The Role of Intuition in Education

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THE ROLE OF INTUITION IN EDUCATION

ABSTRACT

William W. Tuttle

This theoretical study focuses on the significance and implications of developing an educational praxis for fostering intuitive ways of knowing. The main thrust of the study is exploring various conceptions of intuition and through this, developing an overall framework that supports educating intuition. This framework provides for what is termed a meditative participatory approach to education. Of the variety of conceptions of intuition explored, this approach relies particularly heavily on the Mahayana Buddhist conception of intuition and on modern conceptions that have been influenced by it.

The study is concerned primarily, though certainly not exclusively, with higher and adult education, and it attempts to be relevant not only to traditional educational contexts, but also to alternative educational situations as well. It is broadly-based and integrative in that it draws from a wide range of available perspectives on intuition and synthesizes an epistemological-moral perspective that contributes to establishing what is seen to be a much-needed

framework for effectively integrating methods that foster meditative awareness into educational contexts.

The study advocates the Mahayana Buddhist conception of intuition as trans-rational prajna, that is, as nondual immediate knowing based on the dissolution of the subject/object dichotomy that characterizes meditative awareness. This prajnaic intuition is seen to be educable and to have significant implications for virtually all educational situations, particularly in such areas as creativity, cooperativeness, and altruism. It is based on an epistemological shift in educational focus from the individual to the larger network of consciousness in which the individual is embedded. Verification of intuitive knowing, ways that it might be integrated into curricula, and implications for further research and for addressing current social challenges are explored as well.

James R. Jarrett 4/12/88

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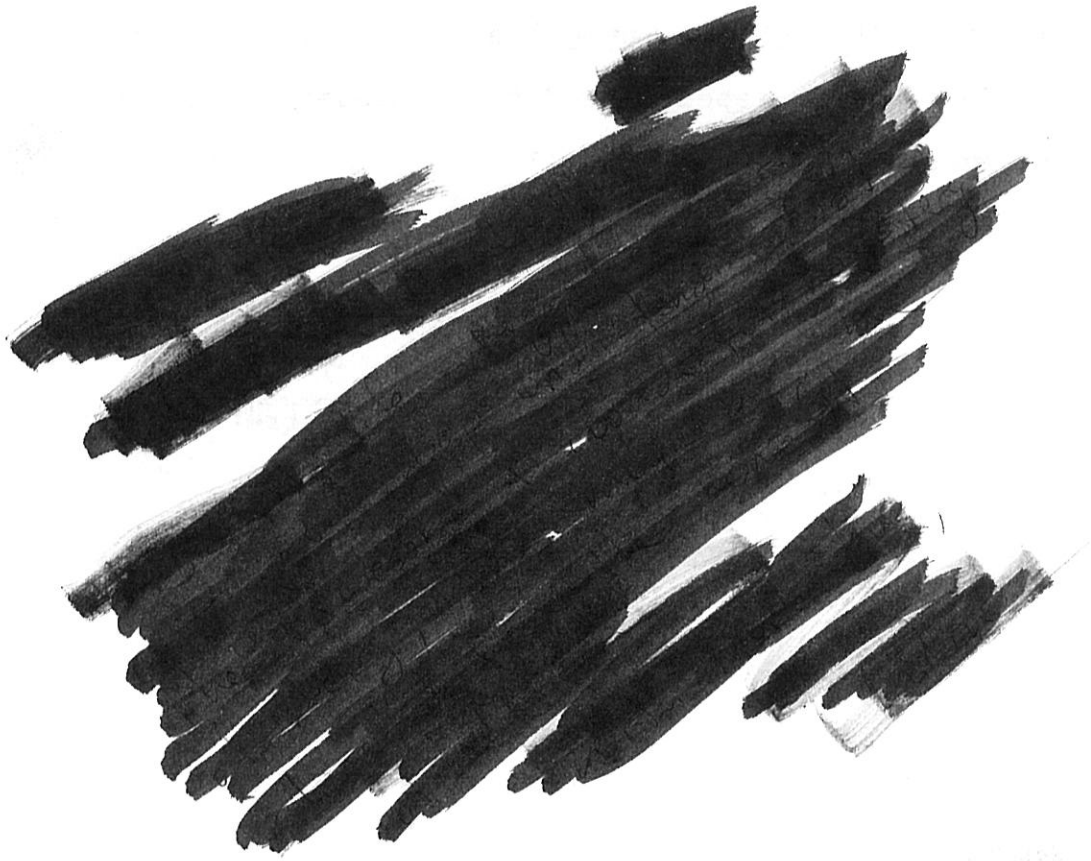

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CHAPTER I

Introduction

Do I contradict myself?
Very well then I contradict myself,
(I am large, I contain multitudes).

Walt Whitman, "Song of Myself"

Except for the point, the still point,
There would be no dance, and there is only the dance.

T. S. Eliot, "Burnt Norton"

How is this still point apprehended, and can its apprehension be educated? What might the significance of this question be for educational praxis today? It seems that conventional education, in focusing on the dance and largely ignoring the ever-enigmatic still point, has become caught up in this whirl of ever-changing forms. In many ways, it does not do much more than try to simply explain the dance and to prepare people for their part in it. For people thus educated, contradictions abound and unending dualisms struggle in apparent opposition: good and evil, individual and society, capitalism and communism, life and death, subject and object, logos and eros, male and female, reason and passion. What if, though, the still point is somehow

realized? How then is the dance of life experienced? It seems that Whitman hints of a kind of knowing wherein contradictions dissolve, swallowed up by an awareness of a far greater wholeness that includes all of these contradictory dualisms as aspects of its own unfolding. This wholeness is perhaps a dynamic process that is inseparable from all seemingly discrete selves: "I am large, I contain multitudes."

Is it possible for people today to seek and find their way to a mode of knowing that goes within the dance and knows it directly, not abstractly, and further, that also contacts and comes out of that still point that is beyond rational categories and which "contains multitudes"? Though "there is only the dance," yet, "except for the still point, there would be no dance."

These questions point to modes of knowing that have fascinated people for many centuries. Today, as the dance becomes surpassingly frenetic, there seems also to be an increasing thirst for deeper and more direct ways of knowing, and for understanding how these modes of knowing, often referred to as intuitive, can be accessed. Though intuition is still, for the most part, officially unrecognized by dominant educational institutions, interest in it is spreading rapidly outside these institutions, and even within them, and this interest seems to be related to the unique character of the cultural dance today, and its remarkable dangers and opportunities.

Humanity lives today, it seems, in a crack between two worlds. The world behind withers and fades, and the world ahead looms in vagueness--promising, threatening, unknown. Education and epistemology find many of their assumptions shipwrecked on newly-emerging connections and amid the confusion this is creating, long-repressed stalks of intuitive knowing sprout forth like mushrooms breaking through asphalt; even their sheer irrepressibility attracts attention.

As schools, teachers, and students of intuition proliferate at the grass-roots level, and as networks and publications dedicated to nonrational modes of knowing propagate ever more widely, it seems clear that some kind of basic educational and epistemological shift is occurring. Further, in surveying the remarkable challenges facing both Western and non-Western societies today, researchers seem to be increasingly finding themselves urgently questioning conventional epistemological assumptions. This urgency stems, at least in part, from an underlying recognition that human societies now face a nexus of problems that, for massiveness, complexity, inertia, and consequentiality, is historically unprecedented. This global crisis has been documented in countless publications and is being interpreted by an ever-expanding number of researchers as posing a direct challenge to the basic conventional epistemological and moral assumptions of the Western worldview.

As this dominant epistemological paradigm is increasingly recognized as being unable to effectively deal with the current problems, an alternative epistemological perspective seems to be acquiring legitimacy. This emergent paradigm has, with some irony, been termed "the new heresy" by scientist-futurist Willis Harman.[1] What the full effect of its coming will be is an open question, though there is no doubt that its potential impact on both education and on the larger societal complexion is enormous and complex. According to many observers, its emergence now is critical, not just for the West, but for the world. For example, in referring to what has become the dominant paradigm in the last several centuries, Georg Feuerstein, a disciple of Swiss cultural philosopher Jean Gebser, observes that, "What began in Europe, with the Renaissance, as a localized phenomenon of dramatic sociocultural change has meantime, through the "Westernization" of the rest of the world, become a panhuman problem."[2]

Thus, the heresy that so powerfully challenged the dominant narrowness five hundred years ago has perhaps become the established narrowness that feeds the current global crisis. It is challenged by an emergent paradigm which, while new in many ways, is also seen to have roots that reach deeply into the soils of both Western and non-Western cultures. It is from within this broad context of paradigm interaction and evolution and of unprecedented global

challenges that the question of educating intuitive modes of knowing seems to be most appropriately addressed.

Many contemporary thinkers have employed perspectives on the issue of forging appropriate epistemological paradigms; some of the writers whose works have contributed to the development of what is conceived to be an emerging paradigm are Bateson, Berman, Bellah, Bruner, Capra, Churchman, Feuerstein, Gadamer, Gebser, Grof, Harman, Kuhn, Laing, Matsuo, Mitroff, Ogilvy, Polanyi, Ratcliff, Ricoeur, Singer, Sperry, Taylor, Vaughan, Vickers, Wilber, and Zukav, and there are seemingly countless others who have contributed to this effort either directly or indirectly. The dimensions of the current crisis have also been explored by many researchers as well, with some focusing on specific symptoms and others focusing on relations among symptoms and attempting, in varying degrees, to address the underlying causes of these symptoms.

It is in looking at these underlying causes that the significance of the basic epistemological framework of Western culture becomes apparent. If, as sociologist Pitirim Sorokin argues, cultures organize themselves around a fundamentally epistemological question, "What is true reality and how is it apprehended?" then exploring the essential qualities of contemporary culture's epistemological perspective will help reveal the basic stance which gives rise to its values, its telos, and the symptoms and challenges it creates for itself. This epistemological

perspective will basically be faithfully reproduced and expressed by its educational institutions as well.

The problem that is seen to emerge from the foregoing brief outline, and which remains to be more fully fleshed out and deeply understood, is: Given the extraordinary demands of this historical moment, and the clearly visible inadequacy of the dominant epistemological-moral paradigm to respond effectively to these demands, how can contemporary society successfully find and adopt a new perspective that empowers people to respond creatively to the unique complex of dangers, problems, and opportunities facing them individually and collectively?

This is clearly an educational problem at its foundations, perhaps the most pressing educational problem discussed today, and it involves education in the broadest sense, in that it means looking at the underlying assumptions by which society conditions and thus creates the consciousness of its members and is, in turn, conditioned and created. It is a problem that is most particularly addressed to adults; not only to the way adults educate children, but especially to the systems and theories by which adults educate each other. For clearly, it is in how adults educate and condition each other, and in the multitude of systems they maintain for this, that both general and specific cultural qualities are created and emphasized, including how the new younger members are socialized.

The struggle between epistemological paradigms is not new; individuals and societies have been engaged in this struggle since Hellenistic and pre-Hellenistic times. It seems to be reaching a climax in this present era, though, with the stakes reaching heights that are dizzying to contemplate. Many observers argue that we stand on the brink of a radical transformation of education and of the epistemological paradigm supporting it, or on the brink of self-annihilation by some form of mass suicide or catastrophic system-wide collapse. H. G. Wells summed up this outlook with his well-known observation that, "Human history becomes more and more a race between education and catastrophe."[3] Though many might agree with this, a more difficult question implicit in it is: What kind of education is it that truly leads away from or beyond this catastrophe? What are its foundations, and where does it actually lead? Perhaps, again, the poets point the way: "Except for the still point, there would be no dance . . .," "I am vast, I contain multitudes. . . ."

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[1]Willis Harman, The Bulletin of the Institute of Noetic Sciences, October-November, 1986, p. 3.

[2]Georg Feuerstein, Structures of Consciousness (Lower Lake, CA: Integral Publishing, 1987), p. 7.

[3]H. G. Wells, The Outline of History (New York: Doubleday, 1949), p. 1198.

CHAPTER II

Ascendancy of Rationality: Implications and Responses

Science, from *scire*, "to know," has been traditionally defined in relatively broad terms as "possession of knowledge as distinct from ignorance or misunderstanding; knowledge attained through study or practice."[1] It also, of course, has a more specific implication, that of "systematic formulated knowledge,"[2] and is usually thought of in conjunction with the scientific method, "the principles and procedures used in the systematic pursuit of intersubjectively accessible knowledge."[3] Science is thus seen to have limited itself, basically, to objective knowing. Intuition, though, as will be discussed, is taken to refer to knowing that is neither objective, subjective, nor intersubjective, but is prior to the subject-object split entirely. Both the objective scientific and meditative intuitive approaches are available to people engaged in education and inquiry; what seems to be of critical interest now is addressing the problems caused by the considerable pre-eminence that the former receives as against the virtual disregard of the latter. By recognizing that rational and intuitive knowing can inform and complement each other, a more balanced epistemological paradigm that integrates these two kinds of knowing can perhaps be found. Can this

alternative conception, expanded to include and integrate intuitive knowing, provide a context that allows the twin epistemological processes of education and inquiry greater access not only to more dependable intellectual procedures, but also to some less appreciated and perhaps more vitally important capacities of human apprehension?

Practically speaking, knowledge does not exist except within particular contexts, and it is particular contexts which provide the frameworks within which knowledge is acquired, interpreted, and applied. Charles Taylor, arguing for a more interpretive, hermeneutically-oriented epistemological approach that explicitly recognizes this, points out that people are always in situations which are, without exception, interpreted by them, and that,

> (1) Meaning is for a subject: it is not the meaning of the situation <u>in vacuo</u>, but its meaning for a subject, a specific subject, [or] a group of subjects, . . . (2) Meaning is of something, . . . And (3) things only have meaning in a field, that is, in relation to the meanings of other things.[4]

Noted literary scholar Stanley Fish's statement, "We are never not in the act of interpreting,"[5] seems particularly significant in this regard, since it can be seen to indicate the degree to which knowledge both conditions and is conditioned by particular contexts. Thus, the conventional Western scientific epistemological paradigm, in emphasizing reductionism, analysis, linearity, universalism, and objectivity, has assumed a certain contextual stance that determines its own self-image and creates a model of "attainment of knowledge" that reflects this stance.

Reductionism, a major aspect of which is the doctrine that objects and events are made up of ultimate, indivisible elements, is complemented by analysis, the mental process of attaining knowledge of a whole by breaking it down into its component parts. Problems are thus broken down into smaller subproblems which are worked on as if they were independent of each other, the implication being that by solving the subproblems (by attainment and application of analysis-based knowledge), the larger problems will thereby be solved. Relationships between parts are also reduced to one fundamental type, that of linear cause-and-effect. By reduction and analysis, knowledge is attained which is universalistic in that this knowledge aims at explaining every phenomenon in terms of universal laws, and which is also objective, in that it assumes the existence of an independent reality apart from the inquirer.

As can be seen, this set of assumptions has a certain quality of internal consistency by which it hangs together, and has done so for several centuries now, with roots in the thinking of Parmenides, Leucippus, and Democritus, and owing much of its foundational support to Galileo, Bacon, Hobbes, Descartes, Locke, Newton, Mill, and others. While this set of assumptions is highly charged, both ontologically and epistemologically, it provides a context which has allowed scientists to maintain that they are "objective" and "value-free" in their knowledge-attaining endeavors, since they are not, according to this dominant paradigm, concerned

with what is right or wrong, but only with what is true or false. This same epistemological context has been also adopted by educators and researchers in the human sciences, though less narrowly. The value neutrality and objectivity of this conventional scientific paradigm are being questioned with increasing intensity, both by scientists and non-scientists:

> The concept of scientific objectivity rests upon the assumption of an external world which is 'out there' as opposed to an 'I' which is 'in here.' . . . According to this view, Nature, in all her diversity, is 'out there.' The task of the scientist is to observe the 'out there' as objectively as possible. To observe something objectively means to see it as it would appear to an observer who has no prejudices about what he observes.
>
> The problem that went unnoticed for three centuries is that a person who carries such an attitude certainly is prejudiced. His prejudice is to be 'objective,' that is, to be without an opinion. An opinion is a point of view. The point of view that we can be without a point of view is a point of view. The decision itself to study one segment of reality instead of another is a subjective expression of the researcher who makes it. It affects his perceptions of reality, if nothing else. Since reality is what we are studying, the matter gets very sticky here.[6]

The reason the matter gets very sticky here lies in the basic assumptions of the Cartesian-Newtonian scientific paradigm and its narrowly-defined assumptions about how knowledge of reality, and of "where" reality <u>is</u>, is attained.

These assumptions and the mechanistic worldview which they support have given rise to what psychologist R. D. Laing refers to as "the scientific look." This look, "this ethically blank, heartless scientific gaze,"[7] is an integral part of the scientific worldview contributed to by Galileo, who postulated, as physicist Fritjof Capra points out, that

scientists "should restrict themselves to studying the essential properties of material bodies--shapes, numbers, and movement--which could be measured and quantified."[8] This reduction of the experience of the world to quantification, emphasized by Galileo, is closely linked with the mechanistic perspective of Descartes and Newton, in which the universe, the earth, and living organisms are all seen as machines that operate according to scientific laws. Scientist-philosopher Michael Polanyi points out that for Galileo,

> the mechanical properties of things alone were primary (to borrow Locke's terminology), their other properties were derivative, or secondary. Eventually it was to appear that the primary qualities of such a universe could be brought under intellectual control by applying Newtonian mechanics to the motions of matter, while its secondary qualities could be derived from this underlying primary reality. Thus emerged the mechanistic conception of the world which prevailed virtually unchanged till the end of the last century.[9]

This mechanistic worldview is also intimately connected with the rigid empiricism advanced by Francis Bacon. His principle of natura vexata, that valid knowledge is obtained by vexing nature, that the aim of the scientist is to "torture nature's secrets from her,"[10] further helped create a scientific spirit based on domination and control of nature, with nature being reduced to being nothing but an elaborate machine. Descartes contributed immensely to this perspective with his fundamental demarcation between mind, the res cogitans ("thinking thing") and matter, the res extensa ("extended thing"). While both he and Newton emphasized the importance of a creator-God in their writings, this concept of a deus ex machina soon became, as the mathematician

Laplace stated, a hypothesis that was no longer necessary. The conventional scientific paradigm is based squarely on the fundamentally materialistic assumptions of the Cartesian-Newtonian world machine. From this perspective, matter (later, matter/energy) is primary and consciousness, if such is admitted to exist, emerges out of matter. This paradigm thus prizes distanciation, objectivity, and an essential split between the knower and the known. Laing points out, "When this Galilean-Descartian rationality is in full swing, . . . one no longer sees anyone, friend, lover, patient, as what is still called in some quarters a human being. One sees a thing."[11] This of course has profound moral consequences, though this also tends to be ignored by conventional scientific rationality, and Laing indicates this dilemma:

> What is scientifically right may be morally wrong. An experiment may be scientifically impeccable and spiritually foul.
>
> The scientist cannot see this with the scientific look. He cannot look at his look with his look, for the scientific look is an act. . . . But the heartless look that does not care, the unbonded ruthless look of unbounded curiosity, self-licensed to glut itself in the pursuit of its satisfaction, is no less scientific.[12]

While there is no denying that the conventional paradigm has brought technological advances and a measure of physical comfort and apparent control over nature, a price is clearly being paid, and this issue is near the heart of the current controversy between the two paradigms. Ironically, even its objectivity may be illusory for, as Laing points out,

"Nothing is more subjective than objectivity blind to its subjectivity."[13]

An alternative perspective is provided by what many refer to as the emergent paradigm in science, and which currently seems to be in the process of subverting the conventional dominant paradigm, at least in the human sciences. While referred to as "new" or "emergent," this perspective is actually, in some significant ways, a contemporary expression and re-visioning of a basic worldview that is ancient and that reached particularly eloquent articulation in some non-Western cultures. Is it, though, merely old wine in new wineskins, contemporary adaptations of an "ancient wisdom" to modern issues? Or is there something inherently novel and unique in what the emergent paradigm represents? This question, while central to the process of understanding the character and potential significance of new-paradigm thinking, can perhaps not be properly approached through such a dualistic, either/or perspective. It seems, and this remains to be explored in greater detail, that the emergent paradigm is both old and new, universal and unique, abiding-historical and transcendent-evolutionary. In any event, the current incarnation of this process, with major features in what is referred to as "the systems approach" in modern science, emphasizes expansionism, integrative thinking, interdependence, relativity, and teleology.

Expansionism refers to focusing on larger wholes in order to understand parts, and maintains that problems are

best understood in terms of the larger contexts in which they are embedded. Integrative thinking is synthetic as opposed to analytic; it makes connections and sees relatedness and interdependence of systems. Thus, it is based on an awareness that problems are systemic in nature, and that all living systems exist in the context of other systems; systems are seen to be nested within each other in an integrated way. Chief Seattle may have been expressing a similar perspective when he said that, "All things are connected like the blood which unites one family. . . . Man did not weave the web of life; he is merely a strand in it. Whatever he does to the web he does to himself." Relativity refers to the idea that there are no universal laws, but only contextually-determined relationships. Thus, for example, the laws that were universal for Newtonian physicists are seen today to be only true within a certain limited range of phenomena; they are thus only "true" relative to a certain context. Teleology refers to the inherent purposefulness of all living systems and thus acknowledges the value orientation inherent in them. Polanyi notes that knowledge "of inanimate things, in which no purpose is apparent," is of a different order from knowledge "of living beings which can only be understood in teleological terms."[14] For example, a scientist engaged in research is seen to constitute an inquiry system, and thus by nature is never objective or value-free in the way assumed by dominant paradigm thinking, but is fundamentally normative.

It can thus be seen that there is a recognition in emergent paradigm thinking that educators, educatees, and researchers are not separate from the objective world, but are totally connected with it and participate with it in ways that are intrinsically purposeful and value-laden. Some of the more recent developments in education, such as affective education, values clarification, identity education, synectics, confluent education, and psychosynthesis,[15] as well as some of the relatively recent developments in research methods, such as ethnography, participant observation, in-depth interviewing, qualitative field notes, hermeneutics, and phenomenology, share many of the basic assumptions of this new epistemological paradigm.

There seem to be two major areas of interest emerging from the foregoing discussion, both concerned with transforming the epistemological assumptions underlying educational practice. The first relates to renovating conceptions of how intellectual rigor is identified and achieved. The second relates to exploring the possibilities of a more intuitively-oriented educational praxis.

In looking more closely at intellectual rigor in education and research, what is immediately apparent are the implications of what Abraham Maslow said about a hammer: if it is the only tool you have, you tend to treat everything like a nail. Because the conventional paradigm outlined above is still dominant in Western thinking, most educators and researchers, in both the natural and human sciences, tend

to apply its principles unquestioningly in their knowledge-dispensing and knowledge-attaining procedures. This is because they have, in turn, been educated to do so by the general atmosphere of the Western cultural context, and more specifically by the educational system. The greatest refinements in this education occur of course in higher education, from whence come the future formal instructors and propagators of this paradigmatic stance.

The dominant paradigm, while it has the advantages of being established and respected, seems to be increasingly on the defensive against the more holistic emergent paradigms, and one of its great buttresses in this defense is the idea of intellectual rigor. Yet because of its constricted scope, it limits this conception of rigor, defined by Webster as "strict precision; scrupulous accuracy,"[16] to a narrowly-defined range of phenomena. Thus, learning to reduce the world to categories and to manipulate and generate data which "speak for themselves" has become, in many ways, learning to use the hammer that must be wielded by those who wish to contribute to the edifice of knowledge.

People are increasingly questioning this perspective and its narrow assumptions, saying that not only can it not effectively address the increasingly massive and complex problems currently faced, but that simply in being applied it is compounding these problems by its failure to see the rich connectiveness between members, and the interdependence of systems. As Harman and others have pointed out, it

systematically ignores what many cultures and individuals take to be important aspects of human experience. This ignoring process, ironically reminiscent of the Catholic churchmen who refused to look through Galileo's telescope, is to a large degree transmitted through education, and seems to be far too costly and damaging today to let pass unquestioned. One of the costs is the sacrifice of the very intellectual rigor around which adherents of the conventional paradigm rally. While fuller treatment of this issue can be found in Ratcliffe (1986), Mitroff (1973, 1980), and Churchman (1979), a brief illustration will help to establish an appropriate context for its relevance to educating intuition. This illustration is based on a brief examination of five different modes of attaining knowledge and of guaranteeing the validity of this knowledge that are currently available and which are taught, to varying degrees, by different aspects of the educational system.

Following in the tradition of philosopher Edgar Singer and Singer's student, C. W. Churchman, Mitroff argues that there are five different research methodologies that have evolved over time.[17] The Leibnizian or deductive paradigm emphasizes attaining knowledge through analytic deduction, which it assumes can arrive at universal laws if rigorously applied. The Lockean or inductive methodological paradigm emphasizes an empirical approach, assuming knowledge of universal laws is attained through direct experiential evidence. The Kantian or synthetic paradigm emphasizes

interaction between deduction and induction, between theory and empirical data, and assumes that valid knowledge results only from the interaction of these two components. The Hegelian or dialectic paradigm is synthetic as well, but emphasizes the role of conflict in quaranteeing validity; it assumes that sound knowledge is attained only through the intense conflict that arises between differing interpretations of data. The Singerian or relative paradigm emphasizes the contextual nature of inquiry, as well as its inherent ethical and value-laden quality; it assumes that knowledge is "true" only relative to particular contexts, and that the theories which interpret these contexts are educated creations of the human mind. This latter methodology is holistic, integrative and transdisciplinary, and requires a continual requestioning by the researcher of the epistemological and moral contexts being used for the inquiry.

It is clear that not all problems are contextualized in the same way. Some, like many mathematics, engineering, physics, and chess problems, are well-structured and, as economist E. F. Schumacher termed it, convergent.[18] These problems, while perhaps difficult, are relatively straightforward. For example, if the problem is how to build a more accurate missile guidance system, or an optimal span steel bridge, the research process will relatively directly converge on the problem and solve it, within the limited context in which it is presented. Other types of problems,

for example, curriculum development, public health education, and worker productivity rates, are seen to be ill-structured and divergent, in that they are not straightforward and their solutions, instead of implying simple convergence, require the capacity to be divergent into complexity, to see interconnections with other elements in the social system, and expand outward in this way. The most pressing problems are so ill-structured and complex that they are referred to by Mitroff as "wicked." Wife battering, drug abuse, illiteracy, suicide, species extinction, mass starvation, high-stress lifestyles, and chronic weapons proliferation all exemplify wicked problems.

The dominant research methodological paradigm, the deductive/inductive, is clearly best suited to well-structured problems, since their features are well-defined and precisely controllable. The synthetic, dialectical, and relative paradigms are clearly more appropriate for ill-structured and wicked problems, since the complexity of these problems precludes agreement as to how they should be defined or contextualized. Applying the "hammer" of conventional methodologies to ill-structured and wicked problems not only fails to generate knowledge that contributes to their solution, but actually seems to exacerbate them and create increasingly greater disinformation and confusion. The conventional research paradigm is thus clearly not trustworthy to the degree that it fails to recognize the

different methodology requirements demanded by different types of problems.

The proliferation of extremely ill-structured problems is thus seen to be compelling both society and educators to develop and transmit new epistemological paradigms that are more responsive to these problems. As Gebser repeatedly emphasizes, the rational objective consciousness that emerged following the medieval period did so in conjunction with what he terms perspectival awareness. Thus, the fascination with and development of perspective in art coincided with a new emphasis on the individual subject as an independent center of consciousness (as has been discussed by countless writers) and this led to a much more fixed I-as-subject-as-opposed-to-world-as-object perspective. The emergence of perspectival awareness gave rise to the so-called Age of Enlightenment and to the explosive developments that have been referred to as the Scientific Revolution, the Commercial Revolution, and the Industrial Revolution, the effects of which constitute the symptoms of the current crisis.

Contemporary society, in being compelled to transcend the fixed perspectival awareness that underlies both the deductive and inductive epistemological paradigms, is being propelled into what Gebser refers to as aperspectival awareness. This awareness has more in common with the synthetic and dialectic paradigms as described by Mitroff, and is in even greater correspondence with the relative

paradigm. Whereas the perspectival awareness of rationality is based on objectivism, aperspectival awareness is arational and the subject/object split of objectivism is replaced by an "acategorical seeing" ("waring" [Wahren] or "verition") which "is possible when the fixed point of the ego, as the center of all perspectival perception and thought, is transcended."[19] The emergent consciousness that Gebser speaks of, and of which he says the poet Rilke is the modern herald, is based on a transcendence of the dualistic egocentric rational consciousness that forms the basis of the dominant epistemological paradigm. The emergent consciousness and correspondingly new epistemology that seem to be becoming increasingly evident will thus call for a much less perspectively-bound conception of intellectual rigor. It will be far more holistic in the sense of focusing on wholes rather than the constituents of wholes, and being able to approach these wholes from many different perspectives simultaneously.

This clearly requires developing, through education, a strikingly different way of knowing, one that is intuitive, that knows from the inside and thus can integrate many different and seemingly contradictory perspectives simultaneously. Nobel laureate Roger Sperry has prefigured this development in his proposing what he calls "the new mentalist paradigm" which he says "represents a new 'middle way' position in philosophy which integrates positivistic thought with phenomenology."[20] In this he distinguishes

microdeterminism, or upward causation, from macrodeterminism, or downward causation. In conventional science, upward causation, the notion that parts determine wholes, is given primacy, whereas in the new science, it is downward causation, seeing how wholes determine the nature of their members, that is given primacy. This is part of what Sperry calls a "consciousness revolution in science." He feels that it allows scientists to recognize consciousness as a higher-order determining factor and this recognition, it seems, is closely connected to the ability to adopt the multiple perspectives mentioned earlier. People seem to be increasingly aware that the conventional epistemological paradigm, in limiting itself to a certain fixed perspective, is not only intellectually non-rigorous in the broader sense illustrated above, but also ignores the possibility of nonintellective ways of knowing.

It is thus clear that there is widespread questioning of the assumptions of the dominant epistemological paradigm and yet, as feminist researcher Jill Vickers notes, the emergent paradigm, and its multiple variations, is not yet established either.[21] In this atmosphere of dissatisfaction, searching, and experimenting, it seems appropriate to consider as deeply as possible the issues embedded in the paradigm struggle that has been sketched. The emergent paradigm is pointing in the direction of overcoming the split between subject and object, and hence, between subjectivity and objectivity. It suggests that mutually-exclusive

dualities can be reframed to be seen as mutually-fulfilling polarities, and that all seemingly separate entities are actually, from another perspective, not at all separate, but parts of an organic whole process. Thus, two perspectives on knowledge emerge. The conventional scientific one, in maintaining a fundamental distinction between knower and known, limits its emphasis to intellectual rigor. The emergent perspective provides for at least a lessening of the emphasis on this dichotomy between knower and known and perhaps ultimately a denial of this distinction. It thus points to a different way of knowing: the direct meditative knowing defined earlier as intuition. The implications of this for the future direction of education are both enormous and puzzling. A radical redefinition of what constitutes knowledge and thus, of valid educational activity, is implied.

This radical shift in epistemological perspective is directly connected to a similarly radical shift in ontological perspective. As being is more clearly seen to be an undifferentiated wholeness from which springs the infinite multiplicity of differentiation, the knowing of the multiplicity may be seen to require a knowing of the undifferentiated wholeness. This knowing, though, is not possible through conceptualization, however rigorous, since concepts are by nature verbal limitations and abstractions applied to that which is essentially unlimited and not abstract.

What, then, will be required? True knowledge of the multiplicity, of the dance, can perhaps only be received at the still point, to use Eliot's images. This knowing arising from the still point transcending space-time is direct and unmediated knowing of the wholeness. This type of human knowing, referred to herein as "intuition," is meditative rather than intellectual, and is based on a dissolution, rather than a strengthening, of the distinction between the knower and the known. Although intuition has unfortunately been used to refer to an exceedingly broad range of noetic phenomena, this restricted and specific definition of intuition, as direct knowing in which there is no split between subject and object, is essential here. Intuition seems threatening and preposterous to conventional thought habits, since it requires such a radical letting go of individualized fixed position: a virtual death to the objective separate self-concept. Yet, can the expanded conception of education implicit in the emergent paradigm afford to ignore the potentials inherent in this intuitive approach? Given the vast array of interconnected wicked problems, can education afford not to expand its conception of epistemological legitimacy to include intuition as well? Can intellectual completeness ever be truly attained without integrating the direct nonconceptual knowing of being in its wholeness that is afforded by intuition? Is the conventional conception of education being forced to radically transcend itself? If so, what forms will education take? These

fascinating questions hint of exciting new vistas in human inquiry and learning, and an understanding of their implications requires a further exploration of their underlying parameters.

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[1]Webster's New Collegiate Dictionary, 1976.

[2]Concise Oxford English Dictionary, 1982.

[3]Webster's Third International Dictionary, 1971.

[4]Charles Taylor, "Interpretation and the Sciences of Man," in Interpretive Social Science, ed. Paul Rabinow and William Sullivan (Berkeley: University of California Press, 1979), pp. 32-33.

[5]Stanley Fish, "Normal Circumstances, Literal Language, Direct Speech Acts, the Ordinary, the Everyday, the Obvious, What Goes Without Saying, and Other Special Cases," in ibid., p. 250.

[6]Gary Zukav, The Dancing Wu Li Masters (New York: Bantam, 1979), p. 30.

[7]R. D. Laing, The Voice of Experience (New York: Pantheon, 1982), p. 28.

[8]Fritjof Capra, The Turning Point (New York: Simon and Schuster, 1982), p. 55.

[9]Michael Polanyi, Personal Knowledge (Chicago: University of Chicago Press, 1958), p. 8.

[10]Francis Bacon, quoted in Carolyn Merchant, The Death of Nature (New York: Harper & Row, 1980), p. 169.

[11]Laing, p. 29.

[12]Ibid., p. 22.

[13]Ibid., p. 17.

[14]Polanyi, p. 175.

[15]John Miller, Humanizing the Classroom (New York: Praeger, 1976).

[16]Webster's Third International Dictionary, 1971.

[17]Ian Mitroff and Murray Turoff, "The Whys behind the Hows," IEEE Spectrum, March 1973, pp. 62-70.

[18]E. F. Schumacher, A Guide for the Perplexed (New York: Harper & Row, 1977), p. 121.

[19]Feuerstein, p. 133.

[20]R. W. Sperry, "Structure and Significance of the Consciousness Revolution, " The Journal of Mind and Behavior, Winter, 1987, p. 39.

[21]Jill Vickers, "Memoirs of an Ontological Exile: The Methodological Rebellion of Feminist Research," in Feminism in Canada, ed. Geraldine Finn and Angela Miles (Montreal: Black Rose Books, 1982), p. 36.

CHAPTER III

Parameters and Implications: The Issue of Intuition and Education

Teaching and research are intimately related. They are two sides of the same epistemological objective, which is understanding the nature of reality, and both are influenced by and in turn reinforce the prevailing cultural worldview. As has been implied in the previous chapter, the dominant paradigm of objective research in the human sciences is based on a conception of research originating in the natural sciences, notably physics. The same is true of education, and prevailing educational paradigms in the human sciences are seen to likewise reflect the same basic emphases on rationalism and objectivism that have characterized education in the natural sciences. It has been argued at length by anthropologists, sociologists, and philosophers such as Bellah, Berman, Fish, Gadamer, Geertz, Hirschman, Ricoeur, Scriven, Skolimowski, Taylor, and many others, that it has been and is inappropriate for the human sciences to try to emulate, like deprived and junior siblings, the epistemological methods and assumptions of the senior natural sciences. As Gadamer has put it, the human sciences must be "liberated from the spurious narrowing imposed by the model

of the natural sciences."[1] Thus, there is an increasing recognition of the necessity of a basically interpretive, or hermeneutic, stance in the human sciences. This is summed up by Geertz:

> Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning.[2]

By thus making the question of meaning explicit in discussing the social sciences, many hermeneuticists, phenomenologists and others have been contributing to what may be taken as a genuine alternative to the conventional scientific paradigm. As discussed earler, the implications of this emergent epistemological paradigm for education are complex and potentially far-reaching.

Thomas Kuhn's work in the history of the natural sciences has helped to shed some light on these implications. For one thing, as Kuhn demonstrates, science does not develop continuously, as textbooks would indicate, but rather through a series of revolutions. These revolutions, or paradigm shifts, occur when an established paradigm is recognized to be no longer completely adequate in its explanatory power. As more and more anomalies become apparent, tension builds and alternative paradigms are posited and explored, generally by younger or newer researchers. Although the dominant and the emergent paradigms thus offer competing explanations of phenomena, one cannot generally disprove the other, since data are always generated by and interpreted through a

particular paradigmatic point of view. Thus, as Kuhn points out, the paradigm shifts which constitute scientific "progress" tend to be accomplished not so much by a given paradigm conquering a competing paradigm in terms the latter cannot deny, but rather by outlasting it and gathering to it the younger scientists of the next generation.

In Kuhnian terms, the human sciences (including education) are, it seems, at the "pre-paradigmatic" stage of development, since they do not generally exhibit basic discipline-wide paradigmatic agreement as do the natural sciences. This has been taken to mean "underdeveloped" in comparison to their elder brethren, the natural sciences. This perception has fueled what many hermeneuticists claim to be a misguided adoption of a "me too" attitude of objectivism and positivism in the human sciences and education. Albert Hirschman argues that the promised land of discipline-wide paradigmatic agreement is not only probably impossible in the human sciences, but also undesirable. He refers to it as a craving for a "quick theoretical fix" that purports to explain phenomena.[3] He favors what he terms an open cognitive style rather than one that is paradigm-bound.[4] Thus, ironically, one of the main features of the emergent-paradigm approach is a conscious willingness to try to become aware of the paradigmatic lens which normally colors (and distorts) educational inquiry and communication. Only if it is thoroughly recognized for what it is will it perhaps be possible to suspend it to some degree.

Kuhn, in portraying "normal science," says that it sees "research as a strenuous and devoted attempt to force nature into the conceptual boxes supplied by professional education."[5] These boxes are what he goes on to characterize and define as paradigms. A major role of higher education is thus to instill in future researchers a conceptual point of view that is in agreement with the existing scientific paradigm and its assumptions. The enormous power that paradigms have in determining both what constitutes valid knowledge and how such knowledge is attained cannot, it seems, be overestimated. Can educators develop the capacity to see how their categorizing assumptions influence and limit their approach to educational processes? Further, are there kinds of knowing that in some way transcend paradigm boundedness and the confines of compulsive categorization, and how might they best be developed and fostered? This is where the epistemological assumptions underlying education need to be most carefully examined, it seems. According to Robert Bellah,

> We have concentrated too much on what Polanyi calls explicit knowledge and too little on what he calls implicit knowing, and we have forgotten that the implicit knowing is the more fundamental, for all explicit knowledge depends on its unconscious assumptions.[6]

The explicit knowledge with which conventional epistemology is concerned is based on implicit assumptions, a primary one of which is objectivism. This paradigmatic assumption of a self separate from the world lies at the heart of conventional education and inquiry procedures, and

it is this objectivist position that is fundamentally put in question by hermeneutics, phenomenology, and the other strands of "the new heresy."

The objectivist perspective which permeates both higher education and conventional research is not taken as something innate to humans, but is seen to be the result of specific training relentlessly imposed by the educational system. Philosopher Henryk Skolimowski refers to it as a yoga: "the Yoga of Objectivity:"

> The Yoga of Objectivity consists in a set of exercises specific to the scientific mind. These exercises are practiced over a number of years, sometimes as many as fifteen--from the time pupils enter high school to the time they complete their Ph.D.'s at the University. The purpose of these exercises is to see nature and reality in a selective way. It takes many years of stringent training (just as it does in any other form of yoga) before the mind becomes detached, objective, analytical, clinical, 'pure.' This frame of mind is viewed as indispensable for dealing with scientific facts and scientific descriptions of reality. And so it is! Because the scientific method of describing reality has moulded the mind to be its servant. The scientific view of the world and the objective cast of mind mirror each other. In the scientific world-view the mind has become a hostage to a selective vision of reality. The Yoga of Objectivity is a gentle form of lobotomy. . . .
>
> Objectivity is a way of excluding all emotions. The objective mind--when it begins to dominate the world--creates the atomic family, the atomistic society, and social and individual alienation, for alienation is a peculiar form of detachment. The atomized society and individual alienation (which are but consequences of detachment) in the long run cause inner tension, frustration, anguish, which then give rise to extreme loneliness, anger, and also violence. At least some causes of violence can be traced back to the Yoga of Objectivity which creates desensitized people: cold, dry, uncaring, lost, anguished, deprived of human contacts and emotions. This an unwelcome and often unperceived result of the Yoga of Objectivity.[7]

Objectivism as a pervasive epistemological stance is thus argued by Skolimowski and others, such as Berman,

Harman, Laing, Leonard, LePage, Merchant, and Wilber, to be correlated with interpersonal isolation, alienation from nature, social fragmentation, and violence. It is the basis of a worldview that tends to destroy the awareness of interconnectedness between self and other and thus allows for alienation and injustice, and the inevitable conflict that these involve. How can education hope to contribute to furthering peace, justice, and creativity if its epistemological foundations are the same as those which are fundamentally contributing to violence, separatism, injustice, and destructiveness?

If it is true that, as Skolimowski states, "Our lives are determined by the spectacles our education forces upon us,"[8] how can education, and the attitudes toward knowledge inculcated by it, contribute to a healing of the fragmentation caused by the dominant objectivist perspective? Clearly, a fresh epistemological basis is called for, one that is not only able to see the enormously limiting and damaging nature of the assumptions implicit in objectivism, but that can also transcend them. Can Western culture transform the tremendous negativity and suffering inherent in the objectivist stance into an empowering vision of participatory knowing that is healing rather than fragmentive? Is what Bellah wrote in 1969 more applicable today, or less?

> I feel that there are greater resources now for healing the split between the imaginative and the cognitive, the intellectual and the emotional, and the scientific and

> the religious aspects of our culture and our consciousness than there have been for centuries.[9]

The answer to this depends, it seems, on what is for both Bellah and Skolimowski the essentially religious aspect of individuals and their culture. Religion is seen as providing a crucial perspective in healing the fragmentation that plagues individuals, institutions, and society itself. Bellah says, "religion is always concerned with the link between subject and object,"[10] and states that the objective "postreligious man, the cool, self-confident secular man . . . is trapped in a literal and circumscribed reality, . . . the world of illusion. Postreligious man is trapped in hell."[11]

Religion may thus be taken as the force which literally rejoins subject and object into a unified whole process. In so doing, it seems to cast conventional epistemology in an entirely different light, illuminating the limitations inherent in its objectivist bias. It also sheds light on potential forms of education and inquiry that are more integral in perspective and therefore less subject to this bias. Thus, the current split between science and religion is seen to be highly damaging to science, since the knowledge thus attained tends to be rigidly confined to science's prevailing conceptual boxes, and by its underlying assumptions and axioms. Michael Scriven has pointed out the problems intrinsic to this one-sided approach: "The defects of the model are well known. If the axioms are definitional, they can't lead to knowledge about the world; if empirical,

they need further justification ad infinitum."[12] Knowledge thus confined also tends to be confining: it confines people's views of the world to the accepted scientific parameters of what constitutes valid knowledge, that is, to the objectivist axioms that define what is seen as an acceptable approach to reality. Scientific objectivity, long proclaimed to be free from the dogma and faith required by crystallized "religion," is thus seen to be its own, albeit secular, "religion."

Objectivism is based on an epistemology that is basically static and ordered; knowledge is seen as a structure which is composed of basic building blocks of indisputable truths at the bottom, to which are added ever more sophisticated levels of knowledge, like bricks. Education and research are the twin processes by which this structure is maintained and added to, according to this epistemological paradigm. In contrast to this view, the emergent paradigm conceives of knowledge more as a non-hierarchical process in which reality is constituted by the very act of perceiving and knowing. Scriven refers to this as a "network model of mutually interconnecting and reinforcing nodes of knowledge."[13] This model of knowledge as a network in process emphasizes interconnectedness, equality, and wholeness and is basically relational in its orientation. Because of this, it provides the desperately needed integrative power which objectivism lacks. In the sense that

Bellah has defined religion, as linking subject and object, it is religious knowing.

What are the implications of this for postsecondary education? On one level, the model of knowledge as a network in process can be seen reflected in contemporary developments in alternative education, of which the Bay Area "Open Education Exchange" is but one example. A vast educational network is seen to be emerging, similar in many ways to the one envisioned by Ivan Illich who in advocating it wrote that the alternative to the inherited dysfunctional educational framework "is a network or web for the autonomous assembly of resources under the personal control of each learner."[14] This network approach to education, which seems to be an expanding grass-roots phenomenon, reinforces a new educational perspective in which teachers and learners exist only in relation to the network. It is the network that becomes a living organism, and that both teaches itself and learns from itself. The strict demarcation between teachers and learners is dissolved, and also the hierarchical structure of conventional education, since virtually everyone is potentially both teacher and learner. Individuals are fulfilled only to the degree that they authentically participate in the network, and it is the network as an evolving and growing organism, not a static structure, that enriches the lives of its constituent members; it is through their participation that it expands its horizons and teaches itself, so to speak. As networks grow and become

interconnected webs of meta-networks, the whole system may be seen to be engaging in a spontaneous, self-directed epistemological quest of understanding the nature of reality. Through computer link-ups and planetary telecommunication systems, the nonhierarchical multidimensional educational network that is establishing itself can be seen as a global organism just learning, in many ways, to orient itself and become sensitive and coordinated enough to respond to its inner guidance and to the promptings received from its environment, the earth.

On another level, the emergent model of knowledge emphasizes possibilities of ways of knowing that are not limited to rationality. These nonrational modes of knowing have traditionally, in the West, been collected under the rubric of intuition. Intuition has thus been used to refer to a wide variety of ways of knowing. By looking at some of the ways intuitive knowing has been conceptualized, a theory of intuition that is relevant to contemporary education can hopefully be articulated.

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[1]H. G. Gadamer, "The Problem of Historical Consciousness," in Rabinow and Sullivan, p. 107.

[2]Clifford Geertz, The Interpretation of Cultures (New York: Basic Books, 1973), p. 5.

[3]Albert O. Hirschman, "The Search for Paradigms as a Hindrance to Understanding," in Rabinow and Sullivan, p. 164.

[4]Ibid., p. 175.

[5]Thomas Kuhn, The Structure of Scientific Revolutions (2nd ed.) (Chicago: University of Chicago Press, 1962), 1970), p. 5.

[6]Robert Bellah, Beyond Belief: Essays on Religion in a Post-traditional World (New York: Harper, 1970), p. 253.

[7]Henryk Skolimowski, "Life, Entropy and Education," in The American Theosophist (Wheaton, IL, October, 1986), p. 306.

[8]Ibid., p. 306.

[9]R. Bellah, Beyond Belief, p. 245.

[10]Ibid., p. 255.

[11]Ibid., p. 244.

[12]Michael Scriven, "The Exact Role of Value Judgments in Science," in Program Development in Education, ed. J. Blaney (Vancouver: University of British Columbia Press, 1974), p. 285.

[13]Ibid.

[14]Ivan Illich, Deschooling Society (New York: Harper & Row, 1971), p. 74.

CHAPTER IV

Historical Perspectives on Intuition

Pre-Hellenistic

For the past several thousand years Western cultures have been wrestling with the issue of rational versus nonrational knowing. As has been discussed, this issue is perhaps coming to a head today, with the overemphasis on rational objectivism being seen as a major underlying factor in the global crisis. The many branches of this issue foliate in virtually all areas of contemporary culture, particularly in education, and are supported by a trunk whose roots go deeply into past civilizations. It can be seen in the mythologies of these ancient cultures, an oft-cited example being Adam and Eve's expulsion from the Garden of Eden. Eating of the fruit of the Tree of Knowledge of Good and Evil is seen as a metaphor for the emergence of rational, categorizing consciousness. Through the reflexiveness of this consciousness, people begin to develop a sense of themselves as discrete individuals, separate from the matrices of nature and of their human community. It is this arising of rationality and its attendant self-oriented perspective that not only opens up new dimensions of freedom and self-exploration, but is also the "original sin" which

bars re-entry into the Garden of self-less communion with the natural order and with, in Judeo-Christian terms, its Creator-God.

The issuance of rational consciousness also coincides with the coming forth of the hero motif in mythology, according to C. G. Jung, Joseph Campbell, and many contemporary interpreters of mythic traditions. The oldest archetypal hero in the West is probably Gilgamesh, the mytho-historic king of the Sumerian city of Uruk whose story dates from at least the third millenium B.C. "In Uruk he built walls,"[1] and the wall-building epithet that Gilgamesh carries throughout the myth is significant, for it represents again the emergence of objectivizing rational consciousness, separating individuals from their community through a nascent self-centered perspective and likewise separating the community from nature: the much-proclaimed walls of Uruk. Gilgamesh is, significantly, a tragic hero, consumed by a fear of death that drives him to unconsciously seek immortality, first through the fame of "an everlasting name" and then through a magic plant bestowed by Utnapishtim, an archetypal father figure. In the beginning of his story, "his arrogance has no bounds by day or night," and the emergent egoistic orientation, besides manifesting through hubris, also gives rise to a profoundly disturbing awareness of death, and troubles Gilgamesh with the basic existential human questions as to the meaning and purpose of individual

existence that have moulded Western consciousness and culture ever since.

The emergence of rationality and the dilemmas it brings are also illustrated in a sacred text of ancient Egypt entitled Rebel in the Soul, dating somewhere from 2500 to 1991 B.C. It serves as a polar opposite to Gilgamesh in its exemplification of the paradox of egoism. While Gilgamesh's existential anguish drives him to a superhuman and doomed search for immortality, the rebel responds by unsuccessfully seeking suicide. The Rebel in the Soul is the first account in Western literature to focus on the suicidal despair that comes with highly-developed individualism and intellect and the ensuing intellectual rebellion. Translator Bika Reed introduces the text with these words:

> Rebel in the Soul is an initiatic text, dedicated to this critical stage: intellectual rebellion. It was meant for students of the Temple, whose highly-developed intellect was approaching this crisis.
>
> Today, in a world where highly-developed intellect is at war with basic social and human needs and where, simultaneously, young intuitive forces are searching for a new way, this initiatic text is vital. It draws attention to the typical phenomenon arising from that conflict, and also offers a solution to it. . . . The intellectual rebel believes that his only real choice in life is suicide. But there is no choice in suicide, only weakness of an intellect unable to understand that there cannot be an alternative to life, only to death. Here the crucial role of intellect in spiritual survival is assessed in its most deeply paradoxical nature.
>
> Egypt often expresses man's inner conflict by the image of the field and the plougher. There is no instant liberation, no other solution to our problems, except cultivation, a balanced development of man's spiritual potential. At the peak of its evolution, like the mature fruit, intellect has to face its inevitable transformation, to be able to perpetuate its seed, life itself.[2]

This transformation of rational intellect is shown to be, potentially, an extremely difficult process. Seeking to avoid it, the intellectual rebel argues for suicide as instant liberation, but his soul replies that this is like crushing an egg before the chick can hatch:

> Only through the living Nefa [Name carrier]
> Can intellect reach the heart
> And Beyond become
> the Haven
> for the upstream struggle.[3]

In the commentary, Reed states,

> A tap, however efficient, gives no water unless connected to the main: if the system is leaky and rotten, the tap may produce poison while appearing to give sustenance. So the discerning intellect nourishes only if connected with the soul.
>
> Our intellect is eager to define, to edify and therefore to limit. In its growth at a certain peak, the intellect, becoming stagnant, turns to a limiting aggression. In separating from his soul, the rebel turns against life. In Egypt, this <u>turning</u> was considered the right time for redemption.[4]

The great intellectual rebellion characterizing the last several centuries of Western culture can be seen perhaps as catalyzing an initiation which must be undergone by the whole of society, though in ancient times it was the concern of only a few in their training to become adepts. At the stage of their training and development referred to as intellectual rebellion, they are separated from their hearts, and seeing the aggression born of this separateness, they reach, as has perhaps our contemporary culture, the time of turning, the right time of redemption.

This dark night of the soul which is enmeshed in a suicidal intellectual rebellion is a phase traversed by the

"barque of the soul" in its evolution, and it is one through which we now, as a culture, seem to be passing. The soul, at the conclusion of the text, responds to the anguished intellect:

> Brother,
> as long as you burn
> you belong to life.
>
> You say you want ME with you
> in the Beyond?
>
> Forget the Beyond!
>
> When you bring your flesh to rest
> And thus reach the Beyond,
> In that stillness shall I alight upon you;
> then united
> we shall form the Abode.
> for ABOVE
> is exalted by
> BELOW
> as is written in the Scriptures.[5]

This union requires that the rebel, the intellect, see its own limitations:

> One could conclude that the modern intellectual will be born into wisdom when he recognizes his own phenomenal nature and, forgetting about his 'objectivity,' starts searching his own source.[6]

The translator concludes that:

> The revelation of this ancient text is unique in mystical literature. It places rebellion within the Canon, as the crucial stage in spiritual transformation.
>
> The dialogue between this rebel, the first in the history of literature, and his soul, demonstrates that the force of individualism, causing rebellion, is also the very source of spiritual redemption in man.
>
> In 'rebellion' or separation from his soul, man creates individuality as a new psychological entity endowed with intellect, unknown in nature. This new entity is thrown like a drawbridge over the abyss, so that consciousness can step into the Beyond.
>
> Recognizing that 'rebellion' is essential to the process of evolution, can the rebel endure? No, he is broken. He is no longer a rebel as he does no more than

> conform to the immutable law of transformation. Seeing this, the Rebel dies. The king is born. 'For its Above is exalted by its Below' as written in the scriptures.[7]

The four thousand years of historical development since the archetypal intellectual rebel can be seen as the working out of this theme on an ever-increasing scale, with more and more people forced to navigate the 'dark night' of intellectual rebellion, that sense of being cut off from others, nature, and the larger sustaining patterns and process which lend guidance and meaning. This epistemological development, leading to the current global dilemma with its ironic spectre of mass rational-technological suicide, is not yet over; where it might be going next is a question of more than casual interest. Is it for people today to recognize that analytical prowess and concomitant intellectual rebellion are essential stages of a transformative process, and that education of the post-intellectual non-rebel may look very different indeed? How can models of intuitive knowing contribute to the transformation of consciousness needed to avoid the suicide of intellectual rebellion, and how might this transformation be related to formulating appropriate educational approaches? By examining some more historical and philosophical perspectives on intuition and how it relates to larger contexts of epistemological development, a more solid theoretical basis may be arrived at for educating intuitive ways of knowing.

It can be seen from the foregoing that the dynamic tension between rational consciousness and different forms of nonrational consciousness was already well-established in the Mesopotamian, Levantine, and Egyptian cultures which strongly influenced the Greek and Christian cultures, and through them, the modern Western societal situation. Although people tend to think of these ancient root cultures as belonging to a time exceedingly far-removed from the present day, in terms of the overall chronological development of homo sapiens, they are relatively recent phenomena.

A distinction between rational and nonrational modes of knowing was thus gradually emerging among these ancient civilizations, and it can be seen clearly reflected in their mythological traditions. According to Gebser, Houston, Jaynes, Jung, Wilber, and many others, while nonrational modes of knowing were predominant, such as "instincts" and voices from the gods, the evolutionary thrust was towards developing reason and greater individuation of consciousness. Gebser describes three succeeding structures of consciousness that antedated the emergence of what he refers to as the mental structure of consciousness which was fully introduced with the flowering of the Greek genius. The first of these he terms the archaic structure of consciousness, preindividuated and correlated with the neonatal stage and with deep sleep. According to Feuerstein's analysis, based on Gebser's work, this structure began with the first hominids, extending up until about 750,000 years ago, not

including Homo erectus;[8] Wilber's interpretation, though, includes Homo erectus in this stage.[9] The second, or magical structure of consciousness, was characterized by an egolessness in which "the family group was the self."[10] There was a "loss of animal innocence"[11] and yet there still remained a deep sense of interwovenness with nature. This stage, according to Gebser, extended through the paleolithic until the neolithic revolution. The third, or mythical, structure began some 40,000 years ago with Cro-Magnon cultures. According to Gebser,

> ". . . whereas the distinguishing essential characteristic of the magic structure was the emergent awareness of nature, the essential characteristic of the mythical structure is the emergent awareness of soul. Magic man's sleep-like consciousness of natural time is the precondition for mythical man's coming to awareness of soul.[12]

The mythical structure of consciousness allowed for the development of both imagination and empathy. Imagination formed the basis for the development of technology, and this neolithic technology, though a reflection of the creativity of imagination, was, as Feuerstein points out, "not like modern technology, founded in an egoic opposition to nature."[13] The significance of the arising of empathy lies, according to Feuerstein, in its indispensability for complex social functions and he claims that a deficiency of mythical consciousness is responsible for many of the problems in contemporary society:

> The far more developed self-sense of the mythical consciousness brought with it the capacity for private feelings, as well as the capacity to participate in the

> private emotional world of another. It is largely this empathic ability which made the complex social interactions of the neolithic age possible. It fulfills no less a function today, though our Western civilization's premium on thinking rather than feeling is a sure indication of the deficiency of mythical consciousness in our lives. There could be no effective advertising, counseling, politics, or business management without the capability to place oneself imaginatively in the inner terrain of a fellow human. It is the basis of all love and cooperation between individuals. Its absence or inadequacy leads to precisely the kind of sociopathy (in the broadest sense of the term) that marks our so-called progressive world, shaken as it is by the problems of loneliness, alcoholism, drug abuse, criminality, absenteeism, and so on.[14]

Gebser theorizes that the fourth, or mental, structure of consciousness arose out of this mythical consciousness, and feels that it did so in 1225 B.C. for the Jewish tribes, 500 B.C. for the Greek city-states, and 1250 A.D. for medieval Europe.[15] Like Wilber, Feuerstein places the emergence of the mental structure somewhat earlier, as part of a gradual process:

> The whole period from the creation of the first cities, like Catal Huyuk, Ur, or Jericho--reaching back to around 8,000 B.C. and maybe earlier--to the collapse of the Homeric world can usefully be looked upon as post-mythical or proto-mental. The developments that followed in the wake of the establishment of tribal federations ("nations") and the Greek <u>polis</u> belonged already to the mental structure of consciousness. . .[16]

<u>Hellenistic</u>

With the emergence of the intellectual functioning of mental distanciation and abstraction on a relatively broad scale in ancient Greece, people began to conceptualize and discuss the relative merits and characteristics of both rational and nonrational modes of knowing. The men who are

today considered the first philosophers were all fundamentally interested in this basic epistemological question, as philosophers have been, either explicitly or implicitly, ever since. This era of profound cultural change in Greece, roughly 800 to 300 B.C., is referred to as the "axial age" by Karl Jaspers, for he feels that, in that transitional period, "the spiritual foundations of humanity were laid, simultaneously and independently in China, India, Persia, Palestine, and Greece. And these are the foundations upon which humanity still subsists today."[17] In these ancient cultures, nonrational forms of knowledge, often referred to as intuitive, were widely recognized. There were strong shamanic elements present, as well as mystery schools and oracular institutions, all of which emphasized the importance of nonrational knowing. The classical Greeks can thus be seen to have taken both rational and nonrational modes of knowing seriously. Like virtually all the traditional cultures of the world, they had highly-respected "intuitive arts" such as chresmology, the art of oracular pronouncement, oneiroscopy, the art of dream interpretation, divination and augury, as well as the still-enshrouded initiatory rites and practices of the various mystery schools. Many of the most respected of the Greek thinkers, including Plato and Aristotle, are said to have participated in these rites.

Among the pre-Socratic philosophers, there is the development of a clear distinction between rational and nonrational ways of knowing. In wrestling with this issue,

certain thinkers, like Parmenides and his followers in the Eleatic school, emphasized systematic analysis and logical deduction in attaining knowledge. Unlike Heraclitus and Empedocles, whose more mystical approaches led them to refrain from trying to rationally demonstrate the proofs of their philosophical insights, and unlike the Pythagoreans, who consciously combined knowledge of astronomy and mathematics with a conviction that numbers themselves have ethical qualities and exist in a realm only accessible to intuition, Parmenides' "system depends entirely on logical deduction."[18] Referred to as "the first logician," he created a logical method dependent only on thought, and dwelt in the realm of rational light where thoughts are the actual things: "The thing that can be thought and that for the sake of which the thought exists is the same; for you cannot find thought without something that is, as to which it is uttered."[19] Parmenides was taken seriously by Plato and his influence on the development of Western thought has clearly been profound.

In contrast to Parmenides is a man referred to as "the Dark" in classical antiquity and whose influence has also been profound. Heraclitus, "the father of dialectical thinking,"[20] seems to have accessed a synthesizing vision through which he saw all apparent opposites as complementary aspects of a greater whole. While earlier philosophers like the Milesians had sought for the fundamental substance of the universe, he proclaimed that what is fundamental is not any "stuff," but a continual process of change. His view of this

constant interplay in which the unity is diversity has much in common with the worldview underlying the I Ching and many other Eastern systems, as well as with the basic notions inherent in quantum physics, as many writers have pointed out. His confident proclamations are often highly paradoxical, for they aim at transcending the dualisms of rational thinking, and in this aspect, his paradoxes are different from those in which the Eleatic school delighted, being oriented instead toward deep inward looking:

> 16. The learning of many things teacheth not understanding.
>
> 20. This world, which is the same for all, no one of gods or men has made; but it was ever, is now, and ever shall be an ever-living Fire, with measures of it kindling and measures going out.
>
> 41, 42. You cannot step twice into the same river; for fresh waters are ever flowing in upon you.
>
> 46. It is the opposite which is good for us.
>
> 62. We must know that war is common to all and strife is justice.
>
> 70. In the circumference of a circle the beginning and end are common.
>
> 80. I have sought for myself.
>
> 81. We step and do not step into the same river; we are and are not.
>
> 95. The waking have one common world, but the sleeping turn aside each into a world of his own.[21]

These fragments of Heraclitus can be seen as evidence of a dynamic understanding of process, that is, from its own perspective, self-evident. They are not intended to be logically consistent or prove anything in the rational sense, but to challenge readers and perhaps lure them into "the

dark" where they too may seek for themselves. How this is done is never actually mentioned, if indeed it could be reduced to words; Heraclitus never founded a school to teach this intuitive process, though even in the case of Pythagoras who did, the shrouds of mystery have not been parted to reveal his pedagogy.

The pre-Socratics displayed a remarkably rich interest in the epistemological issues raised by the emergence of the rational/nonrational split. This interest is evidence of a transformation of consciousness, specifically, the emergence of the mental structure of consciousness. Much of this can be seen in Socrates, who is referred to by Wilber as the "archetypal analyst of the mental level of exchange."[22] While Socrates was thus certainly the embodiment of a profound emphasis on verbally-mediated intellective consistency that focused on developing rational argument (as Nietzsche noted with a certain abhorence), there is the other side of Socrates as well. He stressed the importance of his own inner daimon, "something divine and spiritual [which] comes to me,"[23] a "familiar, prophetic voice of the Spirit"[24] whose guidance at critical moments was not based on logical judgment, but came from some other unknown source.

Socrates' daimon seems particularly significant, for it is the foundation upon which both his actions and his teaching is based. It was not something that he had to learn about, but rather, as he said of it, "This has been about me

since my boyhood, a voice, which when it comes always turns me away from doing something I am intending to do, but never urges me on."[25] Thus, it seems to be an inner sense that he must simply be careful to listen to, and it is particularly interesting in that it only speaks to him when he is going, or about to go, off track. In this way, his reason, passion, and will are given full play to act, explore, express, and conceive, and the inner daimon, which is nonrational, acts as a higher guidance that he takes extremely seriously, as this passage from The Apology, which he speaks after being condemned to death, indicates:

> My familiar prophetic voice of the spirit in all time past has always come to me frequently, opposing me even in very small things, if I was about to do something not right; but now there has happened to me what you see yourselves, what one might think and what is commonly held to be the extremest of evils, yet for me, as I left home this morning, there was no opposition from the signal of God, nor when I entered this place of the court, nor anywhere in my speech when I was about to say anything; although in other speeches of mine it has often checked me while I was still speaking, yet now in this action it has not opposed me anywhere, either in deed or in word. Then what am I to conceive to be the cause? I will tell you; really this that has happened to me is good, and it is impossible that any of us conceives it aright who thinks it is an evil thing to die. A strong proof of this has been given to me; for my usual signal would certainly have opposed me, unless I was about to do something good [emphasis added].[26]

As can be seen, for Socrates, positive proof lies with his inner daimon; he trusts it implicitly--it is the "guarantor of validity" for him. Since it has not checked him in going to his death, this death must be appropriate and therefore good. From his attitude in this ultimate test, so to speak, it seems clear that the inner nonrational daimon lurks

beneath the surface of all of Socrates' immensely-influential teachings, and provides a guidance for virtually everything he says. Thus, while Socrates elevated reason, this elevation rests squarely on an inner intuitive knowing, and though where this knowing originates is never explicitly stated, he referred to it as "the signal of God," indicating that his own inner receptivity allowed him to access a seemingly trans-rational knowing, and that this was the basis for his rationality.

Plato's philosophical idealism can be seen to flow from an underlying notion that ultimate reality, the unseen cause of visible phenomena, is knowable not through sense-based knowledge but through intuitive insight. While Plato emphasized the importance of using reason (logos or nous) to develop knowledge (episteme) as a prime characteristic of both the ideal individual and society, many of his ideas are based on intuitions of eternal and incorporeal realities. He relied upon "divine contemplations"[27] to truly reveal the highest of truths, "the most brilliant light of being,"[28] and free people from bondage in the dark cave of reliance upon mere sense-based phenomenal appearances.

While Plato did not analyze the intuitive process per se, his disciple Aristotle did discuss the knowledge which exists without proof, nous, or intuitive reason (e.g., if A is greater than B, B must be less than A, etc.). He felt that this intuitive knowledge had to be the basis for all deductive reasoning, for otherwise, as many people have

shown since, such reasoning would require further proofs ad infinitum. As the bedrock upon which sound deductions are made, Aristotle declared that intuition is always true, and is the only knowledge more accurate than scientific knowledge. For Aristotle, then, intuitive knowing was true in being self-evident, and also was fundamentally an intellectual process, an extension of rationality but not fundamentally different from it. As Noddings and Shore have pointed out, this view of intuition can be seen in similar guise in modern times by those who do not credit intuition as a distinct function and instead view it as a kind of telescoped rationality[29] or unconscious inference. In this light, Aristotle's view that intuitive knowing is always true is particularly questionable, because what seems self-evidently true is often, as science has repeatedly demonstrated, not necessarily so. This flaw in the Aristotelian conception of intuition thus helps explain some of the skepticism that the notion of intuitive knowing has faced in more modern times.

The third-century A.D. neoplatonist Plotinus contributed to a fundamentally different conception of intuition as nondualistic illumination:

> Knowledge has three degrees--opinion, science, illumination. The means or instrument of the first is sense; of the second, dialectic, of the third, intuition. To the last I subordinate reason. It is absolute knowledge founded on the identity of the mind knowing with the object known.[30]

This definition of intuition as "absolute knowledge" emphasizes both a trans-rational quality and a radically

monistic epistemological perspective, and has much in common with a number of Eastern traditions and some contemporary Western thinkers as well. According to Jaspers, Plotinus

> actually experienced as a perfect whole what in this immanent world we can only know in the duality of loving and loved, beholding and beheld, that is, he experienced the goal that gives our imperfect yearning its perfection. . . . It is a vision which presupposes intellectual activity, but is realized only when we transcend reason, not when we sink beneath it. . . . This state is experienced rather as a waking from the customary mists of existence into another existence, in which I rise above my usual thinking, spatiotemporal experience.[31]

A true mystic, Plotinus was a thoroughgoing intuitionist who seems to always have written from his own direct experience of nondualistic knowing, though, again, he wrote little about how this knowing was actually attained.

Medieval to Nineteenth Century

Medieval theologians were the first to use the term intuitio, and they defined it as a nonrational revelation of the divine, an experience of identification with God which was given only to a few. Unlike the Aristotelian conception of intuition being a product of the interplay of reason and insight, Christian intuition was seen to be essentially nonrational and based on contemplation of transcendent being; unlike Plotinus, it was basically dualistic in its underlying assumptions, i.e., the divine was considered to be basically "other."

While intuition was thus still recognized by medieval thinkers, valid intuitive knowledge was narrowly defined to

acceptable realms of Christian revelation. The seers and soothsayers whose nonrational modes of knowing had been recognized and accepted by the Greeks and Romans, and also by the many diverse cultures of the world, were directly attacked by rapidly spreading Christendom. Thus, while intuition has been important in practically every other world culture, "the onslaught of Christianity virtually eliminated the seer from Western culture," and one of the effects of this has been that "the influence [of intuition] in the West has remained relatively small."[32] Noddings points out that,

> In Europe, Christianity's claim to ultimate truth kept the seer from regaining his or her former position of importance and influence during the Middle Ages. Later, the rise of Renaissance science and rational empiricism alienated most (but not all) intellectuals and educators from the notion of a seer's insights as sources of knowledge. Yet in the twentieth century there has been an increased interest in the knowledge bases of other cultures and in the role of the seer as a source of knowledge. Simultaneously, more educators are showing a willingess to explore new ways of helping students gain knowledge. Among the many avenues now seen worthy of investigation is the intuitive mode, which has its conceptual beginnings in the activities of the ancient seer who could see or divine what was invisible to others.[33]

This renewed interest in knowing by direct seeing can, in some ways, be seen to parallel a similar interest in the early Christians, though there has always been, in orthodox Christianity, the belief that valid nonrational knowing can only come about through the mediation of an external agency, such as an aspect of God or the Church. Augustine, Anselm and Aquinas all stress the need for right faith as a prerequisite for true understanding, and for them, God as "wholly other" is an active, personal force that

initiates the intuitive understanding. Of his conversion experience, Augustine writes,

> Things held me far from Thee, which, unless they were in Thee, were not at all. Thou calledst, and shoutedst and burstest my deafness. Thou flashedst, shonest and scatteredst my blindness. . . Thou did touch me, and I burned for Thy peace.[34]

It was both a short and a long step from the "I think, therefore God is" of Augustine to the "I think, therefore I am" of Descartes. It was short in that it still maintained the basic epistemological duality between knower and known, and yet it was also long, for the humanistic revolution of the Renaissance gave rise to radically new notions of scientific objectivity and of proof based solely on rational and mathematical grounds. While foreshadowed by the Greeks, this development marked a decisive break with established epistemological and ethical assumptions and ushered in the full flowering of what Gebser refers to as rational perspectival awareness. Descartes, who was of course a central figure in this movement toward establishing the supremacy of rational, mathematical thinking, still deeply respected intuitive knowing as the foundation of the discursive deductive process, though in that time of increasing skepticism, intuition was becoming associated more with standard knowledge and less with mysticism.

Like Descartes and many others, Spinoza defined intuition as the highest of three types of knowledge, the other two being sense perception ("opinion") and reason. A basic theme that runs through Spinoza's writings,

Deus sive natura, "God, that is, nature," profoundly challenged the seventeenth-century religious orthodoxy and his conception of intuition was also far more "this-worldly" than the conventional theological intuitio. Spinoza's perspective is significant in that he associated the ancient notion of intuition with knowledge of the phenomenal world, since he did not divorce God from nature as the medieval theologians had done. Arthur Deikman points out that Spinoza felt that intuition "grows out of empirical and scientific knowledge but rises above them. In essence it is knowledge of God. To Spinoza, God exists in different 'manifestations,' all of which are part of the same unified system operating in harmony."[35] For Spinoza, there are two aspects of intuition, both founded on his basic theme, that "Extended substance is one of the infinite attributes of God," and that,

> The human mind is part of the infinite intellect of God; when we say, that the human mind perceives this or that, we make the assertion, that God has this or that idea in so far as he is displayed through the nature of the human mind, or so far as he constitutes the essence of the human mind.[36]

One aspect of intuition that is central to Spinoza's theory of knowledge is the immediate apprehension of things sub specie aeternitatis, which he refers to as "knowledge of the third kind:"

> The more we understand particular things, the more do we understand God. . . .
>
> Our mind, in so far as it knows itself and the body under the form of eternity, has to that extent necessarily a knowledge of God, and knows that it is in God, and is conceived through God.

> The highest endeavor of the mind, and the highest virtue is to understand things by the third kind of knowledge. . . .
>
> From the third kind of knowledge necessarily arises the intellectual love of God. . . .
>
> God loves himself with an infinite intellectual love.
>
> The intellectual love of the mind toward God is part of the infinite love wherewith God loves himself.[37]

Here Spinoza has bridged the first aspect of intuition, which is epistemological, with the second, based on amor intellectualis Dei, which is ethical. His theory of knowledge and his theory of ethics are both ultimately based on knowledge of the third kind, direct intuition of the divine. This divine is for him no longer transcendent only, but radically immanent.

Unlike Descartes and Leibniz, Spinoza was not a mathematician. He dressed his intuitions of the divine in mathematically modeled proofs, though, as was in vogue at that time. Thus, as his arguments strongly emphasize reason and intellect, it is unclear whether his conception of intuition, so forcefully and significantly presented, actually differed fundamentally in kind from rationality, or only in degree. This is an important question, since the concept of intuition as an extension of rational thinking rather than as a fundamentally different modality allowed it to be trivialized as rationality continued its ascent to dominance, and it is for this reason that some have argued, possibly incorrectly, that Spinoza perhaps inadvertently contributed to a process through which "the cult of reason

was thorougly mathematicized, as was the world at large."[38] In any event, Spinoza did see his mission as striving to establish a more integrated human character through the education of intuition:

> What that character is we shall show in due time, namely, that it is the knowledge of the union existing between the mind and the whole of nature. . . . In order to bring this about, it is necessary to understand as much of nature as will enable us to attain to the aforesaid character, and also to form a social order such as is most conducive to the attainment of this character by the greatest number with the least difficulty and danger. We must seek the assistance of Moral Philosophy and the Theory of Education. . .[39]

As the West moved from the more revelational concepts of knowledge heretofore discussed to a more rational epistemological view, Kant probed the limits of reason and concluded that things in themselves can be thought, but can never be known because of the inherent categories through which intellect operates and thus constructs the world. In his attempt to answer Hume's famous question as to how people can ever know anything about the external world, Kant made a clear distinction between the phenomenal and noumenal worlds, emphasizing that an intellectual knowledge of the noumenal is impossible, due to the intellect's categorical requirements. He did, though, postulate a "pure intuition" which affords nonrational a priori awareness through universal categories, such as space and time, and through the universal axioms of geometry. Unfortunately however, Kant's arguments were based on Aristotle's categories, Newton's physics and Euclidean geometry, and since the universality of these categories and

axioms has been shown by modern physics and mathematics not to actually exist, the implication is that Kant's "intuition" (Anschauung: "view") is perhaps actually closer to what some psychologists and analytic philosophers refer to as unconscious inference, thus reducing it again to being merely an aspect of rationality. Also, in confining intuition to the noumenal realm, Kant divorced the metaphysics and epistemology of phenomena from those of noumena. According to some, this has had the effect of defending scientific ways of thinking from the onslaught of criticism, while actually contributing little to philosophy's effectiveness in developing and maintaining contact with the noumenal realm. Yet, in recognizing the possibility of intuition and the inherent limitations of rationality, Kant can be seen as a vital eighteenth-century bridge between the earlier and later, more modern conceptions of intuition in the West.

Schopenhauer, like Emerson and some other early Western explorers of Eastern thought, went beyond Kant's conceptions of intuition, defining it as a source of knowledge that can reveal universal truth, whereas intellect can deal only with appearances. For him, the intuitive capacity is directed through the cosmic Will and ultimately makes reabsorption into this Will possible.

Hegel can also be seen as going beyond Kant in his conception of intuition, since he not only refuted the alleged impossibility of reason ever cognizing the Absolute, but also got around the Kantian dualism by postulating a

three-tiered hierarchy of thinking. Of the three levels, common sense, scientific thinking, and philosophic thinking, the higher always contains the truth of the lower and develops out of it. The highest, philosophic thinking, is characterized by a quality of immediacy that makes it akin to the direct knowing of intuition and according to Hegel it is capable of unity with the Absolute. He emphasized that it is through this highest kind of knowing, "nous, Understanding generally, or Reason,"[40] also called "Divine Wisdom,"[41] "that we should not merely love, but know God . . . that it is the Spirit [der Geist] that leads into Truth, knows all things, penetrates even into the deep things of the Godhead."[42]

Thus, while the basic thrust of Western epistemological unfoldment from the Renaissance to the twentieth century has been to develop rational objective modes of knowing and elevate them above nonrational modes, a number of important philosophers seriously questioned the ultimate ascendancy of rationality. Besides the philosophers mentioned in this brief overview, many others in the romantic and transcendentalist movements, and other smaller movements, as well as countless poets, artists, and mystics also questioned the ultimate ascendancy of rational objectivism. In the twentieth century, the tapestry woven of the various conceptual strands of intuition has developed a remarkable richness, as the next two chapters will perhaps indicate.

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[1]N. K. Sandars, tr., The Epic of Gilgamesh (New York: Penguin, 1960) p. 61.

[2]Bika Reed, tr., Rebel in the Soul (London: Wildwood House, 1978), p. 10.

[3]Ibid., p. 37.

[4]Ibid., p. 125.

[5]Ibid., pp. 78-85.

[6]Ibid., p. 127.

[7]Ibid., pp. 128-9.

[8]Feuerstein, p. 58.

[9]Ken Wilber, Up from Eden (Boulder: Shambhala, 1981), p. 28.

[10]Feuerstein, p. 62.

[11]Ibid., p. 61.

[12]Jean Gebser, The Ever-Present Origin, tr. Noel Barstad (Athens: Ohio University Press, 1986), p. 67.

[13]Feuerstein, p. 79.

[14]Ibid., pp. 78-79.

[15]Ibid., p. 92.

[16]Ibid.

[17]Karl Jaspers, Way to Wisdom: An Introduction to Philosophy (New Haven/London: Yale University Press, 1966), p. 98.

[18]Rex Warner, The Greek Philosophers (New York: Mentor, 1958), p. 29.

[19]Ibid., p. 32.

[20]Henryk Skolimowski, The Theatre of the Mind (Wheaton, IL: Quest, 1984), p. 117.

[21]Warner, pp. 25-26.

[22]Ken Wilber, A Sociable God (Boulder: Shambhala, 1983), p. 41.

[23]Plato, The Apology, in Great Dialogues of Plato, tr. W. H. D. Rouse (New York: Mentor, 1956), p. 437, 31-d.

[24]Ibid., p. 445, 40-b.

[25]Ibid., p. 437, 31-d.

[26]Ibid., p. 445, 40-b.

[27]Plato, The Republic, in ibid., p. 316, 517-d.

[28]Ibid., p. 317, 518-c.

[29]Nell Noddings and Paul Shore, Awakening the Inner Eye: Intuition in Education (New York: Teachers College Press, 1984), p. 8.

[30]Quoted in Willis Harman and Howard Rheingold, Higher Creativity (Los Angeles: Tarcher, 1984), pp. 218-19.

[31]Karl Jaspers, Anaximander, Heraclitus, Parmenides, Plotinus, Lao-Tzu, Nagarjuna, from The Great Philosophers, Volume II (New York: Harcourt Brace Jovanovich, 1957), pp. 48-49.

[32]Noddings and Shore, p. 11.

[33]Ibid.

[34]Augustine, The Confessions of Saint Augustine, tr. Edward B. Pusey, in The Age of Belief: The Medieval Philosophers, ed. Anne Fremantle (New York: Houghton Mifflin, 1954), p. 25.

[35]Arthur Deikman, The Observing Self (Boston: Beacon, 1982), p. 48.

[36]Spinoza, in The Living Thoughts of Spinoza, ed. Arnold Zweig (New York: Fawcett, 1939), p. 72.

[37]Ibid., pp. 126-127.

[38]Feuerstein, p. 115.

[39]Spinoza, p. 61.

[40]G. W. F. Hegel, The Philosophy of History, tr. J. B. Sibree, in The Age of Ideology: The Nineteenth Century Philosophers, ed. Henry Aiken (New York: Houghton Mifflin, 1956), p. 84.

[41]Ibid., p. 87.

[42]Ibid., p. 85.

CHAPTER V

Twentieth-Century Perspectives on Intuition

A particularly striking voice in the call for recognizing intuitive modes of knowing is that of Henri Bergson. As Morton White points out,

> Bergson's philosophy was the most influential French reaction in the twentieth century to the iron grip of mechanics, intellect, rationalism, determinism, and science. . . . It is easy to see why this point of view proved so exciting and liberating to a generation brought up on the formulae of nineteenth-century positivism and materialism, why it appealed to artists and writers, to religious leaders and to fashionable ladies who came to Bergson's crowded lectures at the College de France to understand the mysteries of evolution, mind, matter, time, and free will, 'part of it with the mind and to divine the rest with the heart.' For Bergson had gone much farther than Hegel in attacking the rationalism and intellectualism of the platonic and cartesian traditions, so far that William James greeted the appearance of Creative Evolution with ecstasy. . .[1]

In all his major writings, Bergson sharply distinguishes the two modes of knowing, intuition and analysis:

> Intuition is that art of intellectual sympathy by which one transports oneself into the interior of an object in order to become harmonious with what is peculiar to it alone, and so, inexpressible. On the other hand, analysis is the operation which traces back the object to elements already known, that is, common to this and other objects. Thus to analyze an object is to express it in terms of something other than itself. . . . In its eternally unsatisfied desire to grasp the object, around which it is condemned to revolve, the analysis multiplies the points of view without end, in order to complete its otherwise forever incomplete picture; and it tirelessly changes the symbols to perfect the

> translation, ever incomplete. Thus it continues into the infinite. But the intuition is, if possible, a simple act.[2]

Bergson's well-known definition of intuition as an act of intellectual sympathy by which one places oneself within an object to coincide with what is unique and thus inexpressible in it is one that he came up with relatively early on in his career, and it is one that develops and seems to reach full maturity in his final major writing, The Two Sources of Morality and Religion of 1932. This earlier definition is from his 1903 Introduction to a New Philosophy which begins,

> If the definitions of metaphysics and conceptions of the absolute are compared, it will be seen that the philosophers, despite their apparent divergencies, agree in distinguishing two widely different methods of recognizing one object. The first suggests that one encircle this object; the second, that one penetrate it. The former is dependent on the point of view assumed and on the symbols by which one expresses oneself. The latter does not start with any particular view point and is not supported by the use of any symbols. One might say that the knowledge derived from the first method stops at the "Relative"; of the second, that it reaches the "Absolute," as far as that is possible.[3]

It is easy to see in Bergson's emphasis on "point of view" as a basic distinguishing characteristic between analytical and intuitive knowing a foreshadowing of Gebser's "perspectival" and "aperspectival" awareness. There is also a reaffirmation of Plotinus's idea of intuition as "absolute knowledge," though it is only "as far as that is possible."

In looking at this distinction that Bergson draws, the basic question again emerges as to whether or not he truly considers the "encircling" mode and the "penetrating"

mode to be fundamentally different in kind, or only in degree and emphasis. It seems that in his earlier writing he considers intuition to be an extended development of intellect, or, as he writes in Creative Evolution, a development of instinct through intellect. This earlier conception of intuition is based on a keen awareness of the "tragedy of intellect"--its inherent limitation--and yet his alternative to it, which could perhaps properly be termed intellectual intuition, still maintains a subject/object distinction, and its ability to reveal the Absolute is somewhat tentative. In these earlier discussions, Bergson generally avoids including in his conception of intuition the idea of mystical union with God, which later becomes more important. He nevertheless clearly distinguishes intellective and intuitive knowing, and predicates the distinction on several different elements, particularly the process of constant change which is the essence of life and which he argues can only be apprehended by intuition, never by intellection (termed intelligence):

> . . .to think intuitively is to think in duration. Intelligence starts ordinarily from the immobile, and reconstructs movement as best it can with immobilities in juxtaposition. Intuition starts from movement, posits it, or rather perceives it as reality itself, and sees in immobility only an abstract moment, a snapshot taken by our mind, of a mobility. Intelligence ordinarily concerns itself with things, meaning by that, with the static, and makes of change an accident which is supposedly superadded. For intuition the essential is change: as for the thing, as intelligence understands it, it is a cutting which has been made out of the becoming and set up by our mind as a substitute for the whole.[4]

This idea of duration is central for Bergson, and he contrasts Schopenhauer's conception of intuition as a mode of contacting the eternal with his own which is a way, "above all, of finding true duration." This duration is completely different from the intellect's scientific spatialized concept of duration which is time divided into units, and he stresses this, "that intellectualized time is space, that the intelligence works upon the phantom of duration, not on duration itself." Thus, rather than getting outside of duratio. either into an abstract eternity or into an intellectually fragmented clock-time, intuition enables the knower to "get back into duration and recapture reality in the very mobility which is its essence."[5] For Bergson, this duration is contacted through intuition as a seamless temporal experience, and it can be seen that his sense of the essentially process-oriented nature of reality, and his emphasis on eternal change and becoming rather than static being, have much in common with the Eastern worldview and with the perspective emerging from the theories of modern physics. It is this constant flux that the intellect can never experience directly and which, he says, only the intuitive mode of knowing can effectively correspond with and thus comprehend. And yet he points out that,

> Intuition is arduous and cannot last. Whether it be intellection or intuition, thought, of course, always utilizes language; and intuition, like all thought, finally becomes lodged in concepts such as duration, qualitative or heterogeneous multiplicity, unconsciousness,--even differentiation, if one considers the notion such as it was to begin with. But the concept which is of intellectual origin is immediately

> clear, at least for a mind which can put forth sufficient effort, while the idea which has sprung from an intuition ordinarily begins by being obscure, whatever our power of thought may be. The fact is that there are two kinds of clarity.[6]

Thus, in this 1922 essay, while sharply distinguishing intellective and intuitive knowing, Bergson implies that intuition does not necessarily differ fundamentally in kind from intellection, but is on the opposite end from it in the continuum of thought. It is still thought, and thus verbally mediated and subject to the limitations inherent in eventually becoming "lodged in concepts." In describing it as arduous and fleeting, and in postulating a gradual intuitive clarification as opposed to the immediate clarity of intellect, he is again suggesting that intuition is basically different from intellection, though this difference again seems to be more of degree than kind. There is still an inherent intellectual element in his conception of intuition, and this accounts for it being described as fleeting, arduous, gradually clarifying and subject to becoming lodged in concepts. These are, it seems, characteristic of an intellectual intuition that operates within an essentially rational sphere and that, while going against the prevailing currents of that sphere, is nevertheless bound by the sphere's laws of formulation and expression.

In contrast to this, the tenor of his later writings, particularly his last major piece, <u>The Two Sources of Morality and Religion</u>, reveals a conception of intuition

which is seen to be qualitatively different in kind from intellectual knowing, and which is much more akin to mystical union wherein the Absolute is revealed in a nondualistic sense. He refers to this later conception of intuition as an "integral experience," and emphasizes that while there are many levels of intuition, true mystical intuition is the highest, for it is a dynamic force for human transformation. Bergson thus attributes a major developmental task to intuition, that of lifting humanity to God, and unabashedly proclaims the mystical love which alone overcomes separateness:

> Gone, doubtless, is the distance between the thought and the object of thought, since the problems which measured and indeed constituted the gap have disappeared. Gone the radical separation of him who loves and him who is beloved: God is there and joy is boundless. But though the soul becomes, in thought and feeling, absorbed in God, something of it remains outside; that something is the will, whence the soul's action, if it acted, would quite naturally proceed. Its life, then, is not yet divine. The soul is aware of this, hence its vague disquietude, hence the agitation in repose which is the striking feature of what we call complete mysticism: it means that the impetus has acquired the momentum to go further, that ecstasy affects indeed the ability to see and to feel, but that there is, besides, the will, which itself has to find its way back to God. When this agitation has grown to the extent of displacing everything else, the ecstasy has died out, the soul finds itself alone again, and sometimes desolate. Accustomed for a time to a dazzling light, it is now left blindly groping in the gloom. It does not realize the profound metamorphosis which is going on obscurely within it. It feels that it has lost much; it does not yet know that this was in order to gain all. Such is the 'darkest night' of which the great mystics have spoken, . . .[7]

The mystic experience and the journey of its unfolding and fulfillment is clearly seen by Bergson to be transformative at the deepest levels of the individual's being. The

transformation continues beyond this "dark night," in which there still remains, despite the experience of union, a clinging to separateness. He characterizes the immanent final phase of mystic intuition:

> The mystic soul yearns to become this instrument. It throws off anything in its substance that is not pure enough, not flexible and strong enough, to be turned to some use by God. Already it had sensed the presence of God, it had thought it beheld God in a symbolic vision, it had even been united to Him in its ecstasy; but none of this rapture was lasting, because it was mere contemplation; action threw the soul back upon itself and thus divorced it from God. Now it is God who is acting through the soul, in the soul; the union is total, therefore final. At this point words such as mechanism and instrument evoke images which are better left alone. They could be used to give us an idea of the preliminary work. They will teach us nothing of the final result. Let us say that henceforth for the soul there is a superabundance of life. There is a boundless impetus. There is an irresistible impulse which hurls it into vast enterprises. A calm exaltation of all its faculties makes it see things on a vast scale only, and, in spite of its own weakness, produce only what can be mightily wrought. Above all, it sees things simply, and this simplicity, which is equally striking in the words it uses and the conduct it follows, guides it through complications which it apparently does not even perceive. An innate knowledge, or rather an acquired ignorance, suggests to it straightaway the step to be taken, the decisive act, the unanswerable word.[8]

Here, certainly, Bergson is describing an intuitive knowing that is of a wholly different order from intellection. There is no longer any sense of separateness from what, with his Christian orientation, Bergson refers to as God, and knowledge and action are spontaneously combined in a way that utterly transforms the individual. The terms "innate knowledge" and "acquired ignorance" are highly reminiscent of Buddhist and Taoist conceptions of the awakened mind such as prajna, the intuitive wisdom inherent

in one's own true nature, and wu hsin, the "no-mind" which characterizes an awakened sage whose actions become a harmonious reflection of the eternal Tao in every situation. In fact, Bergson goes on to characterize the action arising from mystic intuition in terms that clearly reflect a similar non-dualistic orientation:

> Yet effort remains indispensable, endurance and perseverance likewise. But they come of themselves, they develop of their own accord, in a soul acting and acted upon, whose liberty coincides with the divine activity. They represent a vast expenditure of energy, but this energy is supplied as it is required, for the superabundance of vitality which it demands flows from a spring which is the very source of life. And now the visions are left far behind: the divinity could not manifest itself from without to a soul henceforth replete with its essence. Nothing remains to distinguish such a man outwardly from the men about him. . . . He has felt truth flowing into his soul from its fountainhead like an active force. He can no more help spreading it abroad than the sun can help diffusing its light. Only, it is not by mere words that he will spread it.[9]

This experience of what Bergson refers to as mystic intuition clearly and boldly transcends reason, verbal mediation, and the intellectual intuition of his earlier writings. While these earlier writings constitute a masterful critique of overdependence on unalloyed intellect and go far in promoting intuition as an alternative, it seems that in his old age, perhaps because that is "when you don't care what people think about you anymore,"[10] he casts off earlier restraint and the later version of intuitive knowing he proposes is more radically transformational. This is an important aspect, for it makes of intuition a powerful force in the world, one which, moreover, has a vital role to play

in individual and societal transformation. It is just this sort of transformation that many commentators say is now required if humanity is to survive the current global crisis. Bergson himself actually makes the same basic point in his last work, writing that mystic intuition not only offers the only real hope of transcending war, but that it also opens the door to a joy that eclipses mere pleasures, which "would pale like our electric lamps before the morning sun." He goes on to add, "Joy indeed would be that simplicity of life diffused throughout the world by an ever-spreading mystic intuition," and concludes that it is this latter which fulfills "the essential function of the universe, which is a machine for the making of gods."[11] This rounding out of Bergson's transformative vision, through the mystic yearning not just to become a new species but to be "delivered from the necessity of being a species; for every species means a collective halt,"[12] is the divinization of humanity which comes about through divine love. For Bergson, as for Spinoza, mystical intuition has a moral as well as epistemological dimension, and the boundless altruism which it engenders is a crucial quality by which it again completely eclipses reason. In describing the love of the mystic, he writes,

> For the love which consumes him is no longer simply the love of man for God, it is the love of God for all men. Through God, in the strength of God, he loves all mankind with a divine love. This is not the fraternity enjoined on us by the philosophers in the name of reason, in the principle that all men share by birth in one rational essence: . . . The mystic love of humanity is a very different thing. It is not the extension of

> an instinct, it does not originate in an idea. It is neither of the senses nor of the mind. It is of both, implicitly, and is effectively much more. For such a love lies at the very root of feeling and reason, as of all other things. Coinciding with God's love for His handiwork, a love which has been the source of everything, it would yield up, to anyone who knew how to question it, the secret of creation.[13]

For Bergson, true love and wisdom are thus seen to be attained and fulfilled through mystic intuition, which he defines as "participation in the divine essence."[14] This participation is both meditative and dynamic. It is meditative in that it admits of no split between knower and known, lover and beloved, human and divine. Its dynamism is that of the essential open and ever-changing nature of life ("the real is mobile, or rather movement itself"[15]), and he argues extensively that closed societies, closed moralities, and static religions are the product of instinct- and intellect-based functioning, while open societies and moralities and dynamic religions come only with "supra-rational" functioning. While Bergson would agree with Bellah on the primacy of what the latter calls "religious knowing," which "links subject and object," he stresses the mystical intuitive aspect of religion which is only available through direct participatory experience, and contrasts it sharply with religious encrustation, which is of the intellect:

> For the teaching of religion, like all teaching, is meant for the intelligence, and anything of a purely intellectual order can be brought within the reach of all men. Whether or not we subscribe to religion, it is always possible to assimilate it intellectually, even if we must admit its mysteries to be mysterious. On the contrary, mysticism means nothing, absolutely nothing, to the man who has no experience of it, however slight.[16]

As to how this experience is to be arrived at, and what contexts might foster its manifestation, Bergson offers little in the way of concrete explanations. While mystical intuition is available to everyone, and arises from and illumines the essential creative force which vivifies all people, some more than others will be drawn into mystical experience. As he points out, a self-centered attempt to will mystical intuition is not likely to be successful; rather, it is as if the transcendent force itself, in willing it, brings forth the corresponding resonance in the "mystical soul." Bergson does not, however, ever take the responsibility away from people and give it over to an outside force, but rather emphasizes that, "men do not sufficiently realize that the future is in their own hands."[17] He does emphasize, though, that one prerequisite for the awakening of mystical intuition on a societal level is the broadening of conventional scientific thinking. He chooses a field that many include within the realm of intuition, namely psychic phenomena, to demonstrate his case. In a statement that foreshadows the main theme of Aldous Huxley's widely-read <u>The Doors of Perception</u>, he says that the brain does not create mental images but rather,

> . . . it merely limits them, so as to make them effective. It is the organ of <u>attention to life</u>. But this means that there must have been provided, either in the body or in the consciousness limited by the body, some contrivance expressly designed to screen from man's perception objects which by their nature are beyond the reach of man's action. If these mechanisms get out of order, the door which they kept shut opens a little way: there enters in something of a 'without' which may be a 'beyond.' It is with these abnormal perceptions that

> 'psychical research' is concerned. To a certain extent the opposition it encounters is intelligible. It is a science that rests on human evidence, and human evidence can always be disputed. The typical scientist is in our eyes the physicist; his attitude of fully justified confidence towards matter, which is obviously not out to deceive him, has become for us characteristic of all science. We are reluctant to go on treating as scientific a form of investigation which requires of the investigators that they be ever on the lookout for trickery. Their distrust makes us uneasy, their trust still more so . . .[18]

Their trust, of course, is in the objectivist paradigm. Bergson clearly has a theoretical framework and perhaps some personal experience that make him more open to the field of psychical research, and his impatience with the materialistic view that conventional science has elevated to dominance is an impatience that is shared by many more people today. He is quite unambiguous about the shortcomings and actual disservice of this positivist bias:

> . . . if, for example, the reality of 'telepathic phenomena' is called in doubt after the mutual corroboration of thousands of statements which have been collected on the subject, it is human evidence in general that must, in the eyes of science, be declared to be null and void: what, then, is to become of history?"[19]

This concern is raised today by an increasingly vocal and recognized segment of the academic community as well as by informed lay people, and it centers on a basic question: Why must science systematically exclude from its realm of possible reality numerous areas of human experience about which there is expressed testimony? Adherents to the conventional scientific paradigm find themselves increasingly in the unenviable position of defending the bulwarks of their concretized worldview against the onslaught of mounting

evidence that this worldview is far too constrictive to adequately represent the full range of reported phenomena. What seems to be most desperately needed now is a new general framework which will not deny, reject, and ignore any aspects of human experience, but will be broad enough to accommodate, at least theoretically, all of them. A significant and growing number of researchers, particularly those in the emergent field of consciousness studies, are pressing toward this creation of a new theoretical framework.

In sum, it can be seen that many of the questions Bergson raised resonate with perhaps an even greater urgency among a new generation of philosophers and scientists. His trenchant critique of the "sheer intellectualism" that has dominated the conventional epistemological perspective, and his ability to evolve an alternative to it, have contributed to the increasing attention that is being paid to intuition. A member of the Academy, and a Nobel laureate, his is a voice from within the strong-walled city. His perspective on intuition, though evolving over time (appropriate enough for someone so thoroughly emphasizing the essential changing nature of all appearances), is always a faculty that is available, potentially at least, to everyone. His earlier version, resting on his premise that intellect is unable to understand life and that instinct, while potentially empowering, is not oriented toward understanding life, sees intuition as combining the certainty and immediacy of instinct with the wide range of intellect. Mystical

intuition, a conception of intuition which emerges later, clearly transcends intellect and is seen as a powerful and much-needed transformative force in individuals and in societies.

Though there are many other twentieth-century voices who offer perspectives on intuition, the viewpoint of C. G. Jung is particularly noteworthy. As is well-known, Jung sees intuition as one of the four basic functions of consciousness, the other three being thinking, feeling, and sensing. He holds that the real project of human life is individuation, a process that involves achieving command over all four of these functions. It is only through this balancing of the pairs of opposites, he feels, that the Transcendent Function can be fully activated. He is thus a proponent of increased attention being addressed to both intuition and feeling, since their respective opposites, thinking and sensing, have been overemphasized by modern Western society.

Just as Jung clearly distinguishes extraverted from introverted attitude types, so he also distinguishes extraverted from introverted intuition. His distinction is based on the idea that psychologically, people "can be distinguished by their attitude to the object."[20] He summarizes:

> It is sufficient to note that the peculiar nature of the extravert constantly urges him to expend and propagate himself in every way, while the tendency of the introvert is to defend himself against all demands from outside, to conserve his energy by withdrawing it from objects, thereby consolidating his own position.[21]

Since the general attitude of extraverted types is to be outwardly oriented, their intuitive function is similarly focused, and Jung states, "In the extraverted attitude, intuition as the function of unconscious perception is wholly directed to external objects."[22] Because this is so, their intuitive faculties are primarily concerned with seeing the possibilities in external situations, and for this reason, as Jung points out, extraverted intuitive types make excellent entrepreneurs, speculators, politicians, and socialites and so are "uncommonly important both economically and culturally." In sum, Jung's external intuition "tries to apprehend the widest range of possibilities, since only through envisioning possibilities is intuition fully satisfied. It seeks to discover what possibilities the objective situation holds in store; . . ."[23] Jung's introverted attitude being more subjectively oriented, his introverted intuition is seen to be directed toward inner objects in the unconscious, particularly in the collective unconscious. Thus, it is intoverted intuition that apprehends the archetypes and this apprehension of inner possibilities is "indispensable to the total psychic economy [and] correspondingly . . . to the psychic life of a people." Jung emphasizes that,

> introverted intuition, through its perception of these inner processes, can supply certain data which may be of the utmost importance for understanding what is going on in the world. It can even foresee new possibilities in more or less clear outline, as well as events which later actually do happen. Its prophetic foresight is explained by its relation to the archetypes, which

> represent the laws governing the course of all experienceable things.[24]

The introverted intuitive is often, according to Jung, a "mystical dreamer," or one whose voice is "the voice of one crying in the wilderness."

It is clear that Jung credits intuition with the status of being a basic perceptual mode of functioning, one focused on seeing possibilities, and his interest in it has encouraged other psychologists to approach it more seriously. He was considerably more open to intuition than his one-time teacher Freud, who, like many rationalists, simply denied its existence, stating that, ". . . no new source of knowledge or methods of research have come into being. Intuition and divination would be such if they existed, but they may safely be reckoned as illusions, the fulfillment of wishful impulses."[25] However, Jung's definition of intuition, as "perception of the possibilities inherent in a situation,"[26] keeps it highly circumscribed as a mode of knowing which, as he goes on to emphasize, is only "the function of unconscious perception."[27]

Jung's position can thus be seen to embody contradictory effects. By including intuition as "one of the four basic functions of the psyche," he explicitly recognizes and values its unique power and quality. This is particularly seen to be the case when the overall thrust of Jung's framework is held in mind, for since opposite psychological functions hinder each other, individuation, the summum bonum of Jungian development, requires the mastery of

all four, and the ability to easily alternate among them as appropriate. On the other hand, Jung's insistence on the unconscious character of intuition and his portrayal of it as lacking direction as well as his tendency to view it through a rationalistic lens seem to work to devalue the intuitive capacity. An obvious characteristic of Jung's conception of intuitive knowing is that, unlike the more mystical versions of intuition of Bergson, Spinoza, Plotinus, and many Eastern traditions, it is emphatically dualistic in its orientation. He considers the primary function to be "simply to transmit images, or perceptions of relations between things, which could not be transmitted by other functions or only in a very roundabout way."[28] Intuition for him is thus always between entities, and this is basically consonant with his underlying conviction that there can not be consciousness without a self to experience it. In regard to this subject-object issue, though, he draws a sharp distinction between ego and Self:

> Individuation is not that you become an ego; you would then be an individualist. An individualist is a man who did not succeed in individuating; he is a philosophically distilled egotist. Whilst individuation is becoming that thing which is not the ego, and that is very strange. Nobody understands what the Self is, because the Self is just what you are not--it is not the ego. The ego discovers itself as a mere appendix of the Self in a sort of loose connection.[29]

There is always, for Jung, a center without which there can be no consciousness, and intuition, like the other three psychological functions, is for him always a faculty mediating between this subject and internal or external objects; like the other three modes, it can thus be either

right or wrong in its perceptions. He emphasizes the necessity of a self-center for consciousness,

> One hopes to control the unconscious, but the past masters on the art of self-control, the yogis, attain perfection in samadhi, a state of ecstasy, which so far as we know is equivalent to a state of unconsciousness. It makes no difference whether they call our unconscious a 'universal consciousness'; the fact remains that in their case the unconscious has swallowed up ego-consciousness. They do not realize that a 'universal consciousness' is a contradiction in terms, since exclusion, selection, and discrimination are the root and essence of everything that lays claim to the name 'consciousness.'[30]

Jung's perspective is thus, ultimately, rooted firmly in the Western dualistic tradition that rejects the possibility of consciousness that is not bifurcated into a subject/object dichotomy. While in this he and Freud could perhaps agree, Jung's willingness to explore Eastern and mystic perspectives, and his explicit emphasis on the distinction between the ego and the Self allow him to create a psychological theory which provides a context for establishing a more transpersonal perspective, for opening up dialogue with non-Western psycho-spiritual approaches, for bridging the chasm between religion and science that has traumatized the West, and for establishing intuition as a primary functional modality that can be cultivated and that fulfills a unique and indispensable role in the development of healthy and mature individuals.

As is well known, Jung was strongly interested in and influenced by many aspects of Eastern thought. His explorations into psychic phenomena and other acausally related noetic occurences reinforced his approving position

on synchronicity as an acausal connecting principle. Long recognized in the East, and with "far-reaching consequences" for modern thought, synchronicity implies "that the psyche cannot be localized in space or that space is relative to the psyche."[31] The Eastern traditions, as the example of synchronicity indicates, take a generally less dualistic and materialistic perspective, and Buddhism particularly takes an extremely penetrating look at what the mind is and what the healthy and mature individual actually is. This is done using epistemological approaches that are basically far more intuitively-centered than Western traditions have been. The influence of Eastern thought, which surfaced and became visible in the West beginning about one hundred and fifty years ago with the first translations of Chinese and Indian texts, can hardly be underestimated. Its impact on the West has already been immense, and its potential effect is truly incalculable. Indeed, historian Arnold Toynbee is said to have predicted that future generations, in looking back at the twentieth century, will consider the most significant event of this century to have been the coming of Buddhism to the West.[32] This is quite ironic, in light of Toynbee's statement that,

> In the encounter between the world and the West that has been going on by now for four or five hundred years, the world, not the West, is the party that, up to now, has had the significant experience. It has not been the West that has been hit by the world; it is the world that has been hit--and hit hard--by the West.[33]

What can be seen here is perhaps an example of Heraclitus's <u>enantiodromia</u>, the "running to opposites" that

is such a central principle of the I Ching. It also figures strongly in Jung's well-known logos/eros distinction. The yang, "masculine," logos-oriented tendencies of the rationalistic West having emerged, grown, and reached full fruition, now retreat and the polar opposing yin, "feminine," eros-oriented tendencies of the more intuitionist East begin to develop, expand, and flourish. This is not a black-and-white monolithic march, but is a dance of inexhaustible richness, replete with currents, cross-currents, interconnecting motifs and sub-motifs, endlessly varying tempos, colors, and tones that blend and reblend in a kaleidoscopic unfoldment that is dazzling in its endless profusion, vastness of scope, and profound subtlety of texture. Whatever abstractions, drawn from this magnificent flow of life and of human consciousness, are used to characterize and define it can only be the palest of pointers, and can in no way be seen to truly represent and thus capture the ever-changing complexity of the process itself.

With this in mind, the earlier characterization of what is perhaps a global resurgence of tendencies and functioning modalities that are metaphorically more right-hemisphere oriented can be seen as an enantiodromic alternation in the global brain itself. The view that humanity constitutes, still in nascent form, a single interconnected system, much like a nervous system, has been popularized by British mathematician Peter Russell in his

book The Global Brain. From this kind of meta-perspective, East and West may be seen not only as geographic hemispheres but as epistemological hemispheres as well. As Jung and many others have emphasized, the simultaneous operation of psychological functions that are polar opposites hinders or denies both. This principle is endemic in nature. For example, inhalation and exhalation are equally vital to the health of an organism, but trying to engage in them simultaneously frustrates both functions and if persisted in, can damage or destroy the organism. Similarly, being only able to inhale or only able to exhale also leads to organismic damage and ultimate death. It is the alternation between opposing tendencies that allows both their full expression within the context of the other, and it is this basic rhythm that can be discerned not only in many different processes in nature, from the subatomic to the cosmic, but also, it seems, in the functioning and development of human consciousness as well. Thus, in the larger collective consciousness of humanity which may constitute the global brain, there has been a strong cyclic pulse of Western, "left-hemisphere" activation of rationalism and concomitant individualism. The fresh pulse now is of Eastern "right-hemisphere" activation of intuitive knowing and concomitant altruism. Within the overall pulse of each cycle there are also nested sub-cycles and cross-tendencies, as can be seen both historically and in contemporary movements.

The central feature of these opposing tendencies is that while they can be viewed as dualities, they can also be seen as polarities. From the dualistic perspective that characterizes objectivism, opposites are seen as contradictory and mutually exclusive things-in-themselves that are in an essentially adversarial relationship with each other. From the perspective of polarity, which is another fundamental principle of the I Ching and of more intuitive approaches generally, opposites are seen to be mutually-conditioning aspects of a greater whole process which is enriched and fulfilled through the interaction of the apparent opposites. According to this latter polar-oriented perspective, rational and nonrational modes of knowing are elements of a larger epistemological process, and need not be cast as competitors, but rather, like East and West (which have suffered a similar fate) can be seen as mutually-fulfilling aspects of a more global process. While the dualistic orientation tends to continually assume "either/or" dichotomies and "us/them" thinking and rejoice in unmasking "contradictions," orientations which emphasize polarity assume "both/and," "us/us" relations in which contradictions are transformed into paradoxes, and often create by-product energy discharges of humor in the process: "Very well then I contradict myself,/(I am large, I contain multitudes)."

The enantiodromia process of East and West, intellect and intuition, is thus seen to be both a cyclical process as discussed above and also a non-cyclical one, since it is also

an evolutionary unfoldment. Perhaps the spiral is an appropriate integrative symbol. All of what has been here sketched and highlighted is of vital importance to educational theory, since it relates to the deep structures which give rise to theoretical orientations.

In undertaking a light tracing of some of the virtually infinite aspects of the East-West interchange as it has evolved over the past several centuries, it becomes immediately clear that many major Western philosophers have been profoundly affected by Eastern thought, two obvious examples being Schopenhauer and Emerson. The latter's colleague, Henry David Thoreau, was an enthusiastic student of Eastern thought, and credited his private library of Eastern works, one of the largest in the country at the time, with catalyzing many insights that later appeared in his essays and journals; these of course influenced Tolstoy and thus future thinking in Russia, and also Gandhi, who was also influenced by Tolstoy. Gandhi's writings have had incalculable influence on people the world over, a primary example being Martin Luther King, Jr. These are but a few examples of the intricate interwovenness of Eastern ways of thinking with those of the West; the texture of the tapestry itself is unimaginably rich and complex, and includes influences in philosophy, science, the arts, lifestyle, politics, and virtually every other area of culture. In many ways the influences have been rendered invisible through a process of "cultural laundering": people directly influenced

by Eastern forms and styles influence others, and these people influence others, and so forth, with the ensuing impact-ripples affecting population numbers that grow exponentially. Thus, for example, some major roots of many movements in art, business, literature, politics, psychology, and so forth, will be seen to reach, if traced carefully, into the soils of China, Japan, India, and other oriental cultures. As the influence of the East continues to broaden and its root system here becomes more dense, the central features of the Eastern approach will become more emphasized and obvious, though there are caveats necessary to avoid oversimplifying sociocultural change. One is that cultures today are influenced by exceedingly complex patterns of forces, and the other is that there is clearly no such monolithic creature as "Eastern" culture. Nevertheless, social forces can be seen and their effects traced, and the general tendencies of cultures can, it seems, be discussed.

Thus, while the West has tended to ignore or devalue intuitive knowing, particularly during the past four hundred years or so, the East has accorded it a far higher status, and in addition, has generally been willing to define it in less dualistic terms. An illustration of this which will perhaps shed light on fresh perspectives on intuition with potential value to educators can be found in Mahayana Buddhism.

Fundamental to any epistemological paradigm is its approach to the nature of the knower: how exactly does it

conceive of the self? This is, as well, a basic question addressed of and by any educational theory, particularly when education is viewed in the broader context of being a process whereby consciousness is conditioned or deconditioned, and, in a deeper sense, whereby it is created to function, manifest, and reflect in whatever ways it does. Education as the creator (and creation) of consciousness is, then, profoundly influenced by the underlying cultural assumptions relating to the nature of the individual self that is to be educated. The highly individualistic conception of the self that characerizes the basic Western orientation has been discussed from countless perspectives and in countless contexts. One prominent example is Erich Fromm who correlates individualism with freedom, rationality, and anxiety, saying that, "Freedom, though it has brought man independence and rationality, has made him isolated, and thereby anxious and powerless,"[34] and he sees the solution to the problem of individualism in the transcending power of dynamic love which alone can give rise to spontaneous action: "The basic dichotomy that is inherent in freedom--the birth of individuality and the pain of aloneness--is dissolved on a higher plane by spontaneous action."[35] He says that "Love is the foremost component of such spontaneity,"[36] and it is important to note that in all the types of authentic love Fromm discusses, brotherly love, motherly love, erotic love, self-love, and love of God, the primary criterion is maintaining and fulfilling the integrity of the self:

> We are aware of the existence of a self, of a core in our personality which is unchangeable and which persists throughout our life in spite of varying circumstances; and regardless of certain changes in opinions and feelings. It is this core which is the reality behind the word "I," and on which our conviction of our own identity is based. Unless we have faith in the persistence of our self, our feeling of identity is threatened and we become dependent on other people whose approval then becomes the basis for our feeling of identity.[37]

This faith in the existence of a personal self is, of course, fundamental to Fromm's humanist position. While he insists that love is the transcendence of the self, it is also the reinforcement of it. He sharply contrasts what he calls two basic tendencies, necrophilia, the negative and destructive "love of death," and biophilia, the positive and affirming "love of life." A major aspect of the necrophilian "syndrome of decay"[38] is narcissism, which is based on the fundamental anxiety of negative freedom that makes it impossible for the individual to truly love either self or others.

In sum, Fromm sees the human dilemma in terms of the question of individuality. All his writings on freedom, love, intuition, rationality, anxiety, spontaneity, narcissism, and so forth, revolve around it. However, he never seriously questions the fundamental existence of the individual self. In fact, he fiercely defends it, though he also admits that individuals can know at-one-ment, and that all individuals are part of the One:

> The significance of the phenomenon of narcissism from the ethical-spiritual viewpoint becomes very clear if we consider that the essential teachings of all the great humanist religions can be summarized in one sentence:

> It is the goal of man to overcome one's narcissism. Perhaps this principle is nowhere expressed more radically than in Buddhism. The teaching of the Buddha amounts to saying that man can save himself from suffering only if he awakens from his illusions and becomes aware of his reality; the reality of sickness, old age, and death, and of the impossibility of ever attaining the aims of his greed. The 'awakened' person of whom Buddhist teaching speaks is the person who has overcome his narcissism, and who is therefore capable of being fully awake. We might put the same thought still differently: Only if man can do away with the illusion of his indestructible ego, only if he can drop it together with all other objects of his greed, only then can he be open to the world and fully related to it. Psychologically this process of becoming fully awake is identical with the replacement of narcissism by relatedness to the world.[39]

This is about the closest Fromm comes to explicitly recognizing that the existence of the separate ego may be illusory. However, even here, in replacing narcissism with relatedness, Fromm clings to an underlying separatistic assumption, that there is an objective self that relates to something else. Thomas Merton clarifies the significance of this subject/object dichotomy in the West:

> Even where Western thought is given a collective and social orientation, and even when its individualism is no longer an enforcement of the 'I' but its renunciation, the 'I' nevertheless remains the starting point of everything. It is the subject endowed with freedom and with the capacity to know and to love.[40]

This seems to be true in all of Fromm's thinking, and also of many of the intuitionist philosophers discussed earlier. With the possible exception of Plotinus, Eckhart, and some unusual and generally unrecognized mystics, the fundamental existence of a discrete objective self has not been seriously questioned in the West until quite recently.

[1]Morton White, ed., The Age of Analysis: Twentieth Century Philosophers (New York: Houghton Mifflin, 1955), pp. 66, 69.

[2]Henri Bergson, The Introduction to a New Philosophy (Boston: John W. Luce, 1912), p. 11.

[3]Ibid., pp. 3-4.

[4]Henri Bergson, The Creative Mind (New York: Philosophical Library, 1946), pp. 38-39.

[5]Ibid., p. 34.

[6]Ibid., p. 39.

[7]H. Bergson, The Two Sources of Morality and Religion (New York: Henry Holt and Company, 1935), p. 219-20.

[8]Ibid., pp. 220-21.

[9]Ibid., pp. 221-222.

[10]Robert Girard, "Intuition and the Evolution of Consciousness," address delivered at Opening the Intuitive Gate Conference, San Francisco, February 5, 1988.

[11]Bergson, The Two Sources of Morality and Religion, p. 306.

[12]Ibid., p. 300.

[13]Ibid., pp. 222-23.

[14]Ibid., p. 252.

[15]Ibid., p. 232.

[16]Ibid., p. 226.

[17]Ibid., p. 306.

[18]Ibid., p. 304.

[19]Ibid., p. 305.

[20]C. G. Jung, "Psychological Types," in The Portable Jung, ed. Joseph Campbell, (New York: Penguin, 1971), p.179.

[21]Ibid., p. 180.

[22]Ibid., p. 220.

[23]Ibid., p. 222.

[24]Ibid., p. 261.

[25]Freud, "New Introductory Lectures in Psychoanalysis," in Standard Edition of the Complete Psychological Works of Sigmund Freud, vol. 22, ed. J. Strachey (London: Hogarth Press, 1964), p. 66.

[26]C. G. Jung, "The Structure of the Psyche," in The Portable Jung, ed. Joseph Campbell, p. 26.

[27]C. G. Jung, "Psychological Types," ibid., p. 220.

[28]Ibid., p. 221.

[29]C. G. Jung, The Kundalini Yoga, ("Notes on the Seminar given by Prof. D. J. Hauer with Psychological Commentary by C. G. Jung, Zurich, Autumn, 1932) (San Francisco: C. G. Jung Institute, 1970), p. 120.

[30]C. G. Jung, "Conscious, Unconscious and Individuation," The Collected Works of C.G. Jung, ed. Herbert Read (Princeton: Princeton University Press, 1954), Vol. 9, Pt. 1, p. 287.

[31]Jung, "On Synchronicity," in The Portable Jung, ed. Joseph Campbell, p. 518.

[32]Marilyn Ferguson, The Aquarian Conspiracy (Los Angeles: Tarcher, 1980), p. 51.

[33]Arnold Toynbee, cited in L. S. Stravrianos, The World Since 1500 (Englewood Cliffs, NJ: Prentice-Hall, 1966), p. 9.

[34]Erich Fromm, Escape from Freedom (New York: Holt, Rinehart & Winston, 1941), p. viii.

[35]Ibid., p. 262.

[36]Ibid., p. 261.

[37]Erich Fromm, The Art of Loving (New York: Harper & Row, 1956), p. 123.

[38]Erich Fromm, The Heart of Man (New York: Harper & Row, 1964), p. 110.

[39]Ibid., pp. 88-89.

[40]Thomas Merton, Mystics and Zen Masters (New York: Harper, 1961), pp. 223-24.

CHAPTER VI

Mahayana Perspectives on Intuition

Mahayana Buddhism differs radically from the foregoing conceptions of freedom, love, and knowledge on one key point: the question of the existence of the self. "Give up those erroneous thoughts leading to false distinctions! There is no 'self' and no 'other.'"[1] This statement by the ninth-century Chinese Zen master Huang-po points to the heart of the Buddhist teaching, that it is only due to the false discrimination of the conditioned mind that a self separate from the world is experienced. Fromm advocates transcending the negative aspects of this experience and developing the positive aspects of it. For Buddhism, though, whether the experience the self has of being separate is negative or positive, it is, fundamentally, a delusion that is linked inescapably with suffering. From the Buddhist perspective, Fromm is trapped in an illusion. Despite his penetrating historical analysis of Western culture and his trenchant critique of it, he is still enmeshed by its core supposition, that "self" is separate from "other." Like the virtual entirety of Western thinkers, all of whom, to one degree or another, seem to share this assumption, Fromm's capacity to

understand, and thus to heal, the basic conflict "at the heart of man" is essentially limited.

For example, Fromm's conception of love, which is the positive solution he offers for the ego's painful isolation, is severely limited from the Buddhist point of view. He sees love as paradoxical, both reinforcing the separate ego and yet also uniting it with its object. In the Buddhist tradition, though, the existence of any self as a separate entity is denied, and this forms the basis for the paradox of love. For Zen, as long as there is still clinging to the idea of myself as lover separate from the beloved, there will inevitably arise other emotions, like greed, anger, and jealousy, which will weaken and pollute the flow of love. The great love of Buddhism, mahakaruna, is only possible for a mind that no longer divides itself between self and other. This could perhaps be referred to as "absolute" love in contrast to Fromm's relative love which is based on a paradoxical union between two selves that are, nevertheless, conceived to be separate. Individual freedom thus provides a paradox similar to that of love. From the Buddhist perspective, all notions of individual freedom are relative and thus contain a basic contradiction in that the very sense of myself as a separate being is the fundamental bondage. The absolute freedom that is so often alluded to in Zen arises spontaneously, like love, in a mind that is not bound by the erroneous notion that there is an unchanging self which can be said to be either in bondage or free.

True intuitive knowing is also, from the Mahayana perspective, possible only for a mind that no longer splits itself into a subject/object dualism. It requires an awareness in which subject and object are recognized as being polarities, since from this perspective, knower and known are seen to be inseparable aspects of a larger process, and it is the larger process, unknowable to the ego through any of its feelings, sensings, thinkings, reasonings, or "intuitings," that is the true intuiter and field of intuition. Ungraspable through the inherent reification of intellection, ever-living intuition, like true freedom and love, remains tantalizingly close, "as close as your own face," and yet it somehow remains elusive, evanescent, and inconceivable, an ever-present goal and goad, whether worshipped or hated, pursued or rejected. This absolute knowledge, like absolute freedom and like the great love of mahakaruna, is attainable only by awakening to the essential nature of the living process which includes all dualisms as polarities.

Since intuition is not, in this sense, attainable by conditioning, it is not something that can be taught or conveyed through an educational process as this has been conventionally conceived. Instead, it requires allowing an uncovering to take place. This basic process of self-discovery, though, is paradoxical, for it includes discovering that there never has been an unchanging self, and that this has always been known. This knowing is not the objectified knowledge of the intellectual process, but is

based on a radical participation in which knower and known are no longer present as separate entities.

This intuitive knowing, which at its deeper levels is referred to as bodhi, awakening or enlightenment, is not conceived to be some thing that is attainable by any concept-bound process, and Zen masters have emphasized this most vigorously. Huang-po said,

> Bodhi is no state. The Buddha did not attain to it. Sentient beings do not lack it. It cannot be reached with the body nor sought with the mind. All sentient beings are already of one form with Bodhi.[2]

Li T'ung-hsuan, an eighth-century master of the Hua-yen school of Chinese Mahayana, shares this same perspective:

> The Buddha is the Buddha in the mind of sentient beings,
> In terms of personal capacity they are not different things.
> If you want to know the source of all the Buddhas,
> Awaken to the fact that your own ignorance originally is Buddha.[3]

Huang-po also said,

> You must never forget that this so-called 'attaining' of intuition implies neither a withdrawal from daily life nor a search for Enlightenment. You have just to understand that time-periods have no real existence; . . . If you practise means of attaining Enlightenment for three myriad aeons but without losing your belief in something really attainable, you will still be as many aeons from your goal as there are grains of sand in the Ganges.[4]

This radical and total sense of participation with the world is fundamental to the Buddhist perspective, though it is difficult to comprehend, perhaps particularly for a mind trained in the Western mode of objective thinking. It is discussed at length in Buddhist philosophy, though this philosophy is, emphatically, an attempt at conceptualizing

and discussing meditative experiences which are, by their very nature, non-verbal and non-conceptual. In this it differs from Western philosophy which does not ground itself in meditative experience as the guarantor of validity. Thus, the basic approach to understanding the conceptions discussed in Buddhism is through direct inner experience; the word "philosopher" is often used as a pejorative to refer to someone who speaks abstractions and argues and draws conclusions without the deep inner experience born of meditation. Thus, for example, one of the core ideas of the radical participatory Buddhist perspective, referred to as mutually-dependent co-origination, is not to be accepted on faith, or understood simply through rational analysis, but intuited through a meditative participatory approach, and thus understood in a way that transcends conceptual knowing.

According to this idea of mutually-dependent co-origination, also known as conditioned origination, the existence of every apparent object is dependent upon every other object. Phenomena arise depending upon conditions and cease to arise depending upon conditions, the whole phenomenal world being thus an arising produced by what is referred to as the Chain of Simultaneous Dependent Origination. The first of the twelve links in this chain is delusion (avidya), which is "the principle of individuation as discriminated from Enlightenment which is the principle of unity."[5] Delusion in Buddhist thought is thus the mistaken conviction that beings, objects, and selves exist separate

from each other. From this basic delusion flow the other eleven links in the great cycle of conditioned existence (samsara), all of which mutually reinforce each other. When delusion disappears and there is an awakening to the truth that there is no abiding self in any phenomenal appearance, the other eleven links also disappear and the samsaric world-mandala rooted in delusion, aversion and clinging is transformed into a nirvanic world-mandala based on sila, samadhi, and prajna (morality, meditative clarity, and transcendent intuitive wisdom). Suffering, being a result of self-centered delusion, ceases when clear-seeing (yathabhutam) wisdom is awakened to. What was thought to be a self is seen to be a composite of five aggregated elements (skandhas): bodily form, feelings, perceptions, mental formations, and consciousness. When a self is sought in any of these aggregates, it cannot be found. The belief in a self existing somewhere in the five skandhas or twelve nidanas (links) is a result of false discrimination, and actually:

> No doer of the deeds is found,
> No one who ever reaps their fruit.
> Empty phenomena are there
> Thus does the world roll on.
> No god, no Brahma can be found,
> No maker of this wheel of life.
> Empty phenomena are there,
> Dependent upon conditions all.[6]

The radical participation of the Buddhist perspective is thus based on the idea that there is no self-substance either in beings or things. There is an arising in mind, and this arising is projected and interpreted as a world;

ultimately, all things in it, including oneself, are conditionally arising images without any reality as separate entities. The full realization that this is so is accompanied by profound and, in a sense, unreasonable joyfulness. It is not the joy of escape as much as it is the joy of freedom, of love, and of knowing which are unbounded by the fears and limitations of the ego-sense. It is a cause-less existential joy in which there is also an awareness of imperturbable tranquility. One is not just participating in life, one is life, unbounded and manifesting through an infinite variety of appearances, and yet, paradoxically, never gaining or losing anything, as the sky is unaffected by the coming and going of clouds. This radical participation is the basis of Buddhist thought and teaching. Though countless pages have been written in explication, interpretation, and evaluation of it, it remains, essentially, an experience which is awakened to through meditation. All teachings about it are, as the Zen masters of old put it, but fingers pointing at the moon.

At the risk of looking at fingers rather than the moon, it might be helpful to explore the notion of radical participation further through what could be called the three basic Buddhist teachings. From the Hinayana tradition, these are dukkha, that conditioned existence is inherently unsatisfactory, annica, that everything is impermanent, and anatman, that the self is empty. In the Mahayana, anatman, the emptiness-of-self idea, becomes svabhava-sunyata,

emptiness-of-selfhood, which implies a larger area than the Hinayana concept: it is not just the individual ego that is empty; all things are devoid of selfhood so there is no soul or abiding self in any conditioned phenomenal appearance. These three are interrelated. Since everything is changing, there is no unchanging self anywhere, and acting on the erroneous belief that there is a fixed self will always create the suffering of dukkha. Instead of an emphasis on structure, there is thus an emphasis on process. All apparent objects arise as part of a greater process which is ever-changing and evolving; since, as Garma C. C. Chang points out, "a changing self is a contradiction in terms," the "so-called self, that allegedly unchanging and perpetual element within us, is only a delusion projected by a confused mind."[7] Paradoxically, there is occasional reference to the "True Self" or the "Self-nature" in the Zen literature and in some Mahayana sutras such as the Mahaparinirvana Sutra. This seems to contradict the basic Buddhist rejection of the existence of a separate self, yet what is pointed at in these cases is not a thing at all and therefore must be outside the realm of verbal categorization and conceptual apprehension. From the Mahayana perspective, "things do not exist; only events exist under relative conditions. An indivisible and self-subsisting entity, or Selfhood, simply does not exist."[8] For Buddhism, as for modern physics, there are no ultimate particles. What the "True Self" is lies beyond the pale of concepts and yet it can be known through prajnaic intuition

which, though always available, is not available to anyone. Mahayana teachings, and Zen particularly, pile these paradoxes on top of each other as teaching devices within a meditational context to somehow prod the mind to leap beyond its conventional boundaries.

Illuminating this paradox from another angle, there are three central forces that are historically at the heart of Buddhist teaching and practice. Referred to as the Three Gems, these three ideas have generated an enormous amount of interest and power in the lives of people and cultures over the centuries, which may be due to the fact that they correspond to basic aspects of human existence. The words that stand for the three gems, Buddha, Dharma, and Sangha, are not just signs in the sense of having objectifiable correlations with particular concepts or things. They are, rather, symbols in the deepest sense, pointing far beyond themselves to aspects of an essential reality that is the core of human existence and yet which, paradoxically, seems to go unrealized and unrecognized by human consciousness.

The first gem, Buddha, refers to the historical Buddha Sakyamuni who was known as the Awakened One, the Sanskrit root "Budh-" meaning simply "to wake up." Buddha refers in a more basic sense, though, to the original nature all humans share, the enlightened essence of mind inherent in all beings. The second gem, Dharma, refers to the teachings of the historical Buddha. On a deeper level, it indicates the principles underlying all existence, and more deeply

still, the essential nature of the universe. The third gem, Sangha, denotes the group of people dedicated to studying and living the Buddhist teaching, or Buddhadharma. More fundamentally, it can be seen to refer to the community of sentient beings, all of which are interconnected and yet unique aspects of an encompassing reality.

The triple-gem, Buddha-Dharma-Sangha, while seeming to be specific to Buddhism, can be seen to provide, at a deeper level, a conception of human existence that is both universal and self-transcending. It addresses in an open-ended way what seems to be the three-part question people contend with: What is the apparent self? (corresponding to the Buddha-aspect); What is the larger reality in which this self is embedded? (corresponding to the Sangha-aspect); What is the nature of the relation between the two? (corresponding to the Dharma-aspect). The three aspects of this question, corresponding to the three gems, are seen to be mutually interrelated so completely that they point to the fundamental existential question lying at the heart of every human being. In Korean Zen meditation practice, this question, in the form of the universal koan "i-mo-go," is continually contemplated: "What is this?" This ancient practice of direct inquiry into the nature of the mind can be seen to be a reflection of, and expression of, the reality and process that the triple-gem signifies. The triple-gem points to a way of knowing that dissolves the existential contradiction inherent in the ordinary awareness of myself as both a limited separate thing

and as a part of a vast web, and on account of this, it is also referred to as the "three refuges," or triple-refuge, as well. Refuge here is not taken to be a place or thing outside of oneself; one takes refuge "in one's own Essence of Mind," as the Chinese Zen master Hui-neng said.[9]

Thus, the heart of Buddhism is that it is possible to awaken from the delusional trance which causes basic existential anxiety. This awakening (bodhi), is the central fact of Buddhism, and is not only potentially available to all beings, it is their essential nature. Although this original enlightened state is, in a sense, covered over and thus obscured from the view of the individualized intellect by the latter's own deluded thought-habits, it is nevertheless ever-present. This essence of mind is referred to as unborn and uncreated, in that it is infinite and its original purity is never contaminated by the defilements arising from the deluded states of mind. Though it is not a thing, and is hence unnameable, many names have been given to it, a few of them being Buddha-nature, alaya-vijnana (storehouse consciousness), tathagata-gharba (womb of the "thus-come-one"), Dharmakaya (body of truth), and Pure Mind. When this essence of mind is awakened to, the consensus trance that sees the world as separate and through a filter of categories is broken. This awakening is the realization of:

> Nirvana, which is a state of emptiness (sunyata) inherent in the nature of things and which again is a state of self-realization obtained by means of supreme wisdom. . . . Nirvana is found to be devoid of all

> predicates. In it nothing is gained, nothing is cast aside, no extermination, no eternity, no unity, no diversity. . . . True Nirvana is that which is found in the oneness of Nirvana and Samsara, absolute or sunya [empty] in its nature, and above the relativity of eternalism [realism] and nihilism. Mahayana followers strive to realise this kind of Nirvana.[10]

Nirvana is thus awakened to by a mind that no longer clings to the illusion of separateness but sees clearly that everything is part of an interconnected process which is basically empty of all self-substance. This realization does not remove one from the world of conditioned existence. Rather, there is the direct experiential awareness that this samsaric world is nirvana and that all beings are Buddhas. Enlightenment is not something to be attained in the conventional sense, for there is no one to attain it, and it is never not present, being the source from which all appearances spring. When this uncontaminated source consciousness is functioning without the impediment of the bifurcating objectification principle, then actions are automatically in harmony with the universal flow of life, referred to as the Tao by Taoists and many Chinese Zen masters.

This concept of Tao as the great Way in which, through which, and as which all appearances arise, and which of course antedates the arrival of Buddhism in China, fits remarkably well with the basic tenets of the Buddhadharma. Both emphasize the essentially dynamic quality of existence, and that the noumenal and phenomenal worlds are not separate. A well-known example of this is the Hua-yen tradition's

emphasis on the interpenetration of all phenomena; in one aspect of this teaching, the world is described metaphorically as a marvelous net. At every node of this infinitely expansive net, known as Indra's net, there is a jewel. Every jewel is unique and yet it reflects, in a way that is inconceivable to conventional analysis, every other jewel in the network. In fact, the entire net is contained in every one of the unique and infinitely numerous jewels. All phenomena are thus seen, in the Hua-yen tradition, to be mutually interpenetrating. The world is a fundamental unity embracing an infinite diversity, though this is not something that is simply believed to be so as a matter of faith or aesthetic preference. Neither is a genuine understanding of this unity attainable merely by making conceptual inferences, however astute they may be. Rather, authentic insight into the true nature of this wholeness, and into the mutually-interpenetrating quality of all phenomenal appearances, is seen to be gained through meditation. Meditation as used here refers to an epistemological process not predicated on the subject/object split that characterizes objectivist knowing. In meditative awareness, this split dissolves, and there is the direct unmediated knowing born of non-dualistic participation: the knower is the known.

Put another way, knower and known are seen to be polar aspects of a more inclusive process. This larger dynamic process is referred to as having two aspects in Mahayana literature, essence and function. These are, of

course, recognized to be concessions to the intellect's demands for categories; essence and function are not actually separate from each other at all. Essence in this case is referred to in a variety of ways by different Mahayana schools, some common ones being Buddha-mind, Essence of Mind, big mind, original nature, true man, no-mind, suchness, original face, the Self, and the Absolute; essence is also referred to as samadhi, the imperturbable tranquility of all-inclusive awareness. The function of this essence is prajna, often translated as transcendent wisdom or as intuition. Thus, the Buddhist conception of intuition is that it is the function aspect of the ever-abiding samadhi of the innate Buddha-mind. This intuitive knowing is bound by neither objectivity nor subjectivity, realism nor nihilism, nor any of the pairs of opposites, but occupies a non-place "between" all dualisms which transcends and includes them all: this is the celebrated Middle Way. The intuitive knowing of the Middle Way that transcends categories is, of course, contrary to the spirit of scientific objectivism; in fact it is literally non-sensical and is not even conceivable to the mind indoctrinated by and functioning within the Yoga of Objectivity. Intuitive understanding of the profound interconnectedness of life is thus, according to the Mahayana tradition, beyond the pale of objectivist inquiry and is available only to people who engage in meditation.

Meditation is emphasized even more strongly by the Zen tradition as providing the soundest epistemological basis

for attaining knowledge and understanding of the nature of reality. The following mondo, or teaching conversation involving a Zen student and Zen master, perhaps sheds light both on the Zen perspective on intuitive knowing, and on Zen teaching methods.

> (Once) a monk asked Hsiang Yen: 'What is Tao?" Hsiang Yen replied: 'A dragon hums inside a withered log.' The monk asked: 'What is the man walking in the Tao?' Hsiang Yen replied: '(Just) the pupils of a skull's eyes.' The monk did not understand and asked Shih Shuang: 'What is the dragon humming in a withered log?' Shi Shuang replied: 'This is joy." The monk asked: 'What are the pupils of a skull's eyes?' Shi Shuang replied: 'This is knowing.'[11]

The withered log can be seen to represent a stage in meditative practice when the passions or conflicting emotions no longer arise, and the mind is in a samadhic state of quiescence. The sense of egoic separateness has withered as has the objectivist epistemological perspective. The dragon, contrary to its implications in the West, represents the ever-awake enlightened mind, the Buddha-nature or original self-nature which is the source of unbounded creativity. In China, the dragon has traditionally represented the positive creative principle as well as enlightenment; the hum, or function of this enlightened creativity, is thus the experience of joy, the existential joy of being itself. The hum also has many other overtones of meaning as well, for example, of nonchalance, of freedom, of the primordial vibration which is the basis of all manifest forms, perhaps even of the subtle sounds that are apparently heard by adepts of nada (sound) yoga. The skull similarly represents the

extinction of the ordinary mental functioning that is bound by the first seven consciousnesses, i.e., the five sense consciousnesses, manas, the mental thinking consciousness, and the egoic consciousness which permeates these six consciousnesses. Again, when this activity has withered, then true seeing, the "this is knowing" function of prajnaic intuition, begins to operate without impediment. In both of the main images in this story, the resurrection theme is strongly present, and this idea is clearly central to the Zen conception of intuitive knowing. The ingrained egocentric perspective withers, and in its place there is the spontaneous birth of creative freedom and intuitive wisdom.

This story, one of countless hundreds that are a vital part of the Zen tradition, is not to be fully understood merely by interpreting the symbols, however shrewd the interpretation may be. This interpretive approach deals with what Zen calls the "dead" words of the story. To be truly understood, one must grasp the "live" words of the story, which are ungraspable by the intellect. The live-word interpretation of this story cannot be thought about or conceptualized in words, it is only to be discovered through direct intuitive knowing that is not mediated by any symbols. The symbols in the story must be transcended and what they signify experienced immediately. Then the story may be said to be successful. It is vital to remember that the context in which these stories arose and have been handed on has been one that has focused on developing meditative awareness, and

that they are educational methods of developing intuitive insight. As Harman and others have pointed out, the monasteries and meditation centers of China, Tibet, and other Eastern countries can be seen as laboratories in which intuitive modes of knowing were researched and ways of fostering it developed and taught. The immense richness and diversity of techniques and approaches that emerged over the centuries can only be hinted at here. Within Mahayana Buddhism alone there are virtually countless schools, lineages, sub-lineages, and orders, all of which have developed and passed on their own perspectives on efficacious means of developing prajnaic intuition.

The Zen schools have, generally speaking, been less concerned with integrating intellectual and intuitive modes and have, in accord with the legendary words of their founder Bodhidharma, emphasized the direct pointing of intuition:

> A special transmission outside the Scripture;
> No dependence on words or letters;
> Direct pointing at the Mind of man;
> Seeing into one's Nature and the attainment of Buddhahood.[12]

The more scripturally-based schools like the Hua-yen, which is based on the massive Avatamsaka Sutra, have tended to emphasize the importance of developing intuitive capacity conjointly with rational analysis and intellectual acumen. They have also tried to map the successive stages of intuitive development more precisely. The Hua-yen school, which does this most completely, describes no less than fifty-two separate stages in the bodhisattva's path to the

complete intuitive awakening of Buddhahood. The Zen schools, though, do recognize different levels or depths of intuitive knowing, a basic one being the clear distinction between the initial "understanding-awakening" that marks the first intuitive breakthrough, and the final "realization-enlightenment" of complete Buddhahood. Between these two "sudden awakenings" there is a great deal of "gradual cultivation," though this is in the realm of time, and Zen, which also transcends time, emphasizes that the first and last awakenings, and all those in between, are actually not separate; realization-enlightenment is ever-present. It is the encompassing process-source of such polarities as time and eternity, delusion and enlightenment. Nevertheless, there is also a recognition of different degrees of intuitive clarity, the famous Ten Oxherding Pictures being one example of this, and the use of different types of koans, both to ascertain a practitioner's depth of insight as well as to deepen it, being another such example. Zen has generally, though, been more suspicious of trying to reduce intuitive development to a generalized system of set stages, and has left it more up to the intuitive judgment of the teacher within the context of each unique teacher-student relationship. Ironically, it seems that in its less healthy periods, Zen schools relied more on systems (such as koan grades) and that this further undermined the health of the tradition.

The differences in emphasis between various Mahayana schools have at times provoked rivalries. For example, in thirteenth-century Korea, Zen adherents were known to charge Hua-yen followers with neglecting meditation practice in favor of engaging in highly-abstract commentaries and debates on the fine points of arcane metaphysical theories, while the latter accused the Zen practitioners of being anti-intellectual boors. Chinul, the famous reformer and syncretist who arose during this period, was thoroughly convinced that intellective development and intuitive development are not mutually exclusive, and undertook a vigorous and wide-ranging effort to demonstrate how they mutually reinforce each other. His efforts were successful, and in the process he founded what is still probably the most highly-respected Zen monastery in Korea and wrote treatises that continue to constitute basic study for practitioners in the Korean Hua-yen traditions. His reconciliation was based on his own meditative experience which both enriched and was enriched by his scriptural study.

Thus, by capitalizing on the essential unity of the Zen and Hua-yen teachings, Chinul developed a syncretic approach which, while not violating the integrity of either school, brought them into harmony as complementary interpretations of the Dharma. For example, he felt that the Hua-yen emphasis on conditioned origination was not as appropriate for Zen meditation as nature origination. Although both types of origination are essentially the same,

and were recognized to be so by both the Zen and Hua-yen schools, their emphases differ. Nature origination stresses that all appearances are of one essence or nature, which is "devoid of essence or nature" since it refers to the uncreated reality of the dharmadhatu ("realm of reality"). Conditioned origination, discussed earlier, affirms the complete interfusion of all conditioned phenomena, an infinite mutual interpenetration in which "all is in one" and "one is in all." Chinul puts forth the basic Mahayana idea that all mental and physical appearances "arise from the own-nature of the dharmadhatu":[13]

> These phenomena are all devoid of essence or nature, for originally they are nondual and their essences are indistinguishable. Since they all arise from the nonproductive conditions of the own-nature of the dharmadhatu, the conditions and the characteristics of these conditions all arise from that nature. That nature itself is the dharmadhatu; there is no inside, outside, or in between. You should be aware of this and investigate accordingly. Buddhas and sentient beings manifest illusorily from the nature-sea of the fundamental wisdom of universal brightness. Although the forms and functioning of sentient beings and Buddhas seem to be different, they are entirely the form and functioning of the fundamental wisdom of universal brightness. Therefore, while they are originally of one essence, they still can give rise to functioning at many different levels. This corresponds to the tenet of nature origination.[14]

Chinul goes on to say, after outlining the notion of "the interfusion of all phenomena from the standpoint of the conditioned origination of the dharmadhatu," that:

> Although we can demonstrate that [nature origination and conditioned origination both] return to one unity, the meaning of nature origination is more appropriate for contemplation and attaining the path. Cease your wrangling and reflect on this point in silence.[15]

Thus, while both nature origination and conditioned origination are valid approaches in the Hua-yen school, Chinul finds the former to be decisively superior from the point of view of "contemplation and attaining the path." Since nature origination is more easily harmonized with the Zen approach than conditioned origination, Chinul's emphasis on it serves an important function in his syncretic endeavor.

This endeavor may be of interest to educators today since it focused on effectively developing prajnaic intuition while also maximizing the intellect's roll in contributing to this development. While thus maintaining the basic Buddhist focus on intuitive knowing, Chinul clearly viewed intuitive and intellective processes as polarities rather than as aspects of a mutually-exclusive dualism.

The Mahayana Buddhist tradition has supported a remarkably lush profusion of theoretical and practical approaches to developing intuitive knowing. By placing bodhi, awakening from the delusion of separateness, at its center, it inherently focuses on a nontheistic epistemology that transcends the severe limitations of individualism and objectivism. The intuition born of meditative awareness is seen, from the Buddhist perspective, to have many potential levels and forms, to be an inherent potential in all living beings, and to be attained and expressed in unique ways by all these different beings. It is considered to be intimately related with altruism and ethical conduct, and to be a way of knowing that transcends rationality, in no way

opposing it. It can be seen as a higher stage of development in that it cannot be understood by or reduced to the concepts and categories of earlier stages. It is only relatively recently that the Mahayana perspective has become more directly available, through translations, commentaries, and institutions, to generalists in the West. Its influence can be seen, to varying degrees, on contemporary observers who take intuition seriously.

Intuition seems to be an area of rapidly growing interest today. Virtually all of the published writers who take intuition seriously have been affected, often directly, by the Buddhist approach. A few examples may help to indicate some of the perspectives currently emerging.

Though Noddings and Shore have been less affected by Buddhist thought than the other theorists in this section, their reliance on Schopenhauer and their awareness, albeit casual, of Eastern perspectives does give a slightly Buddhist tinge to their recent book. In Awakening the Inner Eye: Intuition in Education, they articulate a perspective on intuition that relates specifically to education and which they hope "will be the beginning of serious dialogue on the meaning, importance, and uses of intuition"[16] in educational contexts. After so many centuries of wrestling with this fundamental epistemological and educational question, that they could characterize their book as a beginning indicates the degree to which seriously discussing the role of intuition in education has been suppressed in modern Western

society. Their perspective, while acknowledging the existence of non-Western positions, is basically a neo-Kantian one which has also been strongly influenced by Schopenhauer. They agree with what they feel is, historically, the notion that is central to conceptions that take intuition seriously, namely that it is direct seeing-contact in which dualistic thinking is reduced, and that it is not a "mere speeding up of analytical processes in which the steps become blurred and difficult to identify because of the speed itself."[17] Their definition, that "intuition is that function which contacts objects directly in phenomena,"[18] identifies two domains, the perceptual and the conceptual, with the subject, or as they term it, the range, being the Will in Schopenhauer's sense. This Will, which for Schopenhauer was thing-in-itself, is "the center of meaning and life, . . . the thing behind intuition [which] cannot be acted upon by intuition."[19] Their conception of intuition is thus explicitly dualistic and non-mystical, and they are "careful to separate our concept of intuition from alternative concepts that associate intuition with being-to-being contact or with knowledge of being-itself."[20] In sum, their view is that intuition is essentially an object-oriented mode of knowing that can be right or wrong and that is confined to phenomena, the noumenal realm being, as Kant said, unknowable. Since it is driven by the Will, though, it is inherently concerned with the deeper issues of meaning, and is, they feel, very much enhanced by intentionality.

From this conceptual basis they make a variety of suggestions as to the enhancement of this kind of intuitive knowing, and conclude that a "sufficiently rigorous theoretical base" is essential, for successful educational reform requires that "we should launch our attacks from a well-fortified structure,"[21] and they see their book as a start in that direction, which it certainly is, being far more comprehensive and systematic than the many other starts that have been made in this area. Their approach falls well within the mainstream Western epistemological tradition, which probably makes it easily palatable for any but the most ardent rationalist. Their careful definition, while admittedly limited and dualistic, is intended to open more dialogue about intuitive knowing and increase its respectability in traditional educational settings, and this is undoubtedly essential now, for as they emphasize, "The first and most obvious thing we can do to encourage intuitive activity is to acknowledge intuitive capacity and the reality of intuitive modes."[22]

Frances Vaughan offers a conception of intuition that differs from that of Noddings and Shore in several ways, the most striking being her position that, "Intuition is true by definition. If a seemingly intuitive insight turns out to be wrong, it did not spring from intuition but from self-deception or wishful thinking."[23] Vaughan's perspective on intuition is clearly much more directly influenced by and consonant with Buddhist conceptions of intuition which, as

has been seen, emphasize that prajna, being the function of the ever-present inner essence, always sees clearly, but its functioning is impeded by the deeply-rooted habits of egoic consciousness. Thus Vaughan, like the Buddhists, emphasizes the importance of meditation in awakening intuition. Her perspective on intuition is also much broader than that of Noddings and Shore in that she includes psychic phenomena and other non-ordinary channels and modes of perception, the flashes of insight known to scientists, mathematicians, and educators, the creative artistic inspiration, which as "the source of true art is always an intuitive cognition of reality,"[24] the Jungian introverted and extraverted intuitive temperaments with their particular domains, and the mystical intuition that alone leads to transcendent understanding. As befits this broad orientation, she recognizes and outlines four levels of intuition, physical, emotional, mental, and spiritual, all of which can be developed and engender immediate intuitive knowing within their respective domains. It is spiritual intuition that, similar to Bergson's mystical intuition, is essential to understanding the deeper mysteries of being, as she emphasizes,

> In both Eastern and Western spiritual traditions, intuitive knowledge is recognized as the highest form of truth. . . . The state which is called enlightenment or illumination is an intuitive experience wherein one penetrates behind appearances, to see things as they really are, to know them from within, through identification of the knower with the object known.[25]

In her approach to intuition, which focuses strongly on applications and various methods for developing and training

it in daily life, Vaughan also emphasizes that while it is distinctly different from rationality, it does not deny it in any way:

> Transpersonal consciousness, in which the underlying oneness of the universe comes into awareness and the ordinary confines of time and space are experientially transcended, has commonly been dismissed as delusional or hallucinatory experience. Eastern mysticism, on the other hand, asserts that true reality is essentially one, or non-dualistic, and that all distinctions and separations are illusory. Thus personal consciousness has been rejected as illusory in the East, and transpersonal consciousness similarly rejected in the West. In fact, both these levels of consciousness are part of human experience, and both are necessary for the fulfillment of human potential. Different cultures and different forms of mental training favor one or the other. Human beings have the capacity for experiencing directly both of these aspects of reality. Reason, which works through differentiation and distinction, is the mode of knowing appropriate to the personal level. The transpersonal level, beyond duality, can only be apprehended intuitively. In turn, direct experience of the transpersonal level affirms and evokes the intuitive mode of knowing. The task at hand is not to reject either of these views in favor of the other, but to expand our understanding and experience of consciousneses to include both.[26]

This polar-oriented view is reminiscent in some ways of the syncretism of Chinul, as well as of the idea of the necessity of a dynamic interplay between intuition and reason argued for by Capra, who writes that "the rational part of research would, in fact, be useless if it were not complemented by the intuition that gives scientists new insights,"[27] and by Polanyi who also emphasizes what he refers to as "dynamic intuition" and "the alternation between the intuitive and the formal."[28]

Arthur Deikman, a psychologist at the Langley-Porter Institute and major contemporary voice on intuition, shares a

similar familiarity and affinity with the mystical traditions of the East. He aims at reinterpreting mysticism as a science and thus, for him, as rationality forms the central epistemological trunk of conventional science, intuition is the basic way of knowing of mystical science. He wants to extend science into a "new domain," and feels, like many others, that,

> Western psychotherapy, in basing itself almost exclusively on the worldview of scientific materialism, has impoverished its model of human consciousness and lost the meaning and significance of life. For this reason alone, the need to affirm the function of intuition is especially important because our intimations of a larger existence ordinarily find no support from our scientific culture, but instead, opposition.[29]

His solution, like that of Buddhism, is to question the nature of the self, and he draws a clear distinction between the "object self," which thinks, feels, and acts in a dualistic "object mode," and the "observing self" which "is the transparent center, that which is aware," and which

> is outside content and thus outside intellect and sensation. It follows that a different type of knowing is involved, one we must designate as intuitive, or direct, knowing--knowing by being that which is known. We <u>are</u> awareness, and that is why we cannot observe it; we cannot detach ourselves from it because it is the core experience of self.[30]

Deikman uses this idea of the observing self, similar in many ways to Krishnamurti's "pure subjectivity" in that it is non-reflexive awareness, to create a model that facilitates dialogue between normal science and mystical science, between Western psychotherapy and Eastern mysticism, and between education for skills acquisition and education for

transcendence and transformation. His observing self, the seat of intuition, is something that can be developed through practice, either through Eastern meditation techniques or Western adaptations of them, and he feels it is absolutely essential, for both individual and societal well-being, that this be done. He states that the object self and observing self are functions that mutually impede each other and thus the healthy individual alternates between object self which is able "to invest maximum energy in the perceptual apparatus or cognitive process," and the observing self, which "reduces the intensity of affect, of obsessive thinking, and of automatic response patterns," and, not surprisingly, concludes that "for most people it is the observing self that needs development."[31] Deikman's model is interesting for its simplicity, straightforwardness, and syncretic capacity. The function of the observing self is seen to be central to virtually all Buddhist forms of meditation practice, and since it does not constitute a self in the subject/object sense, it is always prior to and transcendent of the egoic object self which both Deikman and Buddhists agree must become subservient to the observing self. It is important also to note that this non-judgmental awareness of the observing self still presupposes a center and is thus still limited from the Buddhist perspective, and Deikman recognizes also that it is not the highest meditative state, for he says:

> When the observing self is complete, undiminished by 'attachment,' not 'settling down' on any content, the

> meditator may gain access to a higher level of experience that transcends both mind content and the observing self.[32]

This is a central point of Buddhist praxis and is also, interestingly, reemphasized by the contemporary Christian mystic Bernadette Roberts who in her Catholic contemplative training experienced a falling away of ego and after about twenty-five years of cultivating this "unitive state" which she calls "the experience of no-ego," spontaneously and unexpectedly entered a process she describes as the "falling away of the self," and for which she could find little precedence in Christian literature. She describes the passage to this experience in terms not only similar to those of Deikman, but also hauntingly reminiscent of the Mahayana:

> Major Milestones of the Passage
>
> 1. Total dedication and practice; finding the center.
> 2. Falling away of the ego-center of consciousness.
> 3. The transforming process or adjustment to living from the divine center instead of the ego center.
> 4. With the adjustment completed there begins the exercise and testing of the Transcendental or Unitive state in the marketplace. A life of selfless giving and the eventual unmasking of the powers and energies of self's unconscious masks or archetypes.
> 5. The no-self experience, the falling away of the Transcendental condition, the death of self and the divine. What follows this - the great Void, the resurrection, ascension, and even incarnation - has not been the topic of this paper. We reserve discussion of these for some other time.[33]

Ken Wilber's perspective on intuition is part of a grand synthesis approach to the emerging field of consciousness studies of which he is acknowledged by many to be the reigning pundit; as Jean Houston writes, "There is every chance that Ken Wilber will do for consciousness what

Freud did for psychology," and Wilber's impact on current views of personal and social development, while difficult to ascertain, can certainly be seen to be potentially profound. A wide-ranging scholar who is also a Buddhist practitioner and whose intellectual brilliance seems to have dazzled many, Wilber's viewpoint is development-oriented and while his model draws from a strikingly wide range of perspectives, he seems to be particularly influenced by the writings of Gebser and of the Mahayana. Like Gebser, whose views on structures of consciousness were discussed earlier, Wilber sees rationality as but one stage of a much larger evolutionary unfoldment. The crisis of meaning that characterizes contemporary society is thus, according to Wilber, an effect of being at this particular stage in the phylogenetic evolution of human beings. At the heart of Wilber's theoretical model is a hierarchical structuralism which sees rationality as a sort of midway point in both ontogenetic and phylogenetic development. Similar to Gebser, he postulates three major pre-rational stages of development, the archaic, the magic, and the mythic, with the fourth stage being the rational. He correlates these stages with the stages in other hierarchical models, like those of Piaget, Kohlberg, Maslow, and Loevinger, as well as those of Vedanta and of Mahayana Buddhism. He further postulates three post-rational or trans-rational stages that are higher than and include the foregoing four levels; in fact, and not surprisingly, every level is seen to "transcend but include its predecessors."[34]

He refers to these three post-rational levels as the psychic, subtle, and causal/ultimate levels. Wilber terms the mode of knowing of the psychic level vision-logic, which:

> "apprehends a mass network of ideas [and] . . . is thus the beginning of truly higher-order synthesizing capacity, of making connections, relating truths, coordinating ideas, integrating concepts. It culminates in what Aurobindo called the 'higher mind.'[35]

This "higher" mind" is the first of the five stages of intuition that Aurobindo, also a seminal contributor to theories of intuition, said are available above the mental level, the series of grades being: mind, higher mind, illumined mind, intuition, overmind, and supermind, with the quality of intuition being dependent upon the stage from which it emanates. For Wilber, this psychic structure is a "highly integrative structure" that correlates with Loevinger's integrated and autonomous stages, Maslow's self-actualization needs, and with the sixth chakra, and in which,

> Owing to the intense panoramic awareness offered at this level--or rather, at its most mature and highly developed state--the individual might begin to experience intense insight and even illumination, illumination that seems to go beyond thought into a type of vision, noetic, numinous, inspiring, often enstatic, occasionally ecstatic.[36]

The subtle level, according to Wilber, is:

> the seat of actual archetypes, of Platonic forms, of subtle sounds and audible illuminations (nada, shabd), of transcendent insight and absorption. . . . Overall, this is the level of "illumined mind" (Aurobindo); the culmination of manas and vijnana mayakosa; a truly trans-rational structure (not pre-rational and not anti-rational); . . . beginning of the seventh chakra (the sahasrara), and, of course, the start of Maslow's self-transcendence needs.[37]

While the subtle level still maintains a duality between knower and known, "The causal/ultimate level does not involve any particular experience but rather the dissolution or transcendence of the experiencer himself, the death of the watcher principle. That is, the subject-object duality is radically transcended. . ."[38] With each successively higher trans-rational stage, consciousness becomes less dualistic in its orientation, culminating in the highest trans-rational levels, of which there are many more than the three that he outlines, since finer gradations are discernible and the upper limits are not clear. As mentioned earlier, the Hua-yen tradition proposes fifty-two trans-rational stages; this is certainly an area for further research.

Wilber thus sees nonrational knowing as being of two clearly distinct orders, pre-rational and post- or trans-rational, and while intuition has been used to refer to both of these, it is only the latter that can correctly be termed intuitive. Wilber has developed, extended, and synthesized many different Eastern and Western developmental strands into a cohesive framework. The idea of an ongoing and essentially spiritual evolution of both individuals and societies, seen in much simpler form in Bucke's turn-of-the-century idea of an evolution from simple consciousness to self consciousness to cosmic consciousness, pervades Wilber's perspective. The role of meditation in Wilber's synthesis takes on particular significance, for it alone can lead to the transformation of consciousness to more advanced levels which "remain still as

the present and higher potentials of every man and woman who cares to evolve and transform beyond the mental-egoic stage."[39] Thus, for Wilber, the intuitive trans-rational levels of individual and social development are awakened to through successive transformations and these transformations parallel the successive levels of meditation, which is the vehicle and process through which these trans-rational levels are realized in both phylogenetic and ontogenetic evolution. The contradictions and dilemmas that characterize contemporary society cannot be solved by further translations of the epistemological mode which has given rise to them, but only through transformation to a higher epistemological level. This in no way negates the power and appropriateness of reason, but includes it in a larger context that is no longer bound by its dualistic assumptions.

There are many other contemporary perspectives on intuition that might be examined, such as those of Bateson, Berman, Berne, Bruner, Fuller, Gerard, Goldberg, Goleman, Grof, Hastings, Harman, Klimo, Leonard, Ornstein, Westcott--the list seems to grow almost daily. This rapidly expanding field of intuition is thus certainly, in Kuhnian terms, at the pre-paradigmatic stage of development, and the diversity of shadings given to the central concept by different theorists is strikingly indicative of this. Since this diversity is seen as a precious resource to be fostered and not as overgrowth to be cut away, it seems essential that an over-all framework be developed for educating intuition in

adults that employs and acknowledges this richness while not losing sight of the basic simplicity of the intuitive process itself.

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[1]John Blofeld, ed. and tr., The Zen Teaching of Huang Po (New York: Grove Press, 1958), p. 88.

[2]Ibid., p. 82.

[3]Chinul, The Korean Approach to Zen: The Collected Works of Chinul, ed. and tr. Robert Buswell, Jr., (Honolulu: University of Hawaii Press, 1983), p. 207.

[4]Blofeld, The Zen Teaching of Huang Po, pp. 124-25.

[5]Dwight Goddard, A Buddhist Bible (New York: E. P. Dutton, 1938), p. 88.

[6]Ibid., p. 646.

[7]Garma C. C. Chang, The Buddhist Teaching of Totality (Pennsylvania State University Press, 1971), p. 77.

[8]Ibid., p. 81.

[9]The Sutra of Hui-Neng, tr. Wong Mou-Lam (Boston: Shambhala, 1969), p. 53.

[10]D. T. Suzuki, Studies in the Lankavatara Sutra (London: Routledge & Kegan Paul, 1930), pp. 128-29.

[11]Charles Luk, Ch'an and Zen Teaching, Second Series (Berkeley: Shambhala, 1971), p. 178.

[12]D. T. Suzuki, The Essentials of Zen Buddhism, ed. Bernard Phillips (London: Rider & Co., 1962), p. 2.

[13]Chinul, p. 204.

[14]Ibid., pp. 205-206.

[15]Ibid., p. 206.

[16]Noddings and Shore, p. iv.

[17]Ibid., p. 43.

[18]Ibid., p. 57.

[19]Ibid., p. 61.

[20]Ibid., p. 61.

[21]Ibid., p. 203.

[22]Ibid., p. 91.

[23]Frances Vaughan, Awakening Intuition, (New York: Anchor, 1979), p. 45.

[24]Ibid., p. 48.

[25]Ibid., p. 175.

[26]Ibid., pp. 52-53.

[27]Fritjof Capra, The Tao of Physics (Berkeley: Shambhala, 1975), p. 31.

[28]Michael Polanyi, Personal Knowledge, p. 131.

[29]Arthur Deikman, The Observing Self, p. 44.

[30]Ibid., p. 103.

[31]Ibid., p. 110.

[32]Ibid., p. 142.

[33]Bernadette Roberts, "What is Self?" Unpublished paper, p. 40.

[34]Ken Wilber, A Sociable God, p. 35.

[35]Ibid., p. 27.

[36]Ibid., p. 29.

[37]Ibid., pp. 29-30.

[38]Ibid., p. 31.

[39]Ken Wilber, Up from Eden, p. 320.

CHAPTER VII

Developing an Overall Framework

From the discussion in the foregoing chapters, it seems clear that while people agree that intuition is nonrational knowing, just what that means is open to a variety of interpretations. Intuition has been used to refer to a wide range of noetic phenomena, including instincts, hunches, bodily feelings and sensations, unconscious inferences, telepathy, precognition and other psychic phenomena, shamanic and healing states of consciousness, automatic writing and other forms of channeling, artistic, poetic, and creative inspiration, felt connections between ideas and between people, and direct experience of transpersonal relatedness, and of transcendent identity with what is termed the Absolute. It has been connected not only with mundane decision-making but also with many kinds of "unexplained phenomena" and apparently miraculous healings and demonstrations of extraordinary physical, psychic, mental, and spiritual abilities and powers.

On the physical level, exceptional powers can be seen manifested in a strikingly rich variety of examples, all of which share the common factor that they seem to require being able to suspend or transcend normal rational consciousness. For instance, practitioners of Tibetan lung-gom ("chi [prana

or vital energy] meditation" or "trance walking") are purportedly able to cover great distances with extraordinary swiftness and sure-footedness. Lama Anagrika Govinda reports,

> . . . I clearly reached a condition in which the weight of the body is no more felt and in which the feet seem to be endowed with an instinct of their own, avoiding invisible obstacles and finding footholds, which only a clairvoyant consciousness would have detected in the speed of such a movement and in the darkness of the night. . . . [I]t is the non-interference of normal consciousness which ensures the immunity of the trance walker and the instinctive sureness of his movements. There is no greater danger than the sudden awakening to normal consciousness. It is for this reason that the lung-gom-pa must avoid speaking or looking about, because the slightest distraction would result in breaking his trance.[1]

A seemingly similar form of trance running is noted among the Masai in Africa, and related phenomena, such as levitation, of which there are reports among Christian saints as well as Indian yogic adepts, and walking or running on such apparently difficult surfaces as water, knives, hot coals, and so forth, are found in dozens of cultures from virtually all parts of the globe. Trance dancing is even more common cross-culturally, with dancers, again, performing many kinds of feats which do not seem to be explainable in terms of conventional Western scientific perspectives. For example, trance dancers in Malaysia dance excitedly for long periods of time with a spear through both cheeks and often with arrows through their hands or arms, and yet lose no blood, with the wounds healing extremely quickly and leaving no scars; aged Nepalese oracle priests who can barely budge a sixty-pound mask-headress in normal consciousness, put it on

easily in trance and dance furiously without fatigue; there are countless other examples of normal physical limitations being transcended, seemingly by suspending dualistic consciousness, and they are well-known to people seriously involved in music and dance, in athletics, martial arts, combat situations, and hypnosis, as well as to the anthropologists, psychologists, historians, and other researchers who have occasion to study these areas of human experience. These small pointings indicate a vast field of knowledge and experience, long neglected by conventional science, in which normally latent physical powers are accessed (or, as some say, simply de-repressed), and it is through a meditative unification of mind and body that this seems to be accomplished. The unusual, seemingly miraculous powers (siddhi) that humans can develop through various meditative practices share a common requirement: the internal chatter of dualistic egoic-mental consciousness must be suspended. This nonrational consciousness can be either, it seems, pre-rational or trans-rational. In the case of many trance-dancers, it would seem to be reverting to pre-rational states. The lung-gom, though, would seem to be the product of trans-rational processes, as Govinda emphasizes the two-fold training in meditative attention and in the cultivation of the chi or vital force:

> The deeper meaning of lung-gom is that matter can be mastered by the mind. This is illustrated by the fact that the preparatory exercises are mainly spiritual, i.e., consisting in strict seclusion and mental concentration upon certain elementary forces and their visualised symbols, accompanied by the recitation of

> mantras, through which psychic centers (Skt.: cakra) of the body, which are related to those forces by their natural functions, are awakened and activated.[2]

Another apparent example of the power of trans-rational awareness, and of cultivation of the vital force of chi, is provided by Sri Chinmoy, a 55 year-old Indian meditation master who, on January 30, 1987, lifted 7,063 pounds with one arm. According to Lynn Scott,

> Chinmoy . . . says that it is only through unlimited strength of concentration and unlimited meditation power that he is able to perform these one arm lifts. 'In my case, I totally depend on God's Grace. Without my prayer life and meditation life, I am sure I could not lift more than 60 pounds.'[3]

This intimate connection between mind, body, and spirit, and their unification through meditation, has enormous implications for physical training programs, and perhaps for education of all kinds:

> Says Bill Pearl, five times Mr. Universe and the man who has been supervising Sri Chinmoy's weight-lifting feats for the past year, 'This man is of Godly strength. He is truly amazing. It is humanly impossible for the body's joints to even budge this kind of weight. Just to support this kind of weight in any way is a miracle. He is not merely lifting a dumbbell. He is trying to lift the attitude of the world. He is showing us that the mind can surpass matter, that when we reach for the highest through meditation, we can succeed in anything.'
>
> Jim Smith, Registrar of the British Amateur Weight Lifter's Association, commented, 'He has surpassed anything and everything that any weight-lifter has ever done throughout the world. . . . By lifting more weight with one arm overhead than anyone has ever lifted, in any style, he is literally creating a new law of the universe. The dimensions of this lift are not able to be grasped by even the greatest of athletes!'[4]

He is perhaps not creating a new law of the universe as much as demonstrating the ancient yogic and meditative view that consciousness informs energy which informs matter and that

the three are essentially a unity. These traditions are based on an epistemology that can be seen to be profoundly integrative, and suggest an educational philosophy which is similarly integrative.

Closely related to these seemingly unusual physical powers are unusual psychic powers and these are generally more specifically connected with the realm of intuition. As with physical siddhis, psychic siddhis require the ability to focus attention and "stop the internal dialogue," as Casteneda put it. These psychic powers are apparently able to manifest in a remarkably wide variety of ways, and again, as with physical powers, this whole realm of human experience has basically been denied and ignored by mainstream conventional science. This is hardly surprising, since the underlying objectivist belief in a separate, independent material world denies the possibility of psychic powers. And yet, there is overwhelming evidence of the existence of these powers, both in people known as "expert intuitives" and in the anecdotal cultural ground of daily life. As only a hint of the variety of physical powers could be given, so only a brief sketch of the range of psychic powers can be made here.

The most common psychic phenomena are knowledge of the future (precognition); direct knowledge of, and communication with, thoughts and images in the minds of others (these "others" including people, animals, plants, natural objects of every kind, and a huge variety of apparently non-physical beings); knowledge at a distance

through various sensory channels, particularly clairvoyance, clairaudience, and clairsentience, also perception of energy fields (auras), beings, sounds, and other situations that are normally invisible and unknowable through the physical senses and rationality; psychokinesis and telekinesis; and knowledge of a being's hidden or forgotten history in this life or in so-called "past lives." Again, all of these kinds of knowledge and powers are referred to as intuitive because they are basically not trackable; they are nonrational in essence and function. They all require the ability to be internally receptive, developing a relaxed and focused attentiveness that is not impeded by the usual parade of thoughts. Some psychic knowledge, such as being able to read past lives, is not, in most cases, rationally verifiable, while much of it is verifiable, such as knowledge at a distance and telepathic communication.

There are many people who are apparently somewhat accomplished in these areas, and are paid for their skills either in less rationally verifiable areas such as past-life counselling, or in more verifiable areas such as working for police departments and using their psychic skills to help solve previously unsolvable criminal cases. The general consensus among psychics, though, seems to be that these are abilities that everyone possesses, and that with encouragement, practice, and proper training they can be developed. A main part of this training is learning to distinguish between true intuitive knowings and false egoic

projections, since both emerge in the mind as thoughts or images. Vaughan emphasizes that projection is closely related to intuition and often confused with it: "Like intuition, projection operates by identification with, rather than information about, something or someone. However, projection is misperception, whereas intuition provides genuine insight."[5]

Psychic individuals and psychic training groups all basically agree that developing the ability to distinguish intuition from projection requires practice. Like any art form, it is felt that there are many levels of mastery of technique, and that with correct practice, the ability to subjectively distinguish inner gold from dross increases, and that this can be checked by practicing with objectively verifiable kinds of situations. Developing effective ways of doing this is certainly one area of possible future research in this area. While there are already numerous books and articles on paranormal phenomena, it has yet, given the prevailing scientific and funding paradigms, to be extensively, sympathetically, and systematically studied in the West.

Closely linked with these psychic ways of knowing, channeling is also currently enjoying a major resurgence in interest. A spate of books analyzing channeling from various perspectives has appeared in the last few years, as the number of people who consider themselves to be channels has grown exponentially, not only in the United States, but in

many other countries as well, particularly in Europe and the Soviet Union. Hastings, Klimo, Harman, and others point out that channeling is ancient and culturally ubiquitous, that the oracle at Delphi was a channel, as were the Old Testament prophets and the countless other creators of humanity's cultural heritage, its scriptures, poetry, music, literature, art, and so forth. Broadly interpreted, as opening to inspiration from outside the parameters of the enclosed ego, channeling can clearly be seen to be fundamental to the creative process. A major question is whether or not the images and information comes from outside agencies and forces, or is from usually unrecognized aspects of the self. This may be another aspect of the "self/other" paradox discussed earlier. The marks of channeling, though, that make it different from the more trackable and linear forms of knowing and expressing, are the sense of allowing a greater power, force, will, or intelligence to flow through. Individuals feel themselves to be receiving information, ideas, and inspiration from another source, which they may variously interpret as God, the Muse, an inner guide, or an unnameable feeling. Plato says in the Ion, "Therefore God takes the mind out of poets and uses them as his servants, and also those who chant oracles, and divine seers,"[6] and he sharply distinguishes between art as mere technical skill and art as "divine dispensation." His discussion of true poetry is strikingly similar to the Taoist idea of wu hsin (lit.: "no mind") and the Zen idea that "no-mind is One Mind, which

is empty mind and is awakened mind,"[7] which is, again, a transcendence of the egoic-mental level of dualistic thinking, as here he, Plato, makes clear:

> For the poet is an airy thing, a winged and holy thing; and he cannot make poetry until he becomes inspired and goes out of his senses and no mind is left in him; so long as he keeps possession of this, no man is able to make poetry and chant oracles."[8]

There are countless examples of this in the statements of people discussing the creative process:

> I forget everything and behave like a mad man; everything within me starts pulsing and quivering; hardly have I begun the sketch, and one thought follows another. In the midst of this magic process, it frequently happens that some external interruption awakes me from my somnambulistic state. . . . Dreadful indeed are such interruptions. . . . They break the thread of inspiration. (Tchaikovsky)

> Straightaway the ideas flow in upon me, directly from God. . . . Measure by measure the finished product is revealed to me when I am in those rare inspired moods. . . . In this exalted state I see clearly what is obscure in my ordinary moods; then I feel capable of drawing inspiration from above as Beethoven did. . . . I have to be in a semitrance to get such results--a condition when the conscious mind is in temporary abeyance, and the subconscious mind is in control. (Brahms)

> I wrote the book almost unconsciously, like a somnambulist, and was amazed when I realized what I had done. (Goethe, of Werther)

> I have written this poem from immediate dictation, twelve or sometimes twenty or thirty lines at a time, without premeditation, and even against my will. (Blake, of Milton)

> While the ideas were flowing in upon me--the entire musical, measure by measure, it seemed to me that I was dictated to by two wholly different Omnipotent Entities. . . . I was definitely conscious of being aided by more than an earthly Power, and it was responsive to my determined suggestions. (R. Strauss)

> The music of this opera [Madame Butterfly] was dictated to me by God; I was merely instrumental in putting it on paper and communicating it to the public. (Puccini)

> My Daemon was with me in the Jungle books, Kim, and both Puck books, and good care I took to walk delicately, lest he should withdraw. I know that he did not, because when those books were finished they said so themselves with, almost, the water-hammer click of a tap turned off. Note here. When your Daemon is in charge, do not try to think consciously. Drift, wait, and obey. (Kipling)[9]

The English poet Shelley sums up a situation that is remarkable for its having been ignored for so long: "One after another the greatest writers, poets, and artists confirm the fact that their work comes to them from beyond the threshold of consciousness."[10]

It is interesting to note also that it is not only the recognized poets, writers, artists, and musicians who tap into trans-conscious powers (which, of course, are difficult to objectively evaluate except to observe how others respond to the works thus produced); scientists, inventors, and mathematicians also report similar experiences. For example, referring to the proof of an arithmetic theorem, Gauss writes,

> Finally, two days ago, I succeeded, not on account of my painful efforts, but by the grace of God. Like a sudden flash of lightning, the riddle happened to be solved. I myself cannot say what was the conducting thread which connected what I previously knew with what made my success possible.[11]

This lightning bolt image which can be seen as a cross-cultural symbol of the force that links heaven and earth, divine and mundane, transpersonal and personal, eternal and temporal, reveals again the process whereby creative

inspiration makes its way into the trained and receptive consciousness. Einstein, Heisenberg, Tesla, Gauss, Poincaré, Kekulé, and countless other scientists confirm the importance of nonrational inspiration in their discoveries.

The ironically central role that this nontrackable knowing plays in the creation of logical, trackable scientific frameworks again underscores the need to fundamentally question whether education, in ignoring intuitive knowing, is even serving conventional science, or only providing it with half, and the smaller half at that, of what it needs to grow and develop.

This is all closely connected with the phenomenon of channeling, for if these inspirations which are found in virtually every field of human endeavor--these bright lights by which humanity marks its evolutionary progress--all come from beyond rational consciousness, from whence do they come? How are they checked and validated? What are the dangers involved? How can receptivity to these trans-rational knowings and powers be educated?

While there is an extensive range of perspectives from which these questions can be approached, looking at that of Mahayana Buddhism seems to be particularly appropriate since it has maintained an unusually dynamic and enduring intuitively-centered approach to educating consciousness. This educating process has focused on the development not of physical, psychic, or mental intuitions but on spiritual intuition and powers. The perfection of prajna

(prajnaparamita), this transcendent spiritual intuition, is the centerpiece of Buddhist meditation practice; as the function of the inherent Buddha-mind, prajnaparamita is held in the highest esteem, even being praised as a goddess by some Mahayana schools:

> Perfect Wisdom spreads her radiance. . . . Spotless, the whole world cannot stain her. . . . In her we may find refuge; her works are most excellent; she brings us to safety under the sheltering wings of enlightenment. She brings light to the blind, that all fears and calamaties may be dispelled . . . and she scatters the gloom and darkness of delusion. She leads those who have gone astray to the right path. She is omniscience; without beginning or end is Perfect Wisdom, who has Emptiness as her characteristic mark; she is the mother of the bodhisattvas. . . . She cannot be struck down, the protector of the unprotected, . . . the Perfect Wisdom of the Buddhas, she turns the Wheel of the Law.[12]

Since Mahayana meditation practices focus on the awakening of the nondualistic intuitive wisdom of prajnaparamita, there is a mildly suspicious attitude toward the conscious development of siddhis. It is felt that enhancement of physical, psychic, and mental powers is a natural by-product of meditative progress, but that focusing on them as ends in themselves is a dangerous detour because it so easily can cause ego inflation. This tradition goes back to the historical Buddha Shakyamuni who only rarely displayed miraculous powers (such as multiplying his body a thousand-fold) and who explicitly discouraged his followers from ever doing so, the only exception being when it was absolutely necessary to directly help someone. Nevertheless, de Bary points out that, "it was taken for granted that the monk who was highly advanced in his spiritual training was capable of

supranormal cognition and of marvelous feats such as levitation," and there are sometimes rather abundant sprinklings of stories of paranormal powers, particularly in the Vajrayana tradition. The Vajrayana has developed an extraordinarily rich heritage of yogic practices that can confer a wide variety of special powers on their practitioners. Some of the most well-known ones include the lung-gom discussed earlier, the yoga of psychic heat which allows the practitioner to generate enormous internal heat and stay comfortably warm in Tibet's arctic climate, the yoga of the dream state which aims at lucid dreaming and its concomitant powers, the yoga of consciousness transference, used in leaving the body particuarly at death, and the yoga of the bardo (intermediate) state, used after death to attain rebirth in the best situation for continued spiritual evolution. There is much more to these yogas, since they operate on other levels as well, and they provide but a small sampling of the wealth of practices in this particular yogic tradition. It is important to note, though, that they are practiced only within the larger Mahayana context, which is to engage in them solely as an aspect of fulfilling the bodhisattva vow, which is to work selflessly for the benefit of all beings. This cultivating of bodhicitta, the deep, unshakeable commitment to dedicating oneself to wisely and compassionately helping others, is particularly emphasized as the foundation of these practices, since the powers attained through them might tempt the ego to use them for self-

centered purposes. Developing prajna, intuitive wisdom, and karuna, compassion, through awakening to the original Buddha-mind is always the overall aim, and the yogas are considered to be an aspect of upaya, skillful means for helping people overcome the primordial ignorance that is the source of their suffering.

The Mahamudra or "Great Symbol" Vajrayana tradition is similar to Zen in that both aim at transcending all dualisms, including that of yoga and yogin, practice and practitioner. While the yogic tradition is endlessly complex, with many elaborate visualizations, mantras, gestures, rituals, and methods of manipulating energy forces, Zen meditation techniques are decidedly simple. Zen is oriented completely toward immediate experience of one's true nature, and anything that might distract from that, including having elaborate visions and developing unnecessary supernormal powers, is referred to as makyo, a "devil's condition." In this tradition, it is felt that if people are genuinely focusing on awakening transcendent intuition and manifesting it in daily life, whatever physical, psychic, and mental powers a situation might require to help others will be available. As Blofeld puts it, ". . . the supranormal powers which dhyana-practice brings in its train should properly be regarded as mere by-products never to be used except in case of dire necessity."[13]

The heart of Mahayana epistemology can thus be seen to be meditation, which is, ultimately, a nondual

"realization of the mind-base."[14] While the various strands and schools differ somewhat as to emphasis, virtually all of them recognize, and perhaps even require, the many kinds of extraordinary physical, psychic, mental, and spiritual powers that are connected with the intuitive mode. Since all individuals are seen to be aspects of a larger process, all forms to be essentially empty, all minds to be dimensions of One Mind, and temporality and separateness to be illusory, a large part of the current range of "unexplained" phenomena is, from the Buddhist perspective, not unexplainable at all. Channeling, for example, whether from incarnate entities, discarnate entities, or other dimensions of one's being, is in no way precluded theoretically. The Zen tradition would want its practitioners, though, to be wary of getting stuck in these so-called paranormal phenomena since they still can reinforce the primary subject/object duality. The confluence of Buddhist philosophy and contemporary sciences like physics, biology, psychology, and economics is the subject of an increasing number of books (e.g., Bentov, Capra, Grof, Mansfield, Schumacher, Sheldrake, Wilber, Wolf, Zukav), and it seems that there is still much more research and theoretical work to be done in this area.

From the Mahayana perspective, true intuitive prajna operates on a strictly transcendent nondual level. Its reflections and expressions in minds which are suitably receptive can result in wonderful creativeness, insight, compassion, wisdom, and power. Since prajna functions

through the uniqueness of the individual, its expressions are unpredictable and original. This is clearly shown in the wealth of anecdotal material on the Zen masters, all of whom emerge as vibrantly unique individuals. The expression of this prajnaic intuition may be impeded in countless ways and at different levels by the vasanas, mental habit patterns and egoic tendencies. A major aspect of meditative training is thus cultivating the true mark of intuition, which is inner silence and receptivity, and letting go of the conscious and unconscious clingings and projections that impede its flow. This is only ultimately possible with complete realization-awakening, which is also, paradoxically, ever-present, as the Bodhisattvasila Sutra emphasizes: "My original Self-nature is primarily pure; when my Mind is known and my Nature is seen into I naturally attain the path of Buddhahood."[15]

Prajnaic intuition is thus indissolubly linked with samadhi, as Hui-neng points out:

> Samadhi is the quintessence of Prajna, while Prajna is the activity of Samadhi. . . . They are analogous to a lamp and its light. With the lamp there is light. Without it, it would be darkness. The lamp is the quintessence of the light and the light is the expression of the lamp. In name they are two things, but in substance they are one and the same. It is the same case with Samadhi and Prajna.[16]

Just as there is a wide range of levels and types of intuition, there is a correspondingly wide range of levels and types of samadhi. A general framework for educating intuition must be, then, fundamentally concerned with understanding samadhi and developing techniques for fostering it. According to Sekida in his Zen Training, there are two

types of samadhi, positive and absolute: "Positive samadhi is a samadhi in the world of conscious activity. Absolute samadhi is a samadhi that transcends consciousness."[17] While Zen stresses that both aspects are to be cultivated together in a balanced way, it is absolute samadhi that forms the foundation for positive samadhi, and not vice-versa. In other words, the ability to experience total inner absorption of mind, in which time, causation, discursive thought, and the reflexive sense of self disappear, is the basis for the ability to perform activities in a meditative state of alert calmness and one-pointed attentiveness. True intuitive knowing, beyond concepts and inexpressible, shines in absolute samadhi; in positive samadhi, it is expressed in a myriad of ways. These manifold expressions, also falling under the rubric of intuition, are reflections of the light of prajna, with many degrees of clarity and purity, that is, of freedom from interference by projections and vasanas.

In sum, it seems that an overall model for successfully developing intuition will best have as its ideal the highest level of intuitive knowing, the nondual prajna that is the natural expression of enlightened awareness. Through the process of cultivation and awakening, the many types of supernormal physical, psychic, and mental powers, related to intuition in their requiring an inner relaxed attentiveness, will naturally develop. By contrast, in focusing only on developing, say, certain psychic powers without the larger guiding context of bodhicitta and nondual

prajna, it is almost unavoidable that the separate self-sense will co-opt these powers to further entrench its position, thus arresting growth and jeopardizing overall intuitive development. This is not just a Mahayana perspective; the writings of Wilber, Deikman, and other contemporary theorists, as well as those of Bergson and Jung can be seen to support this position.

Educating intuition is thus seen to require a type of educative participation that goes far beyond the usual sense of participation. It will require a meditative participatory approach in which the habitual cognitive bifurcations are transcended. This means a radical deepening of the conception of participation, in which consciousness is not reflexively aware of itself as knowing, learning, and teaching other "things," but rather is aware of itself as the total process in which seemingly different aspects of itself learn, teach, interact, and grow. This meditative participatory approach to education is based on an epistemology which conceives knowing as a process that fundamentally transcends dichotomies, and thus is true prajnaic intuition as it has been defined herein.

This approach is clearly profoundly subversive to the conventional educative paradigm, but not in an adversarial way. Meditation practice does not deny intellectual clarity and development in any way, either theoretically or practically. Since meditation enhances the ability to focus attention, and to see the connections between objects and

events, it increases intelligence in its practitioners, and this has been shown in many studies of meditators, particularly of people involved in Transcendental Meditation,[18] and of children trained to meditate by developing phase synchronization of brainwaves through the use of biofeedback devices.[19] Ecologist Gregory Bateson's definition of mind, so different from Descartes' "absolute distinction of mind and body,"[20] offers some insight into why developing intuition is critical for intelligence. He defines mind as a pattern of organization that is essential to all living systems. Mind is thus not limited to certain life forms, but also pervades ecosystems and the universe as the interrelating and organizing "pattern which connects."[21] It seems that to the degree that education limits people's ability to make their lives and knowing relate to the larger patterns in which they are embedded, to that degree intelligence (both moral and cognitive) is impeded. A meditative participatory approach which fosters intuition is thus subversive only to an obsolete and divisive set of epistemological assumptions.

Developing this intuitive approach, then, is seen to not only improve the translative function of education, but also vitally contribute to its transformative function. The translative function is that of developing the Gebserian mental level/structure of consciousness beyond its present deficient manifestation as rationality to its true function as clear, open reasoning power. Translation is horizontal in

its focus and as Wilber points out, "translation apparently has one major function--to integrate, stabilize, and equilibrate its given level." He emphasizes that "transformation, on the other hand, is a vertical shift, a revolutionary reorganization of past elements and emergence of new ones. It is synonymous with transcendence . . . [and] apparently has one major function: to go beyond its given level."[22]

Intuition, while it transcends intellection and thus is central to a transformative shift in education and consciousness, is also seen to provide the necessary perspective that would allow for the full and proper development of reason and its healthy functioning on its own plane. The global dilemma humans have created is, as Jack Crittenden points out, not proof "that reason has failed, but that, for the most part, it has not yet been fully tried." To be fully tried, to function freely and harmoniously, it will, paradoxically, have to be perhaps transcended so that it can operate within a larger context. This larger context is the direct unmediated knowing of interconnectedness that is the hallmark of true intuitive knowing and that is the goal of the meditative participatory approach to education. The implications of this approach, which is education for transformation, and for transcendence of the current maze we have built and managed to almost lose ourselves in, will be discussed in the next chapter.

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[1]Lama Anagarika Govinda, The Way of the White Clouds (Berkeley: Shambhala, 1970), pp. 80-81.

[2]Ibid., p. 81.

[3]Lynn Scott, "Sri Chinmoy Lifts over 7,000 Pounds with One Arm," Life Times, Volume 1, Number 3, p. 46.

[4]Ibid.

[5]Vaughan, p. 30.

[6]Plato, Ion, tr. W. H. D. Rouse, p. 19, 534-d.

[7]Korean Zen master Seo Kyung-bo, personal conversation, Oakland, CA, November 17, 1983.

[8]Ibid., p. 18, 534-b.

[9]Quoted in Harman and Rheingold, pp. 33-47.

[10]Ibid., p. 47.

[11]J. Hadamard, The Psychology of Invention in the Mathematical Field (Princeton, 1949), p. 15.

[12]William T. de Bary, The Buddhist Tradition (New York: Random House, 1969), pp. 103-104.

[13]Blofeld, The Zen Teaching of Huang Po, p. 94.

[14]Hosaku Matsuo, The Logic of Unity: The Discovery of Zero and Emptiness in Prajnaparamita Thought, ed. Kenneth Inada (Albany: SUNY Press, 1981), p. 13.

[15]D. T. Suzuki, Manual of Zen Buddhism (New York: Grove, 1960), p. 87.

[16]Hui-neng, in The Sutra of Hui-Neng, tr. Wong Mou-lam (Boston: Shambhala, 1969), p. 42.

[17]Katsuki Sekida, Zen Training (New York: Weatherhill, 1975), p. 93.

[18]Andre Tjoa, "Increased Intelligence and Reduced Neuroticism through the Transcendental Meditation Program,"

in Scientific Research on the TM Program: Collected Papers, Vol. I, ed. Johnson and Farrow (New York: MERV Press, 1976), p. 55.

[19]Jean Millay, "Expanding Visual Intelligence," AHP Newsletter, May, 1979, p. 13.

[20]Rene Descartes, Meditations on First Philosophy (1641) in From Descartes to Locke, ed. T. V. Smith and Marjorie Grene (Chicago: University of Chicago Press, 1940), p. 53.

[21]Gregory Bateson, Mind and Nature (New York: Bantam, 1979), p. 12.

[22]Ken Wilber, A Sociable God, p. 48.

CHAPTER VIII

Implications for Education

The term intuition is affiliated with a remarkable diversity of human experiences, as the preceding chapters indicate. Included in this assortment are the different kinds of pre-rational instincts, hunches, and powers; the various extensions of rationality that have been termed intuitive such as unconscious inference and problem incubation-resolution; and the still largely unexplored variety of trans-rational noetic phenomena that range from physical and psychic siddhis to channeling, inspiration, and creativity, to the higher forms of knowing outlined by the various meditative traditions of the world. A number of conceptions of intuition have been noted in the foregoing, including an ancient Egyptian form of intuition through which the dark night of intellectual rebellion is transcended, Heraclitus's intuition of change and polarity, Socrates' daimonic intuition that prevents inner and outer missteps, Plato's intuition of the archetypal Forms, Aristotle's intuition of that which is self-evident, Plotinus's intuition of illumination and absolute knowledge, cross-cultural conceptions of intuition as revelation operating through seers, prophets, and shamans, Christian intuition of the divine other, Spinoza's intuitive "knowledge of the third

kind" based on an intellectual love of God, Kant's "pure intuition" operating through universal categories, Schopenhauer's intuition of the cosmic Will, Hegel's third-level philosophic thinking that allows for intuitive and immediate contact with the Absolute, Bergson's intuition of true duration and of penetrating to the interior of objects, and his mystic intuition of the divine, Jung's intuition of the inner and outer possibilities inherent in situations, Fromm's intuition of the paradox of individualism, Noddings' carefully-delineated intuition of direct object contact that is driven by the Will, Vaughan's transpersonal intuition that is "true by definition," Deikman's intuition whose seat is the pure subjectivity of the "observing self," Roberts' intuition of the no-self experience, Aurobindo's intuitive knowing based on five levels of supramental functioning, Wilber's intuition as pertaining to a complex hierarchical matrix of trans-rational modes of knowing, and the Mahayana conception of intuition as prajna. This Buddhist notion of prajna seems to provide a particularly salutary context for focusing on the practical development of intuition, since it is explicitly and intimately connected with meditative practice and unfoldment. In this chapter the focus shifts from exploring the values of understanding and practicing intuitive modes of knowing in general to looking at how different kinds of intuition, particularly prajnaic intuition and the meditative participatory approach that it implies, can be educated and can be integrated into educational

contexts, and exploring what some of the effects of this might be.

The meditative participatory approach to education is less focused on knowledge per se, since knowledge is, as Dwayne Huebner points out, "the fallout from the knowing process"[1]; it rather focuses on developing intuitive capacity, or as Schumacher terms it, inner adequatio.[2] Like Wilber, Schumacher emphasizes that nothing can be perceived or understood without the appropriate organ of perception or of understanding, and it is with this appropriate organ that the meditative participatory approach to education is concerned. Since prajnaic intuition is the function of the samadhi of the essential true-nature of the mind, the organ of intuition is this transcendent mind-essence, and the faculty that must be trained so that it can function freely is that of attention.

Unless attention is liberated from being addicted to dualistic orientations, distractions, and compulsive habit patterns, the mind-essence can neither be perceived nor can it function freely as unimpeded intuitive capacity. The dual process of taming and training mental attention is thus a central aspect of meditative traditions, and it seems to be, in some form, a prerequisite for virtually all of the intuitive arts referred to in Chapter VII, as well as for the development of prajna. This training is basically an educational process, and it is a process that is implicitly and explicitly transformative. As Dewey points out, true

education is transformative, and it is so both for the apparent individual and for the larger cultural context. Wilber emphasizes that transformation and transcendence are two aspects of the same essential process, and the transformative orientation inherent in meditative approaches to education of consciousness is particularly closely affiliated with the capacity to solve seemingly unsolvable problems by transcending them. This may be particularly significant for contemporary society, for, as Schumacher notes, while simple convergent problems can be solved in their own terms by reduction and rational analysis, complex divergent problems cannot be solved in this manner and ultimately seem to be solved only in being transcended.[3] In other words, resolving a divergent problem requires a fundamental shift in perspective, a recontextualization of the problem and of the whole complex, inner and outer, in which the problem is embedded.

Solutions to divergent problems thus arise not through particular actions operating on the same level as the problems, but rather through paradigmatic leaps in which the problems are replaced by a more integrative level of awareness. For example, during the Articles of Confederation era, 1781-87, there were seemingly insoluble problems of trade wars and economic, political, and military rivalry among the loosely-confederated states, and the thrust that most successfully contributed to resolving these problems was not dealing with them on their own level, but transcending

that level and recontextualizing the whole situation, seeing the states as members of a larger body and emphasizing the preeminence of this more encompassing whole, which resulted in the Constitution. There are, of course, many other examples of this principle functioning in both individual and collective contexts, and it is in many ways closely related to dialectic, which the Western world has repeatedly employed to better understand its predicaments. However, the explicit emphasis on the enormous power of shifting attention, of changing perspectives and recontextualizing situations in order to solve problems is quite foreign to the basically materialistic assumptions and approaches of conventional Western thinking, and it is this emphasis on the power of consciousness that seems to be a major contribution of the meditative traditions. It is being increasingly recognized that the problems created by rationalistic, separatistic thinking cannot be solved by applying more of the same kind of thinking; rather, as Einstein stressed, a "new mode of thinking is required," and this new mode is not an extension of rationality but grows out of, transcends, and includes rationality. It is through this intuitive knowing that dualisms are recreated as polarities and apparent dilemmas are vaporized, often through a seemingly sudden insight and an "Aha!" or laughter.

The continual pressure of divergent problems, then, whether appearing in the external world as Chapter II discussed or in the internal world as the basic existential

questions that all humans face, constantly drives people to transcend, in some way, the limitations of encrusted ways of thinking, being, and relating. As Huebner aptly points out, "Education is only possible because the human being is a being that can transcend itself."[4] In this process, the focus of the mind, what it attends to, and how, is of critical importance.

Teaching Intuition

Teaching intuition presents something of a puzzle for educators because it is a way of knowing that can not be tracked rationally since by its very definition it lies outside of the rational mode. Since words and concepts are, as Zen emphasizes and Bergson articulates so well, limited and basically artificial crystallizations of a livingness that always transcends them and must therefore always be, in the final analysis, mysterious to them, they cannot be but artifacts that, hopefully, can point beyond themselves. Intuitive ways of knowing are thus not teachable through ordinary methods based on subject/object dualisms and purely verbal mediation, and this of course helps to account for its general neglect in conventional educational settings. While prajnaic intuition cannot be reduced to words or symbols, it may be expressed through words and symbols, and these artifacts, in the form of gestures, sayings, artistic expressions, and so forth, may help to reveal the intuitive experience to minds that are ready.

A central aspect of teaching intuition, then, is readying minds to render them receptive to intuitive knowing. In principle, this necessity of preparing the gound is also basic to the "Yoga of Objectivity" and its goal of teaching people to think rationally. The actual process itself, whether intellective or intuitive, is learned through practice and by the example and guidance of those who have already developed skillfulness in the respective modes of knowing. The main difference between them, that one is verbally trackable by the light of analysis and the other is not, suggests that the intuitive act, while not illuminated by the light of analysis, is illuminated by another more subtle kind of light and that intuitive knowing is thus verifiable not just through its interplay with rationality, which is fraught with problems, but more dependably, through the insight and sensitivity of those who have developed the intuitive faculty already and are attuned to its expressions.

This can be clearly seen, for example, in the Zen tradition. The intuitive insight that lies at the heart of Zen has nothing to do with the logical consistency that ideally underlies rationality and conventional verification, and yet Zen masters acknowledge a nondualistic logic and use this to verify their students' depth of understanding. A well-known and oft-repeated example of this is the ancient mondo of a Zen master holding up his staff to a student and saying, "If you say this is a staff I will give you thirty blows. If you say it is not a staff I will give you thirty

blows. Now, what is it? Speak! Speak!" The student's response, less the actual words and more the way it is presented, reveals the student's depth of insight to the trained eye of the master. Zen, like other meditative traditions, recognizes that trans-rational intuition cannot be taught by rational people using rational methods, just as rationality cannot be taught by pre-rational people using pre-rational methods. In fact, intuitive knowing is not so much taught, this being itself a rational concept, as awakened to.

This awakening requires that the inner ground be prepared and receptive, and the central aspect of this preparation is developing control of the faculty of attention. This is the particular significance of meditation, for meditation is fundamentally concerned with attention, and it is also educational in its orientation as well. Meditation can thus be seen to be the bridge between the teachable and that which is not teachable, between rational thinking and trans-rational awakening. Ultimately, it seems that meditation, like intuition, basically transcends linear notions of causality; it is both the goal and the path to the goal, and the transcendence of goal as well. Intuition is thus not so much learned as liberated, and the basic way intuition is liberated from the constraints of self-centered consciousness is through meditative awareness, and this may be arrived at along many paths. The exploration of these different paths is, it seems, an

essential agenda for education at this time. A brief description of some of them may provide a glimpse of the beckoning terrain.

The most obvious and straightforward path is that of formal meditation practice, which can be introduced into educational settings on a widespread basis, particularly if this is done in a non-religious manner. Zen, which has been called "the religion before religion," is eminently suited to this, since its approach has evolved a number of meditation practices which are particularly non-threatening to non-Buddhists. However, Vajrayana, Hinayana, and other Mahayana schools have also developed many meditation techniques, virtually all of which could be adapted or used directly, depending on the particular educational context. Taken in sum, these Buddhist traditions provide a variety of meditation techniques which is almost unimaginably rich and varied.

Furthermore, there are many, perhaps countless, other traditions with meditative traditions, all of which can be potentially adapted to contemporary educational settings. A small sampling of some of these other traditions includes Taoism, Yoga, the ancient Greek and Egyptian mystery traditions, Sufism, Gnosticism, contemplative Christianity, Shivaism, Kabbalism, Jainism, as well as the vast profusion of shamanic, animistic, and earth-centered traditions of which we are directly or peripherally aware. Every tradition embodies a system of meditation techniques; in the large and

complex ones, like Taoism and Yoga, the number of different techniques easily runs into the hundreds. Added to this fertile and abundant supply of meditation techniques embodied in the traditional religious and philosophical systems of the world are the methods developed and adapted by modern Western culture. These are multiplying rapidly now and some examples include Arica, Autogenics, Beshara techniques, biofeedback, Clearing, Core Energetics, A Course in Miracles, Gurdjieff Work, Enlightenment Intensives, Integral Yoga, Movement Harmonics, Rebirthing, Vivation, and many others invented or introduced by psychologists, educators, and others.

Given the profusion of formal meditation techniques now available, it seems that a basic priority of educational thought should be providing contexts that facilitate integrating them into curricula in coherent, meaningful, and effective ways. Education is, as mentioned earlier, virtually coextensive with culture. Besides the public and private school systems including primary, secondary, and higher education, immense systems in themselves, are the burgeoning educational situations outside of these systems: corporate and governmental training seminars, personal effectiveness courses, organizational conferences, workshops on specific topics, consciousness-raising programs and symposia, educational programs sponsored by special interest organizations and research institutions, issues-oriented colloquia, the programming of the mass media, apprenticeship programs, self-help and support groups, and lessons and

trainings, either one-time or ongoing, on virtually every topic imaginable. Even though these educational contexts differ widely, it seems that meditative techniques could be applied to many, perhaps all, of them. As the resistance to more inner-oriented approaches dissolves, as is seeming to be the case, it becomes clearer how this might be appropriately done in the various cases. Methods of stopping internal dialogue and of training attention to be alert and receptive can be introduced and adapted to these different educational contexts. A brief discussion of meditative techniques will help clarify this.

There are basically two broad types of meditation: those with objects of attention, and those without such objects. Zen practice, or zazen, is considered to fall in the latter category, and it is this characteristic which endows it with the "non-religious" quality. It seems that Zen master Yasutani-roshi's comment, "All great religions embrace some measure of Zen, since religion needs prayer and prayer needs concentration of mind,"[5] could be extended to education as well, since learning similarly requires concentration of mind. This unification of mind, establishing internal mental calmness and one-pointedness, is fundamental to all Zen practices, and to the five varieties of Zen enumerated by Keiho-zenji, one of the early Chinese Zen masters. The first type, "ordinary" or "bompu" Zen, is commended by Yasutani-roshi, a former school teacher, as:

> being free from any philosophic or religious content, [it] is for anybody and everybody. It is a Zen

> practiced purely in the belief that it can improve both physical and mental health. Since it can almost certainly have no ill effects, anyone can undertake it, whatever religious beliefs he happens to hold or if he holds none at all. Bompu Zen is bound to eliminate sickness of a psychosomatic nature and to improve the health generally.
>
> Through the practice of bompu Zen you learn to concentrate and control your mind. It never occurs to most people to try to control their minds, and unfortunately this basic training is left out of contemporary education, not being part of what is called the acquisition of knowledge. Yet without it what we learn is difficult to retain because we learn it improperly, wasting much energy in the process. Indeed, we are virtually crippled unless we know how to restrain our thoughts and concentrate our minds. Furthermore, by practicing this very excellent mode of mind training you will find yourself increasingly able to resist temptations to which you had previously succumbed, and to sever attachments which had long held you in bondage. An enrichment of personality and a strengthening of character inevitably follow since the three elements of mind--that is, intellect, feeling, and will--develop harmoniously. The quietist sitting practice in Confucianism seems to have stressed mainly these effects of mind concentration. However, the fact remains that bompu Zen, although far more beneficial for the cultivation of the mind than the reading of countless books on ethics and philosophy, is unable to resolve the fundamental problem of man and his relation to the universe. Why? Because it cannot pierce the ordinary man's basic delusion of himself as distinctly other than the universe.[6]

Bompu Zen is thus seen to be a method that is easily assimilable into a wide variety of educational situations, since its aim, in facilitating control over the faculty of attention, is basically integrative and developmental. For example, the meditation practice of counting exhalations from one to ten is a bompu practice that helps people of virtually all ages and backgrounds focus attention and relax. The ability to focus attention is a crucial component of effective learning, and the ability to consciously relax is being increasingly emphasized as being a necessary survival

skill in today's high-stress environments. This practice, and others like it, can be integrated into the curricula in a variety of ways, and at virtually all levels. Children can learn and profit by doing simple breath and mantra meditations as Zen and Transcendental Meditation communities have demonstrated, and it is easy to imagine regular meditation exercises in schoolrooms from the primary level up to the university, as well as, of course, in adult education settings. Just as, several decades ago, physical fitness became recognized as appropriately being a basic requirement of all school programs, so it seems that "mind fitness" can also be so recognized. Joy Watson, for example, emphasizes that "Mind Fitness encourages a daily structuring of inner development, just as physical fitness encourages the daily structuring of physical development,"[7] and advocates "daily rituals" of twenty minutes for meditation, relaxation, imagery, intuitive affirmation, and breath awareness for people of all ages and inclinations. She points out that regular practice is essential to developing any skill, strength, or faculty, and development of intuitive capacity is no different. It is not hard to imagine meditation techniques integrated into educational settings as ongoing mind fitness programs which would directly promote intuitive growth and facilitate overall learning and personal development. This is one possible application of bompu Zen, the first type of Zen training.

The second type of Zen aims at cultivation of joriki, the dynamic power which arises once the mind has been unified into one-pointedness in meditative concentration; the third type aims at escaping the suffering of samsaric existence, a Hinayana approach; and the fourth and fifth aim at satori, the direct realization of the inherent true-nature which is not separate and is beyond distinctions. The types of Zen meditation practice germane to these latter four varieties of Zen are also certainly applicable in educational contexts, depending on the specific situation and the motivation of the individuals involved. Prajnaic intuition functions increasingly freely with mastery of each of these types of meditation practice. With the fifth level, practice and practitioner are transcended, though there is some of this quality in the other four types as well.

Through the more basic zen meditation techniques, like attending to breathing, students learn about their own mental processes and states, becoming sensitized to them and developing the ability to control them or not be dominated by them. In addition, these practices tend to create a group or class energy that is more centered and connected. It has been widely recognized that being silent together and focusing inwardly together can be a powerfully bonding experience. Thus, group meditation practice in educational contexts may have potential value in creating solidarity and interpersonal sensitivity, as well as developing within

individuals the capacity to focus attention and more easily shift between inner and outer worlds.

This integration of inner and outer, besides being healing, facilitates relaxation, creativity, inner exploration, and the ability to make connections between internal phenomena and external events. Excellent educational tools that support this process are artistic expression and journal writing. Much more research needs to be done in this area of how creative and honest self-expression through art, music, writing, and so forth, facilitates learning and fosters intuitive awareness. The research by Betty Edwards, Frederick Franck, and others on teaching intuitive drawing, and by Ira Progoff, Tristine Rainer, and others on using journals to explore consciousness, point in some interesting directions. It is not hard to imagine, for example, biology students drawing flowers, trees, and butterflies, and using inner imagery to experience body space, rootedness, flight, and various types of growth, and even using kinesthetic learning to, for instance, better understand trees, ants, deer, tigers, birds, and fish by moving and dancing like them and practicing Tai-chi movements based on the ancient Chinese perceptions of their animal styles. I have integrated animal movements, for example, in teaching Chinese philosophy, and yin and yang movements in teaching about these concepts, as well as art and collage in philosophy and humanities courses, and inner imagery and journaling in college courses in history,

philosophy, mythology, humanities, oral and written communication, music appreciation, and issues in science. Experimenting with introducing students to various meditation techniques, as well as to bodywork, massage, and ritual, I have found students to be highly receptive to these alternatives to strictly rational and verbal approaches to learning. They seem to consistently help students make connections between concepts and the reality of their bodies and their lives, and help them develop more focused awareness, and besides bringing a measure of excitement and involvement to the class, they help students create a sense of community in the class that supports honesty, intellectual exploration, sharing experiences, cooperation, and individual initiative. When I teach mythology, as another example, I have students keep a dream journal to help them better make connections between the inner and outer mythological worlds and understand the way symbols function in these worlds. These techniques help students participate more directly with the learning process and since they facilitate their ability to focus and shift attention, they are well-suited to being integrated with meditation practices done either individually or in group settings.

The meditative capacity to contact and express awareness that is not dominated by habitual patterns and internal chatter is essential to deriving maximum benefit from educational techniques that draw on and foster creativity, self-expression, and authentic exploration,

whether this exploration is of scientific concepts and theories, of works in the humanities, of patterns of culture, or of inner feelings about life transitions or world affairs. This meditative capacity can be learned and improved, but only through practice and informed guidance. Developing contexts that naturally encourage and motivate authentic effort in meditation practice is fundamental to successfully introducing it to people. It seems that a central value of integrating this meditative participatory approach into educational settings is that the sense of receptivity and relaxed attentiveness it engenders has a tendency to extend to the whole cognitive process. This can be encouraged by the teacher or facilitator in the particular situation and this often means creating a safe environment for the exploration of intuitive knowing, free from the judgment and competitiveness that tend to inhibit it, especially in the initial stages.

Two other Zen meditation techniques which correspond more to the fourth and fifth types of Zen can also be introduced in educational settings in various ways. The first is known as <u>koan</u> practice, and it involves one-pointedly focusing on a question (koan) which reflects one's basic existential dilemma, and penetrating it more and more deeply. There are hundreds of koans in the Zen tradition, the most primordial one being a basic self-inquiry: "Who am I?" or "What am I?" or "What is this?" or "What is it?" or just "What?" In some koans the question is explicit, for

example, "What is your original face before your were born?" and "What is the sound of one hand clapping?" In others, the question is implicit: "A monk asked Chao-chou (Chinese Zen master, 778-897), 'Does a dog have Buddha-nature?" and Chao-chou replied, "Wu!' (or "Mu" in Japanese and Korean, meaning "'No!')"; "A monk asked Chao-chou, 'What is the meaning of Bodhidharma's coming from the west?' and Chao-chou answered, 'The oak tree in the garden.'" What did Chao-chu mean? Don't all beings have Buddha-nature? The oak tree in the garden?

These koans do not have rational answers or explanations. To truly understand, for example, what is meant by the sound of one hand requires an inner nondualistic experience of the unity of the temporal and the eternal, of sound and silence, and thus of the infinite potential of emptiness, silence, and the eternal moment. The koan is not solved, but is transcended; it forces the mind that wants to solve it to transcend the usual limitations and paradigms by which it creates its ordered world. The technique for working with a koan is thus not to try to rationally figure it out, but to let attention focus more and more completely on it until the question consumes both attention and the questioner. Out of this deep questioning process in which the subject/object dualism dissolves, an intuitive knowing emerges and the practitioner <u>knows</u> the answer to the koan. There is no particular right answer that can be given in words; the practitioner's very being pulsates with a new

level of understanding and radiates it in a way that a Zen teacher can immediately recognize. Thus, while a koan does not have a right or wrong answer, it is successful if the practitioner breaks through the confinements of ordinary thinking and directly experiences, with an "Aha!," the underlying truth of being that is normally unrecognized.

The koan is thus a problem which is unsolvable in the terms in which it is conceived by ordinary thought habit-patterns. It is solvable only when a shift is made to another totally different perspective; this shift is perceived as a sudden flash of insight. It is, in Schumacher's terms, a divergent problem that cannot be solved but only transcended. There are differing degrees of depth in the insight and transcendence thus experienced, and a basic aspect of Zen is integrating and extending this insight into all the aspects of consciousness. This is where the guidance of a more experienced mentor is particularly important, and it is through this process that the obstacles to prajnaic intuition are cleared away. The koan is thus a tool for awakening from the consensus trance consciousness and the unsolvable problems inherent in it. It involves a definite kind of learning, though it is quite different from what is generally recognized as learning in conventional education.

Generally speaking, it is learning of content that is explicitly recognized in most educational settings. This content corresponds to the information presented, and the

"right" way to handle this information. There is a second mode of learning that is always going on as well, though it is left implicit. This is paradigmatic learning, and corresponds more to the form of the educational situation. It is learning that is absorbed, less consciously, about the nature of the particular context: the rules of the game, so to speak, that define the nature of the individual, the world, and of the relation between them. Aspects of this paradigmatic learning have been referred to as the "hidden curriculum." Content learning is of a lower order than paradigmatic learning, which is generally invisible, yet far more powerful. Bateson refers to these as Learning I and Learning II (deutero-learning) respectively. Paradigmatic learning provides the organizing context through which the Learning I process is experienced, and by which information is interpreted. Changes in worldview can be effected through educational methods that engender paradigm shifts, resulting in new and different interpretations of experience. There is, however, a third order of learning available to humans, as Berman indicates:

> Behavior, says Bateson, is controlled by Learning II, and molds the total context to fit in with those expectations. The self-validating character of deutero-learning is so powerful that it is normally ineradicable, usually persisting from cradle to grave. Of course, many individuals go through 'conversions' in which they abandon one paradigm for another. But regardless of the paradigm, the person remains in the grip of a deutero-pattern, and goes through life finding 'facts' that validate it. In Bateson's view, the only real escape is what he calls Learning III, in which it is not a matter of one paradigm versus another, but an understanding of the nature of paradigm itself. Such changes involve a profound reorganization of

> personality--a change in form, not just content--and can occur in true religious conversion, in psychosis, or in psychotherapy. These changes burst open the categories of Learning II itself, with magnificent or hazardous results.[8]

Clearly, successful koan training can be seen as Learning III with magnificent results, in which paradigm-boundedness itself is recognized. This seems to be most significant for education, for several reasons. First, simply recognizing the existence of Learning III can help make more visible the normally transparent epistemological and ontological assumptions that underlie cultural and educational views of the nature of reality. Secondly, the koan method is eminently adaptive to learning situations. Basically, the teacher refrains from merely engaging in what Paulo Freire refers to as "banking education," and instead facilitates a problematizing process. By problematizing material and relationships, learners can engage with it directly and in a personal way that has relevance. The Zen teachers of old problematized the inner unrest of their students, creating koans which served as foci by which the students could concentratedly address this existential unrest and gain direct first-hand insights. This can truly be education of a most highly nurturing and empowering type. Students today, and all people can be seen as students, face additional koan-situations: 50,000 nuclear warheads, social fragmentation, and severe environmental degradation are examples. These situations, problematized, clearly become koans which are natural educational tools; they provide

situations requiring deep questioning. Teachers can use this to advantage in practically any educational context that allows for them to get a sense of what kinds of questions particularly resonate with particular students. By effectively presenting these questions, a process is started which can far transcend the limits of the particular course, workshop, or educational situation.

Thus, Zen points to a highly participative approach to education based on an ongoing and intensely personal questioning process in order to discover meaning and value. It does so explicitly recognizing that problems may be insoluble within the conventional paradigmatic contexts, and thus encourages students to shift perspectives, going beyond the limitations enforced by the categories of their paradigm-bound conceptions of reality. Education is thus freed to become truly the responsibility of learners, as they deepen the questioning and exploration process. This approach is, of course, radically anti-authoritarian, and is harmonious with the basic idea in Buddhism that seeming individuals are essentially complete and not limited by the delusional lenses through which they interpret the world.

The other main type of Zen meditation practice, referred to as Shikan-taza, is the complementary opposite of koan meditation. It is a practice of total wide-awake awareness without distraction and without internal comment, thought, judgment, or questioning. In this awareness, problems are, in a sense, de-problematized and simply

noticed, with no sense of separate self. While thus similar, in some respects, to "value-free science" and thus perhaps particularly well-suited to integration into educational contexts involving scientists, shikan-taza fundamentally differs from science's basically objectivist orientation. While conventional science is based on objective world and self notions, shikan-taza is only truly practiced when there is no longer any objective world or self, and there is simply non-judgmental awareness of arising sensations, thoughts, and feelings. This requires a highly-developed ability to focus attention in a non-focused way, and creates an internal spaciousness that allows for the practitioner to more clearly distinguish between immediate perception of the apparent world and all of the distortions and interpretations that overlay and cloud that perception. For this reason, shikan-taza may be of interest to scientists, since it provides clarity without the separatism that distorts conventional objectivity. While shikan-taza seems to be a rather difficult practice, it clearly has important relevance for education, perhaps particularly in the sciences. Its nondualistic awareness is the basic ground which, while generally invisible, provides the context for the free functioning of prajnaic intuition.

There are countless meditation techniques that involve concentrating on particular objects, and their potential applications in educational situations, being virtually unlimited, can be greatly expanded. Practice in

focusing attention on an object develops mental power and a natural internal discipline. One aspect of this meditative approach is focusing attention on an external object. As this practice deepens, the split between the seer and the seen dissolves, and a more intuitive epistemological connection with the apparent object is possible. For example, one way to approach understanding a daisy is to cut it up, take it apart, label the parts, discuss the functions of the parts and thus, supposedly, come to a better understanding of this flower. A meditative approach, alternatively, would be to relax, calm the mind, and focus attention on the daisy, becoming completely receptive to it, and allowing it to enter one's mind and heart. A sense of becoming a daisy, of experiencing daisy-ness, can open up sensitivity and internal flexibility, since it encourages the ability to see life through the eyes of the seeming 'other' and thus get fresh perspectives. The haiku master Basho said, "In order to draw the bamboo, you must become the bamboo." In developing the ability to become the other, the walls of the ego-prison are rendered less rigid, and artistic, musical, and poetic capacities are opened up. Connections are seen, and thus insights into more hidden meanings emerge. This meditative approach to understanding a daisy would be ideally done out in a field where the wild daisies grow, rather than in the confines of a room where its own connectedness with the ecosystem has already been severely altered. In this way, the daisy as part of a larger

pattern would be more easily intuited, if the ground has been properly prepared and the perceiving mind is quiet, open, and attentive. This educational approach, which is based on radical meditative participation, has many implications. It seems that an important agenda for educational research is to explore how the principles of this meditative approach might be applied to a variety of educational situations.

Meditation on external objects potentially includes an infinite diversity of phenomena: mandalas, geometric forms, mantras, paintings, photographs, sculptures, trees, rivers, stones, mountains, battlefields, office buildings, city streets, shanty-towns, traffic noise, smells, tastes, tactile sensations, music, dance and movement, sounds in nature, kinesthetic sensations, people, animals, and patterns of all kinds. These objects could be meditated upon in numerous ways as well. Inner harmonization and connectedness is the basis, and this could be combined with various kinds of artistic expression, such as drawing, dancing, poeticizing, "musicating," moulding, moving, arranging, and so forth, to deepen, give form to, and share the participatory learning experience.

Another basic kind of meditation that has enormous potential applicability to education is focusing attention on inner objects of awareness. This would include meditation on an idea, feeling, image, or internal state. This subject is incomprehensibly vast; it is the primary domain of the endless profusion of meditative practices that are present in

all human cultures. Since focusing the mind on internal states, ideas, feelings and images can take an infinite variety of forms, there is potential for application to a broad spectrum of educational settings, though until recently this has been virtually unrecognized by conventional Western educational thought. As everyone knows by direct experience in dreams, internal experience can be as vivid and real as external experience. Because of this vividness that internal experience has, it is a highly-promising avenue of educational exploration.

Some researchers have gotten surprisingly excellent results using the power of imagination to develop, for example, physical skills in martial arts, sports, and musical instrument playing. Thus, basketball players are now able to practice and improve their shooting by simply relaxing, focusing attention on the internal bodily sensations that accompany good shots, and vividly imagining these feelings while visualizing the ball going through the hoop. Tests have shown that this kind of internal practice can be more effective at improving skill than actually going out and practicing shooting baskets!

These same principles can be applied to the many kinds of educational contexts that focus on skills acquisition, such as teaching music, art, crafts and technical abilities, interpersonal communication, and foreign languages. In addition, they can be applied to teaching internal qualities like self-esteem, healing, and empathy.

Focusing the mind on internal images can also be used to explore ideas and feelings, and the ability to think without words can be developed. This capacity is seen to be one of the characteristics of people who unfold seemingly exceptional abilities. Einstein, who said that, "Imagination is more important than knowledge," also wrote,

> The interaction of images is the source of thought. The words of the language as they are written or spoken do not seem to play any role in my mechanism of thought. The physical entities which seem to serve as elements of thought are . . . clear images which can be voluntarily reproduced or combined.[9]

The role that meditation and internal imagery can play in education is recognized by many to be a major frontier in educational theory and practice:

> Visualization, guided imagery, and imagery-based curricular activities are also on the rise in many education programs. Influenced by successful endeavors in psychology and medicine, educators are becoming more attentive to curricular interventions that correspond to physical, emotional and spiritual well-being as well as intellectual growth. Interest in teaching to the intuitive, imaginative, metaphoric mind (often referred to as the 'right brain') as well as to the rational, analytical mind (often called 'left brain') is also growing. Intuitive activities such as fantasy, imagination, visualization, imagery and psychophysical exercises are becoming key aspects of standard curricula.
>
> Imagery as used in education settings usually falls into one or more of four categories. (1) <u>Relaxing, centering, focusing</u>. These prepare the mind for learning by lessening stress, disinhibiting negative thoughts about learning, and sharpening inner vision. (2) <u>Accelerating and expanding cognitive mastery</u>. Students use imagery activities to increase their knowledge of cognitive material, basic subjects, technical skills and psychomotor skills. (3) <u>Deepening affective growth and awareness of inner life</u>. Students use affective imagery processes where they learn the skills of introspection, self-understanding, love and appreciation, bonding with others, empathy, communication, non-violent conflict resolution, problem solving, emotional assessment and self-determined self-

> concept. (4) Trans-personal growth. Students use imagery to explore aspects of consciousness that span beyond ordinary awakening states of perception such as transcendence, altered states, heightened sensory perception, and expanded intellectual capabilities (metaphoric thinking, symbolic language, mind merging or synergic mind, and direct mind to mind communication). They also explore spiritual themes such as 'higher wisdom,' 'cosmic or universal consciousness,' 'oneness of being,' 'divine,' and 'universal love.' When two or more of these types of imageries are merged into one lesson for the simultaneous teaching of different types of learning objectives (i.e., a cognitive objective merged with an affective objective), we call this confluent imagery.[10]

The potentials inherent in integrating meditative approaches into educational situations are incalculable, but they are clearly extendable into many dimensions of human learning. The common element in all these practices is fostering receptivity and relaxed focused attention, as Vaughan points out. Intuitive knowing grows out of and springs from this educable basis. My own personal experience has confirmed the enormous benefit derivable from introducing meditative approaches in educational contexts. Overall, it seems to consistently encourage group harmony and deeper interpersonal communication, as well as creativity, self-exploration, and the ability to look within, and to make connections with other aspects of the individual and societal life-patterns. There is, however, resistance to meditative approaches by some students. Since it seems essential that these approaches never be forced on people, it is helpful, particularly in this time of transition, to discuss the underlying epistemological context in which meditation is embedded, thereby pacifying some, at least, of the most

obstreperous inner protestations that students may have. This of course equally, though somewhat differently, applies to administrators and members of society generally. The egoic sense of separateness knows instinctively that meditation is a direct threat to its internal power base, and it will both resist it and attempt to co-opt and thus use meditation to add to its own territory. This egoic inflation, as Jung points out, is particularly likely around the siddhis discussed earlier which are natural by-products of meditation, as is intuitive knowing generally.

In teaching intuition, it is thus important that students have guidance that can point out the egoic tendencies which will not only inhibit learning and growth, but also, perhaps, misuse the increased capacities inherent in intuition and direct them against perceived (and often self-created) enemies. This generally implies a relatively more long-term relation between student and mentor than a weekend workshop or even a four-month semester or training period. This is not, though, to necessarily overemphasize a long-term guru-disciple relationship as the only valid approach, and there are, in fact, strong signs that this may not be appropriate for many Westerners or for contemporary cultural conditions. In the Chinese and Korean Zen traditions, meditators have been encouraged to travel, and to seek out, learn from, and be intuitively tested by many different meditation adepts. The meditative traditions all agree that ultimately, the only true teacher is within. The

awakening of prajnaic intuition is essential to finding this teacher, and in this light all apparent educational contexts can be seen to be but way-stations, necessary and ultimately illusory, in this awakening.

A central implication of this awakening as it unfolds through a meditative participatory approach to education is the promotion of creative self-expression. Paradoxically, this does not contradict the central premise that the separate self is illusory, for every apparent individual is seen to be a unique manifestation of the non-individuated mind-essence. Thus, art as creative exploration of and expression of meditative awareness can be seen to be the crowning of human life. This is art that is conceived not only as drawing, dancing, sculpting, flower arranging, and so forth, but as pervading every aspect of life. People who awaken to the essential wholeness of the universe do not separate art from non-art; their very lives become their art. The Zen scholar and teacher D. T. Suzuki writes,

> To such a person . . . every deed expresses originality, creativity, his living personality. There is in it no conventionality, no conformity, no inhibitory motivation. He moves just as he pleases. His behavior is like the wind which bloweth as it listeth. He has no self encased in his fragmentary, limited, restrained, egocentric existence. He is gone out of this prison. . . . His is 'no-mind.' Says St. Augustine, 'Love God and do what you will.' This corresponds to the poem of Bunan, the Zen master of the seventeenth century:
>
> While alive
> Be a dead man,
> Thoroughly dead,
> And act as you will,
> And all is good.

> To love God is to have no self, to be of no-mind, to become 'a dead man,' to be free from the constrictive motivations of consciousness. This man . . . is addressed and he responds. . . . How rich his inward life is! Because it is in direct communion with the great unconscious.[11]

The rich inward life is created symbiotically with a rich outward life, and art is the actualized metaphor for this. Thus, from a Buddhist perspective, as people develop the inner receptivity of meditation, they will express more freely, creatively, spontaneously, and uniquely. Self-consciousness will dissolve, and they will participate more directly with "others," and as they express their own unique aspect of the greater wholeness, they will also get more deeply in touch with their own inner nature, from which artistic expression springs. This artistic expression is creative in the deep sense of which Krishnamurti speaks:

> Creativeness is not a continuous state, it is new from moment to moment, it is a movement in which there is not the 'me,' the 'mine.'. . . It is only when the self is not there that there is creativeness--that state of being in which alone there can be reality, the creator of all things.[12]

Bergson's emphasis on the intuitive apprehension of movement and true duration can be seen here, though Krishnamurti goes further than Bergson does by explicitly leaving the self out of intuitive creativeness. Teaching creatively and teaching creativity are thus, from this perspective, based on the meditative participatory element that engenders prajnaic knowing and the inner harmony born of transcending dualistic orientations.

Complementary to harmonizing with one's inner nature is harmonizing with outer nature. A basic meditative perspective is that of the oneness of human beings with all of the natural life forms on earth and with the earth herself. The nondifferentiated essence of being, the Dharmakaya, is not separate from this earthly life. Once when a monk asked a Zen teacher, "What is the pure, immaculate Dharmakaya?," the teacher pointed to the excrement of a horse and said, "Well, it is there." This non-separatistic approach tends to both strip the conditioned mind of its tendency to try to postulate conditions (like "immaculate") to that which is essentially unconditioned, and also to evoke a fundamental sense of the sacredness, wholeness, and inherent equality of all life. In the Mahayana tradition, nature is seen as a great teacher, though minds that are not receptive cannot learn from it. People become more receptive to outer nature as they become more receptive to inner nature. Zen poet Thich Nhat Hanh writes,

> We also know that in our former lives we were trees. Maybe we have been an oak tree ourselves. This is not just Buddhist, this is scientific. The human species is a very young species that only recently appeared on the Earth. Before that, we were rock, we were gas, we were minerals, and then we were single-celled beings. We were plants, we were trees, and now we have become humans. We have to recall our past existences. This is not difficult. You just sit down and breathe and look, and you can see your past existences. It is not difficult. . . . We can learn from everything that is around, that is in us. . . . Everything is preaching the Dharma. Each pebble, each leaf, each flower is preaching the Dharma.[13]

A vital part of education, from the meditative perspective, is thus the experience of nature. Living close to nature and

experiencing the richness of the earth and one's intimate connection to her are seen to be central implications of a meditative participatory approach to education. Exploring ways of contextualizing this for specific types of situations is another promising area for educational research.

People learn to more deeply sense their inner and outer connectedness through meditative receptivity, and this receptivity opens people to love. Huebner points out that,

> As those who live close to and in harmony with the land know, and as the modern ecology movement suggests, the land, also a threat, will care for those who care for it. The knowledge between two people--parent and child, or two in love--points to this dialectic between knowing and loving. The dialectic is also suggested by the Biblical Hebrew word for 'to know,' which also means sexual union.[14]

This is significant for education, for people are motivated to learn about what they can identify with and love. As people are opened and inspired to learn about what they love, their knowledge and sense of connectedness grow, and their love deepens. Learning is thus seen to be, basically, an extremely joyful and fulfilling experience. It is based on connectedness and love, the thrill of discovery and opening up vistas of meaning, of expressing and growing. George Leonard writes, "Ecstasy is education's most powerful ally. It is reinforcer for and substance of the moment of learning."[15] He points out that,

> Our society knows little about this ingredient. In fact, every civilization in our direct lineage has tended to fear and shun it as a threat to reason and order. In a sense, they have been right. It is hard to imagine a more revolutionary statement for us than 'The natural condition of the human organism is joy.' For, if this is true, we are being daily cheated, and perhaps

> the social system that so ruthlessly steals our birthright <u>should</u> be overthrown.[16]

The implications of opening up a more meditative approach to learning are clearly highly subversive to the established order, as Spinoza, Bergson, and the Zen tradition have all realized. Although the resistance to it is still strong, it might be that the truth in the saying that "Nothing is as powerful as an idea whose time has come," pertains even more to a "feeling whose time has come." Perhaps this feeling is joy, the essential joyfulness that is not dependent upon outer conditions, but which is inherent at the heart of being. To be alive, to learn, to express, experience, and unfold are all seen to be manifestations of the native joy which, though not teachable, can be realized through meditative awareness and an education that fosters this.

Another implication for education in the teaching of intuition through meditative participation is emphasis on the role of humor in learning. In the Mahayana teachings, as in modern physics and in life generally, paradox is ubiquitous. If approached in a tight and humorless manner, frustrating contradictions abound. Seen from a more open and humor-filled perspective, there is the delight of paradox, the basic funniness or irony in practically every situation, and a freer, more joyful expression of laughter. From this perspective, as people learn to see more deeply into the nature of appearances, they tend to lighten-up, smile more, be able to relax and trust, and realize that "Practice and joyfulness are not separate from each other!"[17] The records

of the sayings and doings of Zen and Vajrayana meditation masters are filled with humor. A great example of this are the zany antics of the two eleventh-century Chinese "Zen idiots" Han-shan and Shih-tou. Another example may be seen in this ancient story of a Zen temple abbot:

> Once upon a time there was an abbot who vowed he would never again walk across the bridge that spanned the chasm between his monastery and the outside world. One day two friends came to visit him. They all had a big feast together. When the time came to say goodbye, the three of them were talking so fast and so merrily that, before they knew it, they had all crossed the bridge. When the two visitors said to the abbot, 'Hey, you just broke your vow,' he laughed even more merrily. The three friends then had to grab each other to keep from falling into the gorge, they laughed so hard.[18]

One of the most common expressions at the moment of satori enlightenment, is great laughter. Exploring humor, and its capacity to heal apparent contradictions and to facilitate paradigmatic leaps to new levels of understanding, is another important aspect of a meditative approach to education. Humor can evoke insights because the walls of the ego are often temporarily let down, and these insights often reach surprisingly deeply. Laughing and celebrating humor together is also an effective way to reduce constrictive tension in educational situations, and fosters group unity. It seems important to note that as this humor is integrated with an unflinching and compassionate awareness of the dimension of suffering in the world, it becomes more profound and precious; without this awareness, humor remains shallow and distressingly hollow.

A further major implication for teaching intuition through the radical participatory perspective which sees people as essentially not separate is that education should reflect this, and be basically non-competitive. Learning environments that provide a context of unconditional love and support are seen as most effective. Learners support each other, cooperate, and take complete responsibility for their own and the group's educational experience. From a meditative perspective, the best learning environment is that of a support group, with all members participating fully and equally in the learning process. Meditative awareness helps provide the foundation for the effectiveness of this approach. The deep sense of being part of a larger whole, and the solidarity and sense of community this creates, provides a learning context that can perhaps help transform the negative freedom of individual isolation described by Fromm into the absolute freedom of awakened consciousness, functioning as prajnaic intuition.

The foregoing broad-stroked painting of theoretical underpinnings that support educating intuitive modes of knowing, and of some apparent implications for education, can accommodate an enormous amount of detailing, and it is this actual fleshing out of the vision that seems essential today. Though the focus herein has primarily been on adults, the principles involved certainly apply to educating children as well, and it seems vital that education begin both imagining ways of developing meditative and intuitive knowing and

incorporating these ways into the curriculum. Regular periods devoted to mind fitness training, to learning the skills of conscious relaxation, to developing facility in the art of focusing and shifting attention, and to fostering the ability to image clearly will add crucial new dimensions to the education of children and also make it that much easier for them to continue the unfoldment of intuitive knowing later in life. A number of studies have also shown that regular periods of meditation, relaxation, and biofeedback training of attention can all contribute to increasing intellectual intelligence and improving learning performance. Regular opportunities to creatively visualize and positively imagine would also serve as a counter-weight to what many theorists feel has become a serious problem, namely, that people, and children particularly, are losing their ability to imagine, due to heavy reliance on the canned images of television, and that since the content of these images is so heavily dominated by violent and consumerist messages, that people may be effectively losing control of their own minds. Renewing and extending imaginative abilities, and learning how to repossess some control over the content of individual imagining activity are thus politically significant undertakings. It would be naive, though, to think that any educational change or policy action could be apolitical.

To help encourage the adoption of more intuitively-centered educational practices, it seems particularly important that people begin imagining ways that educational

contexts of all kinds can be more oriented toward facilitating intuitive development. Teaching meditation, attention-focusing, and relaxation techniques can be incorporated directly into virtually any learning context, either without adaptation, or with changes so they fit the content themes of the situation. Examples of the latter might include attention-focusing games using geometrical forms or equations in math classes or developing relaxation techniques using words, music, and art from a foreign culture in foreign language courses. Given the enormous depth to the pool of meditative techniques that are available, and the breadth of variety of educational situations, the number and diversity of innovative combinations seems virtually infinite, limited only by creativity and imagination.

It seems important that the view of intuition as nondual prajna be maintained as an overall frame of reference, to allow students to keep implicitly focused on the highest, most profound dimension of intuitive knowledge. The meditation practices, relaxation techniques, imagery games and exercises, and development of internal receptivity all take place within the larger context of preparing the way for intuitive prajnaic wisdom, which is truly transformative. Other conceptions of intuition discussed earlier can fit within this larger context and contribute to educational practice. For example, Bergson's theoretical model of intuition as an immediate apprehension of true duration, of the flowing ever-changingness of the phenomenal world,

suggests educational forms that are less concerned with manipulating abstract intellectual concepts and more concerned with direct experience of the dynamic present moment. This can be applied, say, in training programs that aim to help people learn how to get out of their heads and into their bodies, so to speak, to be aware of their felings and the subtle ever-changing quality that these feelings have. This happens to be an area of considerable interest now both personally and professionally and it can be illumined both by Bergson's ideas and by Mahayana meditative practices that promote a direct experience of pure duration, toward the larger goal of unfolding prajnaic intuition. Another example is Jung's notion of intuition as the function that perceives possibilities in both the external and internal dimensions. For instance, students can explore through drawing, poetry, collage, and drama, individually and collectively, possible alternative futures and their implications for economics, architecture, psychology, politics, law enforcement, history, science--almost any area of human learning. Another equally broadly-applicable potential application for the Jungian notion of intuition is the exploration of inner alternative realities. This will involve developing facility in altered states of consciousness and the potentials in this area are immense, as both ancient and new techniques are available such as using dreamwork and lucid dreaming, ritual, self-hypnosis, breathwork, psychotropic plants, drumming, sweat lodges,

vision quests, and other methods of entering shamanic states of consciousness, and the rapidly proliferating technology of "brain machines" that alter consciousness and perception. Each of these areas is vast, with numerous educational applications that certainly deserve further exploration. What seems important is that they not be seen merely as ends in themselves, but as aspects of the larger project, which is unfolding nondualistic prajna. Education that fosters this intuitive knowing is vital and transformational and fulfills the task that the poet Rilke assigned to true educators, artists, and intellectuals: "to prepare in men's hearts the way for those gentle, mysterious, trembling transformations, from which alone the understandings and harmonies of a serener future will proceed."[19]

Teaching intuitive ways of knowing through meditative participatory approaches is seen to have profoundly transformative implications for educational practice. Though it will eventually entail a radical re-visioning of educational praxis, which will only come about when the larger societal context can support it, teachers can begin implementing it now, and in ways that are relatively easily assimilable into most educational contexts. Since people who have already developed their own intuitive powers are crucial for creating educational contexts conducive to the development of intuition, more of these teachers must be developed as the system expands. The rapidly-increasing demand for guidance in the development of intuitive powers

can be seen in many areas, most notably, perhaps for its novelty, in business. Intuition training programs, affiliated with business, government, spiritual growth, psychic development, and so forth, are multiplying profusely and this has, of course, led to issues of discerning effective as opposed to deficient approaches. Basically, the less teachers' prajnaic intuition is impeded by egoic attachments, the less likely they and their methods are to give rise to attitudes and practices which hamper students' development. Since, though, there is less role-identification as intuition develops, everyone can be seen as both teacher and student, and it is actually the intuitive development of the whole system which is, in effect, bootstrapping itself. It is a co-creative and dialectical process on many levels which, though now in its infancy, bears positive signs of enormously rapid near-term expansion, as Peter Russell emphasizes. One of the factors involved here is that humanity faces a situation of its own creation that is dictating, in effect, "change or die." The change required is transformation and transcendence in the sense indicated by Gebser, Wilber, Schumacher, and the Mahayana.

It is the ability of people to focus attention and thereby unify consciousness into a clear lens for the functioning of intuitive knowing that seems to be primary in the educational effort. By exploring meditative approaches to education, people can perhaps empower each other to awaken to and express the freedom, mental clarity, joy, harmony,

love, creativity, humor, and solidarity which are, from the Mahayana perspective and also for many contemporary theorists, the inherent potential of being human. Besides the foregoing implications of a meditative participatory approach, there is also altruism--developing the basis for ways of being that transcend the egocentric stance inherent in dualistic rationality.

Intuition and Altruism

As Spinoza, Bergson, and the Mahayana emphasize, there is an inherent ethical dimension to any epistemological perspective. The ethical cannot be separated from the epistemological, and this section attempts to show this and explore the educational implications of this interconnection. How are educating intuition and altruism related, and what are the implications of their relationship for education and for society? From the point of view of a meditative participatory approach, there is a clear connection between rationality, egoism, and selfishness, as there is between intuition and altruism. Both Sorokin and Wilber point out that the underlying sensate worldview, which corresponds with the mental-egoic level and its focus on separateness, does not easily accommodate and support development of altruistic character structures. Sorokin's integral worldview, which can be seen as approximating Wilber's trans-rational levels (though the latter's model is more refined and evolution-oriented), is seen to provide an epistemological basis more

conducive to altruistic development. In this integral worldview, the true reality-value is neither sensory-material (Sorokin's sensate worldview) nor supersensory superrational God (his ideational worldview), but is "the manifold Infinity which contains all differentiation and which is infinite qualitatively and quantitatively."[20] This is similar to the Mahayana perspective which, being based on the primacy of individuals' direct experience of connectedness with and as the "manifold Infinity," provides insight into the dynamics of what Sorokin referred to as "the paramount problem of humanity: what are the methods and techniques necessary to render ourselves and others less selfish and more altruistic?"[21]

The sensate objectivist worldview has ignored this problem because recognizing it is fundamentally inconsistent with its underlying suppositions. Even when it acknowledges the problem and tries to address it, its methods and theoretical assumptions are inappropriate, being basically oriented by and toward a dualistic and thus ego-dominated perspective that promotes selfishness. From the point of view of the integral worldview described by Sorokin, which is basically consonant with the meditative perspective, the sensate worldview is fundamentally inconsistent with the true nature of reality. It ignores the basic interconnectedness of all life, and the fundamentally ever-changing nature of phenomenal appearances, in which there exist no separate entities, but rather a totally participatory dance. From

this perspective, the correct emphasis is on the integral whole process, rather than separate things.

The implications of these ideas may be clarified by looking at examples from the Zen tradition, in which it is said that meditative practice is like a three-legged stool: there are three essential aspects, like stool legs, which, while appearing to be separate, are actually fundamentally connected. These are sila, ethical conduct, samadhi, and prajna, intuitive wisdom. The three support each other; if one is missing, the practice, like the stool, collapses. Thus, sila is concerned with altruistic action. From the point of view of Zen, though, as long as there is any sense of a separate ego performing an activity, it is not a completely altruistic action. Truly altruistic actions only occur when they arise from a mind that is completely free of dualistic distinctions betwen self and other. Herein lies what may be seen as the great paradox of altruism. Although it is fundamentally concerned with what may be seen as the alter, the other, and the individual's attitude toward the other, if this-which-sees sees the other as somehow separate from it, then any actions, seemingly altruistic or not, will be tainted by a dichotomous, and hence nonaltruistic, attitude. This paradox is inherent in the mind which is split between "self" and "other." Thus, from the point of view of Zen, true concern for the "other" is only possible when there is no longer any separate "other," though this in no way denies the uniqueness of individuals. In referring to

this process, the twelfth-century Zen master Dogen wrote a well-known verse:

> To study the Way is to study the Self.
> To study the Self is to forget the Self.
> To forget the Self is to be enlightened by all things.
> To be enlightened by all things is to remove the barrier between Self and Other.

With the removal of this barrier, there is no longer self or other.

Therefore, in order for the altruism of sila to be fully present, samadhi must also be fully present. Sila is the fruit that ripens and comes forth from a mind that does not create the fundamental distinction between self and other. In samadhi, the ever-present interloper, the conviction that I exist as a separate entity, is seen to be illusory, and the far greater Source from which all appearances spring then functions directly, without interfering concepts of subject and object.

This functioning is prajna, and from prajna, karuna, or compassion is born. In fact, they are inseparable. True intuitive wisdom is compassionate, true compassion is wise. This provides insight into the serious issue of how seemingly altruistic attitudes can in fact engender actions that are non-altruistic in effect. Acts such as these have been referred to in the Buddhist traditions as acts of "idiot compassion," which is not compassion at all, since it is not infused with the prajna-wisdom born of meditative awareness. Unskillful altruistic activity is thus seen to be the natural result of an attitude that is, perhaps very subtly, still

tinged by the deeply-rooted vasanas that accompany the underlying notion of separate selfhood.

Intuition and compassion thus both arise from and empower samadhi and sila, and concomitantly, altruistic action helps to establish the mind in the meditative absorption of samadhi; the awareness born of samadhi in turn gives rise to enormous compassion, love and altruistic feeling. This altruistic circle springs from and deepens the direct prajnaic knowing that what I am is not a separate limited thing, but pure subjectivity, completely unconditioned and in no way separate from all phenomenal ~~arisings~~.

In the Buddhist tradition, as in all religious traditions, there are many different kinds of meditative techniques designed to facilitate the dissolution of the erroneous sense of separation between self and other. To the extent that a person experiences the nondualistic awareness which is the hallmark of samadhi, a meditative foundation is laid for the development of altruism. While necessary, in that the mind must first be tamed, it is not, perforce, sufficient; the mind must also be trained. This dual process of taming and training the mind has rich implications for education, and ways of implementing it in educating altruism deserve further exploration. In one example of a practice that focuses on training altruism, known as the Four Viharas, or Four Abodes, meditators establish themselves in, consecutively, the four abodes of <u>maitri</u> (lovingkindness),

karuna (compassion), mudita (joy in the joy of others), and upekha (peace, equanimity). Meditators who use this technique generate profoundly altruistic feelings which they imagine emanating from them to all beings, including enemies and neutral acquaintances as well as friends and beloved ones. Eventually, meditators send forth deep feelings of love, compassion, joy, and peace into all directions, vividly visualizing the entire universe to be thereby engulfed and established in the Four Viharas. I introduce this practice in virtually every college course I teach and while it is difficult to judge how successful these endeavors are, it seems valuable, not only on the obvious practical level, but also for the perspective it provides that sees people as not at the effect of emotions and outer events, but as being able, with practice, to actually cultivate the ability to respond altruistically in all situations.

There are many other meditative techniques for engendering altruism in the Mahayana tradition. They often involve visualization techniques, for example, visualizing oneself as Avalokitesvara, the Bodhisattva of Compassion, effortlessly emanating compassion in all directions. A mantra is also often used in conjuction with these techniques, for example, Om Mani Padme Hum, the mantra of Avalokitesvara, or Kwanseum Bosal, simply invoking this Bodhisattva's name. Another example, referred to as "Sending and Taking," is a practice that is coordinated with breathing. On the exhalation, practitioners send forth

feelings of lovingkindness and compassion, and give away anything good that they may be feeling. On the inhalation, they take in the problems, difficulties, and pains of others. Through this practice, empathy and a willingness to let down the walls between self and others are cultivated, as well as the ability to transmute negative into positive energy.

Another example, which is a practice intended to be used during all activities in daily life, is to constantly keep this saying in mind:

> May I receive all evils; may virtues go to others.
> Gain and victory to others; loss and blame to myself.

In other words, this is a practice of developing an awareness such that whenever negative emotions come up, practitioners "own them," and when positive feelings of inspiration arise, they are given and shared with others. It is interesting to compare it with Hobbes' enormously influential conception of "the life of man" as a race:

> But this race we must suppose to have no other goal, nor other garland, but being foremost, and in it:
> To consider them behind is glory
> To consider them before, is humility,
> To fall on the sudden is disposition to weep.
> To see another fall is disposition to laugh.
> Continually to be out-gone is misery.
> Continually to out-go the next before is felicity.
> And to forsake the course, is to die.[22]

A basic idea that underlies all meditative effort towards self-improvement and self-realization is that the situation that one finds oneself in is workable. It is completely possible, in this present moment, to undertake training and a way of being that opens the inherent capacities for altruism by softening the confining walls of

the ego-dominated perspective, by developing "leaky boundaries," as Jean Houston puts it. One is not condemned by one's past. Allport noted that this is often not recognized by psychology:

> The trouble lies chiefly in the excessive emphasis upon infantile experience. We are asked to believe that an individual's character structure is, in all essentials, determined by the time his last diaper is changed. . . . If the chances for peace in the world depend to such a degree upon infant fixations ought we not disband this Division and register as wet nurses to the mewling citizens of tomorrow?[23]

The meditative practices mentioned above, focusing on cultivating an altruistic attitude, are but a few techniques among thousands in the cultures of the world, and to know the consequences of practicing them, they must, of course, be practiced. These consequences, though, will invariably be directly related to the sincerity and intensity with which they are practiced, and this of course depends on the degree to which individuals feel moved to leave their prison of egoism, being thus willing to expend a proportionate degree of effort. If practiced regularly and sincerely, though, the Four Viharas, for example, will certainly have some positive effect at the very least, and may perhaps be truly transformative, depending on the individual.

Since there are many different temperaments and tendencies among people, there must be many different meditative and altruizing techniques and approaches. Though a vast reservoir of them exists as part of the human heritage, more of them certainly could be (and are being) invented, and investigating, learning, and practicing them

are education and research frontiers with, it seems, extremely promising potential. It must also be borne in mind that all such techniques, invaluable though they are, can ultimately be seen to be poisons that counteract poisons. When it is realized that the practitioner is but an arising in the Infinite Manifold, and wisdom and compassion replace egocentric striving and wall-building, the practice is successful and no longer necessary.

As Sorokin points out, altruism is a quality that can expand along several dimensions, including purity, intensity, extensity (the degree to which no beings are excluded from the altruistic feeling) and wisdom (the degree to which karuna is informed by prajna). The degree to which altruism is tainted by egoism determines its purity, intensity, extensity, and the skillfulness of its manifestation. In developing educational contexts that will help people to develop marginal altruism into sublime altruism, it seems that the rich resource of meditation techniques alluded to earlier is of primary importance. These constitute a powerful, integrative, and time-tested inner technology, and exploring ways they can be adapted for more general use in modern cultures seems to be a key aspect of any agenda for educating altruism.

It also seems important to provide an educational context that will address the situation of those who do not seem to have the will to develop altruistic awareness. In relation to this, it should first be noted that Sorokin

pointed out that "a society consisting of only thoroughly egoistic members could not survive."[24] Elaborating on this, he noted that,

> The helplessness of a newborn babe and the non-self-sufficiency of man in general have made cooperation, mutual aid, sympathy, and sacrifice an indispensable condition of the survival of the human species. For these reasons alone, altruism is as much a part of man's second nature as egoism. The natural man as a purely egoistic person is a fiction invented by modern pseudo science. It confuses egoism due to the specific traits of sensate culture with man's inherent nature. So far as such a myth has influenced human beings, justifying their selfish propensities, it has been destructive and antisocial. As an invalid and degrading conception it should be replaced by a more scientific conception of man as a creature possessing altruistic as well as egoist propensities.[25]

In declaring that people have an inherent social and collective orientation, Sorokin is in agreement both with Durkheim's idea of society as the larger living organism through which the individual derives meaning, that "it is from society that there comes whatever is best in us, all the higher forms of our behavior,"[26] and with Jung's orientation toward the collective, as opposed to the personal:

> But the more we become conscious of ourselves through self-knowledge, and act accordingly, the more the layers of the personal unconscious that is superimposed on the collective unconscious will be diminished. In this way there arises a consciousness which is no longer imprisoned in the petty, oversensitive, personal world of the ego, but participates freely in the wider world of objective interests. This widened consciousness is no longer that touchy, egotistical bundle of personal wishes, fears, hopes, and ambitions which always has to be compensated or corrected by unconscious counter-tendencies; instead, it is a function of relationship to the world of objects, bringing the individual into absolute, binding, and indissoluble communion with the world at large. The complications arising at this stage are no longer egotistic wish-conflicts, but difficulties that concern others as much as oneself. At this stage it is fundamentally a question of collective problems,

> which have activated the collective unconscious because they require collective rather than personal compensation.[27]

Sorokin's views are also in conformity with the review of developmental research conducted by Robert Hogan, who concludes that,

> Taken together, these developmental considerations suggest that individuals are sociocentric (as opposed to egocentric), possibly from birth, and certainly by the end of the first year of life.[28]

In believing that the root of altruism inherently exists in all people, Sorokin is in agreement, as well, with the basic perspectives taken by the meditative participatory approach to education. This fundamental altruism is seen to be not only an inherent part of the human cultural heritage, but also a manifestation of the unity of all life; it needs only to be nourished, and there are many ways this can be done. As an example, in Mahayana Buddhism there is a central ideal, that of the bodhisattva. A bodhisattva is one who has dedicated his or her life to serving, and to helping others to enlightenment, and as a manifestation of this, engages in the three-fold practice of sila, samadhi, and prajna discussed earlier.

It seems that validating and making available an ideal like the bodhisattva ideal could be very helpful to people who do not seem to have the will to develop altruistic awareness. This is due to the fact that it presents altruistic behavior as an end in itself. In a culture wherein telos, the purpose, end, and meaning of life, has been either denied, ignored, or dealt with in shallow,

egoistic terms, introducing a telos based on radical altruism as an end in itself, and an empowering, ennobling, and truly happiness-generating end at that, seems particularly appropriate. It seems to be becoming more clear that individual and group happiness are not mutually exclusive, but mutually supportive, and that the happiest people are those who, as Schweitzer writes, "have sought and found how to serve." Egoism, by contrast, seems to be the surest road to unhappiness, both for the individual and the group. As Lao-tzu, the legendary founder of Taoism put it,

> Having bestowed all he has on others,
> he has yet more;
> Having given all he has to others,
> he is richer still.

A meditative participatory approach to developing intuitive knowing must consciously focus on fostering this basic altruism at the same time. If intuitive insight does not engender more compassionate, harmonious, and responsible relations between people and their world, it seems to be of little practical value given the dilemmas nonaltruistic orientations are creating. As has been emphasized, though, prajna and karuna are two aspects of a larger functioning, and they must, in educational contexts, be consciously cultivated together. Exploring ways of doing this is the focus of a contemporary movement often referred to as "engaged Buddhism," and a major factor in this effort is working with the sense of detachment that often arises with meditative awareness. While this detachment confers a sense of spaciousness and freedom from emotional reactions, it is

important that it be grounded in full awareness of the suffering and conflictual fires of daily life here on planet earth. Zen master Hakuin sums this up: "The power or wisdom obtained by practicing Zen in the world of action is like a rose that rises from the fire. The rose that rises from the midst of flames is all the more beautiful and fragrant the nearer the fire rages."[29]

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[1]Dwayne Huebner, "Spirituality and Knowing," in Learning and Teaching the Ways of Knowing, ed. Elliot Eisner (Chicago: National Study for the Study of Education, vol. 84, part 2, University of Chicago Press, 1985), p. 172.

[2]Schumacher, A Guide for the Perplexed, p. 50.

[3]Ibid., p. 122.

[4]Huebner, p. 165.

[5]Philip Kapleau, The Three Pillars of Zen (New York: Doubleday, 1965), p. 45.

[6]Ibid., pp. 45-46.

[7]Joy Watson, "Intuition and Mind Fitness," lecture at Opening the Intuitive Gate Conference, San Francisco, January 29, 1988.

[8]Morris Berman, The Reenchantment of the World (Ithaca: Cornell University Press, 1981), p. 217.

[9]Beverly-Colleene Galyean, Mind Sight: Learning Through Imaging (Long Beach: Center for Integrative Learning, 1983), p. 5.

[10]Ibid., pp. 9-10.

[11]D. T. Suzuki, "An Artist of Life," in The Gospel According to Zen, ed. Robert Sohl and Audrey Carr (New York: Mentor, 1970), p. 21.

[12]J. Krishnamurti, "Self-Knowledge," ibid., p. 103.

[13]Thich Nhat Hanh, "The Three Gems," in Karuna, Vol. III, No. 3, pp. 5-6.

[14]Huebner, p. 171.

[15]George Leonard, Education and Ecstasy (New York: Dell, 1968), p. 232.

[16]Ibid., p. 230.

[17]Thich Nhat Hanh, quoted in Michelle Mills, "Book Reviews," Karuna, Vol. III, No. 3, p. 14.

[18]Stewart Holmes and Chimyo Horioka, Zen Art for Meditation (Rutland, VT: Charles E. Tuttle Co., 1973), p. 99.

[19]Ranier Maria Rilke, "Introduction" to Duino Elegies, trans. J.B. Leishman and Stephen Spender (New York: W. W. Norton, 1939), p. 14.

[20]Carle C. Zimmerman, Sorokin, the World's Greatest Sociologist (Saskatoon: University of Saskatchewan, 1968), p. 39.

[21]Pitirim Sorokin, The Reconstruction of Humanity (Boston: Beacon Press, 1948), p. 95.

[22]Thomas Hobbes, "Human Nature," in Body, Man and Citizen, ed. Richard S. Peters (New York: Collier, 1962), pp. 224-25.

[23]Gordon Allport, Nature of Personality: Selected Papers (Cambridge, MA: Addison-Wesley Press, 1950), p. 191.

[24]Sorokin, p. 57.

[25]Ibid., p. 136.

[26]Emile Durkheim, Moral Education (New York: Free Press, 1973/1925), pp. 67-68.

[27]Carl Jung, "Relations between the Ego and the Unconscious," from Two Essays on Analytical Psychology (1928, 1935) in The Portable Jung, ed. Joseph Campbell, p. 127.

[28]Robert Hogan, "Theoretical Egocentrism and the Problem of Compliance," American Psychologist, May 1975, p. 538.

[29]Zen Master Hakuin, quoted in Ken Jones, "Buddhism and Social Action: An Exploration," in The Path of Compassion: Contemporary Writings on Engaged Buddhism, ed. Fred Eppsteiner and Dennis Maloney (Berkeley: Buddhist Peace Fellowship, 1985), p. 30.

CHAPTER IX

Implications for Possible Further Research

It can be seen that there is a wide range of areas where further research is needed. A primary one is exploring the ways that intuitive knowing can be verified. This has been a considerable sticking point for many rationalists, and not without good reason; contemplating the excesses that spurious "revelations" have occasioned is sobering for even the most ardent of intuitionists. An obvious first approach to verifying intuition is to use the conventionally accepted scientific methods based on replicability, random trials, and so forth, or to check intuitive knowing against rationality. These approaches can only be used with the lower-order reflections of prajna, such as psychic abilities, unusual mental abilities, and intuitive insights that are testable in dualistic terms. These areas certainly merit far more serious attention and funding than they have received, and there is evidence that they are increasingly receiving this attention, with researchers grappling with such problems as developing indices for measuring psychic functioning and its accuracy, and so forth. The British Society for Psychical Research, the Institute for Noetic Sciences, the Center for Applied Intuition, Maharishi International University,

transpersonally-oriented psychologists, and, ironically, the Department of Defense, have been and are engaged in this research, and though there is still, for the reasons given in Chapter II, much general resistance to it, this resistance seems to be on the wane. It is often in cultures with less bias against intuitive ways of knowing that research in psychic powers, and in increased mental abilities such as "superlearning," supermemory, and suggestology, has reached more advanced levels, particularly in China, Japan, Eastern Europe, and the Soviet Union. Extending the research that is being done in these areas and developing effective ways of teaching and testing potentially trans-rational abilities are seen to be essential for successfully integrating the development of these kinds of intuitive capacities into educational contexts.

There is a deeper level that will also certainly need to be explored, and this takes research beyond the rational level. While the lower-order reflections of intuition can, it seems, be tested rationally, truly trans-rational insight transcends rational categorization and modes of measurement. This is not to say that it is not publicly verifiable, however. Conventional scientific assumptions about verification will, as Harman points out, have to be expanded. Wilber emphasizes that intuitive knowledge, "<u>like all other forms of valid cognitive knowledge</u>, is experimental, repeatable, and publicly verifiable, because, like all other modes, it consists of three strands." These three,

theory that can support the development of educational forms that effectively transmit intuitive ways of knowing. This organizational aspect has been a particularly intransigent problem historically, since the living apprehension-illumination experience has tended to become crystallized and often virtually expelled from the organization. Exploring avenues whereby these kinds of problems may be transcended is thus particuarly urgent. Thirdly, more research is needed on the level of individuals, exploring how meditation practices affect the body-mind, if and how technological devices can enhance meditative training, and what ways the basic types of meditation, those without objects, and those with either internal or external objects, might best be incorporated into available contexts for the education of intuitive knowing. Further research is also needed on ways of engendering altruistic character structures in people through meditation, and also on developing ways for people to effectively reconnect with nature. Further exploration of how environments affect education is also strongly called for by this overall emphasis on a meditative approach to education.

The research implications of taking intuition seriously seem to be remarkably complex and extensive. Since a basic reorganization of both theoretical and practical approaches to higher education is implied, and since it is transcultural and transdisciplinary in the broadest and deepest senses, this project will require the input and evolutionary energy of large segments of society, and

completed these particular strands, is able to guide and verify the apprehension-illuminations both of students and of other adepts. The accounts in the Chinese Zen literature of the "Dharma combat" that Zen masters engaged in with each other and with their students to both verify and deepen each others' understanding provide a particularly fascinating example of this.

An important aspect of research on educating intuition thus seems to be creating possible models for centers of higher intuitive education that are appropriate to contemporary Western culture. Like colleges and universities, these centers would bring together adepts and students for purposes of both education and research. How might such centers be organized; what training programs might be followed by students; and what might be the relationship between these trans-rational centers and the existing rationally-based ones? Looking at models created by other cultures such as shamanic training programs, monasteries, mystery schools, and meditation centers of diverse types, is certainly essential. Further, it is important to develop an understanding of the principles that underlie the most successful of these models and explore how they might be informed by structures and practices appropriate to contemporary cultural conditions. This will entail several levels of further research. One is creating a general epistemological framework that supports the full spectrum of human experience. Another is developing an organizational

CHAPTER X

Conclusion

A new vision of higher education emerges from the foregoing chapters. Its outlines are still vague, and yet its implications are exciting and empowering. The adoption of a meditative participatory approach to education, though it can draw deeply from the richness of many of humanity's past traditions, represents, potentially, a leap without historical precedent through which the consciousness of the masses of people will be established on a trans-rational level. This is not just a vision that allures from ahead, so to speak, by its beauty, mystery, and inspiring images of far greater harmony, power, and solidarity. It also kicks from behind as well, for if we fail to make the shift to intuition, and thus to the greater ability to exercise the true reason and compassion, it seems certain our technological prowess will be our own destruction. This is perhaps a hidden gift borne by nuclear weaponry and toxic effluents.

An important task now is to explore the richness of possibilities in intuitive development, and to thoroughly ground this exploration, and the vision on which it is based, into a solid epistemological foundation that is rooted in the soil of past traditions and accomplishments, and in the sense

ultimately, of the entire society. Many researchers and explorers have and will contribute to its birthing, and the primary concern now seems to be creating an overall epistemological framework that validates exploring the potentials of educating intuition, and which thus facilitates mobilizing resources for this undertaking.

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[1]Wilber, A Sociable God, p. 133.

points to, begin to truly see that they and all beings are not separate from the infinite process and that their own growth and learning is in no way separable from that of others and of this larger whole. This basic understanding forms the foundation of intuition and altruism, and of a vision of education based on total meditative participation.

Central to realizing this vision is educating consciousness to enhance its ability to directly experience the sine qua non of intuition: inner nondualistic dynamic silence. This is meditation in the basic sense, not confined to any particular form but being instead an internal attitude of receptivity that is potentially present in all circumstances; this meditative quality of mind is seen to be the pivot and the still point around which the vision of trans-rational epistemologies, individuals, societies, and educational contexts revolves. Meditation is thus not at all exotic or unusual, but is a natural mode of consciousness that is available for development and is, as Wilber emphasizes, necessary for our further evolution:

> It is simply what an individual at this present stage of average-mode consciousness has to do in order to go beyond that stage in his or her own case. It is a simple and natural continuation of evolutionary transcendence: just as the body transcended matter, and as mind transcended the body, so in meditation the soul transcends the mind and the Spirit transcends the soul.
>
> And, if we--you and I--are to further the evolution of mankind, and not just reap the benefit of past humanity's struggles, if we are to contribute to evolution and not merely siphon it off, if we are to help the overcoming of our self-alienation from Spirit and not merely perpetuate it, then meditation--or a similar and truly contemplative practice--becomes an absolute ethical imperative, a new categorical imperative. If we do less than that, our life then

of connectedness with the earth and with the larger unfolding universal process. This grounding is predicated on a shift in the emphasis of consciousness, and this shift can be educated through meditative approaches that help establish consciousness in nondual modalities. Out of this shift from duality to polarity, prajnaic intuition emerges. As the self/other schism is healed through transcendence of dualistic thought patterns, a new vision of education based on the realization that self and other are polar aspects of a greater reality is born. This greater reality, "the I that is we," the network of consciousness, is seen to be the fundamental unit of education, and not the separate individual self. Shifting the fundamental educational unit from the part to the whole in no way obliterates or diminishes the significance of the part; it simply recontextualizes it in a radically paradoxical way wherein this seeming part is seen to be both unique and coextensive with the infinite whole. This wholeness, in its unfolding, is educating itself through the infinitely complex interactions among its infinitely numerous aspects. Knowledge of this whole process (the "I am that I am," [Judaic] "That Thou Art," [Hindu] "There is no God but God," [Moslem] "Jewel in the Lotus," [Buddhist]) is, as Bellah stresses, religious knowing in the root sense of linking subject and object, and yet it transcends this as well, for all such categories are ultimately obliterated. Individuals, as they realize what the "as above, so below" Hermetic dictum

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[1]Wilber, Up from Eden, p. 321.

[2]Rainer Maria Rilke, "The Ninth Elegy," from Duino Elegies (1923) in The Selected Poetry of Rainer Maria Rilke, ed. and trans. by Stephen Mitchell (New York: Vintage, 1982), pp. 201-203.

> becomes, not so much a wicked affair, but rather a case of merely enjoying the level of consciousness which past heroes achieved for us. We contribute nothing; we pass on our mediocrity.[1]

Since our continued physical survival is highly questionable if we do not evolve intuitively based awareness, and since the promise of this evolution may transcend anything conceivable by rational thinking, we seem to be flying, as it were, through the crack between two worlds. The old world, like a trapeze, has brought us as far as it can and its momentum will carry us to the next trapeze only if we are willing to let go of it and fly unsupported by its habitual epistemological and moral assumptions. This requires, basically, a shift in attention, a shift that can be educated through meditative approaches, and this is where, it seems, the momentum of change, necessity, and adventure must carry us. Together, as a network, we evolve, shift, and leap, and if we fall, we may perhaps find we are the safety net as well. After all, "I am large, I contain multitudes."

This awareness of a far greater context supporting and embedding our growth as its own unfoldment can be seen as the core of an educational transformation. This transformation draws both from the transcending spirit and from a thorough grounding in the earth, and of this transformation Rilke asks:

> Earth, isn't this what you want: to arise within us,
> <u>invisible</u>? Isn't your dream
> to be wholly invisible someday--O Earth: invisible!
> What, if not transformation, is your urgent command?[2]

Ashton-Warner, Sylvia. Teacher. New York: Simon & Schuster, 1963.

Assagioli, Roberto. Psychosynthesis. New York: Hobbs, Dorman & Co., 1965.

Asvaghosha. The Awakening of Faith, translated by Yoshito Hakeda. New York: Columbia University Press, 1967.

Augustine. The Confessions of Saint Augustine, translated by Edward B. Pusey. In The Age of Belief: The Medieval Philosophers, edited by Anne Fremantle. New York: Houghton Mifflin, 1954.

Aurobindo. The Essential Aurobindo, edited by R. McDermott. New York: Schocken, 1973.

Barnett, Paul. "Science for Sale: The Pesticide Connection." Science for the People, Vol. 12, No. 4, July/August 1980.

Barron, Frank. Creative Person and Creative Process. New York: Holt, Rinehart and Winston, 1969.

Batchelor, Stephen. Alone with Others. New York: Grove, 1983.

Bateson, Gregory. Mind and Nature. New York: Dutton, 1979.

Beck, Deva and Beck, James. The Pleasure Connection. San Marcos, CA: Synthesis Press, 1987.

Bellah, Robert. Beyond Belief: Essays on Religion in a Post-traditional World. New York: Harper & Row, 1970.

Bellah, Robert, et. al. Habits of the Heart. Berkeley: University of California, 1985.

Bentov, Itzhak. Stalking the Wild Pendulum. New York: Dutton, 1977.

Bergson, Henri. The Introduction to a New Philosophy. Boston: John W. Luce, 1912.

_____. The Creative Mind, trans. by M. L. Andison. New York: The Philosophical Library, 1946.

_____. Selections from Bergson, edited by H. A. Larrabee. New York: Appleton-Century-Crofts, 1949.

_____. The Two Sources of Morality and Religion, translated by R. Audra and C. Brereton. New York: Henry Holt and Company, 1935.

BIBLIOGRAPHY

Achterberg, Jeanne. Imagery In Healing. Boston: Shambhala, 1985.

Adams, Frank. Unearthing Seeds of Fire: The Idea of Highlander. Winston-Salem, NC: John F. Blair, Publisher, 1975.

Aitkin, Robert. Taking the Path of Zen. San Francisco: North Point Press, 1982.

Allport, Gordon. Nature of Personality: Selected Papers. Cambridge: Addison-Wesley Press, 1950.

_____. Personality and Social Encounter. Boston: Beacon Press, 1960.

Altman, Nathaniel. Ahimsa (Dynamic Compassion). Wheaton, IL: Quest, 1980.

Anderson, Marianne and Savary, Louis. Passages: A Guide for Pilgrims of the Mind. New York: Harper & Row, 1972.

Arguelles, Jose. The Transformative Vision. Boulder: Shambhala, 1975.

_____. Earth Ascending. Boulder: Shambhala, 1984.

_____. The Mayan Factor: Path Beyond Technology. Santa Fe: Bear & Co., 1987.

Aristotle. Basic Writings, trans. by Richard McKeon. New York: Random House, 1941.

Arnheim, Rudolf. "The Double-edged Mind: Intuition and the Intellect." In Learning and Teaching the Ways of Knowing, edited by Elliot Eisner. Chicago: University of Chicago Press, 1985.

Aronfreed, Justin. "Moral Development from the Standpoint of a General Psychological Theory." In Moral Development and Behavior, edited by T. Lickona. New York: Holt, Rinehart & Winston, 1976.

Carus, Paul. The Gospel of the Buddha. La Salle, IL: Open Court Publishing, 1915.

Castaneda, Carlos. Journey to Ixtlan. New York: Simon & Schuster, 1972.

Chang, Chung-yuan. Creativity and Taoism. New York: Harper & Row, 1963.

Chang, Garma C. C. The Buddhist Teaching of Totality. Pennsylvania State University Press, 1971.

_____. The Hundred Thousand Sons of Milarepa. Boston: Shambhala, 1977.

Chuang Tzu. Chuang Tzu: Basic Writings, translated by Burton Watson. New York: Columbia University Press, 1964.

Churchman, C. West. The Systems Approach and Its Enemies. New York: Basic Books, 1979.

Cleary, Christopher, tr. Swampland Flowers: The Letters and Lectures of Zen Master Ta Hui. New York: Grove Press, 1977.

Cohen, J. M. and Phipps, J-F. The Common Experience. Los Angeles: Tarcher, 1979.

Cooper, J. C. Yin & Yang. Wellingborough, England: Aquarian Press, 1981.

Coward, Harold. Jung and Eastern Thought. Albany: SUNY Press, 1985.

Crandall, Joanne. Self-Transformation through Music. Wheaton, IL: Quest, 1986.

Creel, Herlee G. What is Taoism?. Chicago: University of Chicago Press, 1970.

Dalai Lama (Fourteenth). The Key to Madyamika. Dharamsala, India: The Library of Tibetan Works and Archives, 1974.

Dallmayr, Fred, and McCarthy, Thomas, eds. Interpretive Social Science. Notre Dame: University of Notre Dame Press, 1977.

Dass, Ram and Gorman, Paul. How Can I Help?. New York: Alfred A Knopf, 1953.

De Bary, W. T. The Buddhist Tradition. New York: Random House, 1959.

Berman, Morris. The Reenchantment of the World. Ithaca: Cornell University Press, 1981.

Bhattacharya, A. C. Sri Aurobindo and Bergson. Gyanpur, India: Jagabandhu Prakashan, 1972.

Blavatsky, H. P. The Voice of the Silence. Pasadena: Theosophical University Press, 1976.

Blofeld, John, tr. The Zen Teaching of Huang Po. New York: Grove Press, 1958.

_____, tr. The Zen Teaching of Hui Hai. New York: Samuel Weiser, 1972.

_____. Bodhisattva of Compassion. Boulder: Shambhala, 1978.

Boone, J. Allen. Kinship with all Life. New York: Harper & Row, 1954.

Bruner, Jerome. On Knowing: Essays for the Left Hand. Cambridge: Harvard University Press, 1962.

Buber, Martin. Between Man and Man. Boston: Beacon Press, 1955.

_____. Tales of the Hasidim. New York: Schocken, 1947.

Bucke, R. M. Cosmic Consciousness. New York: Dutton, 1901/1969.

Buswell, Robert, tr. The Korean Approach to Zen. Honolulu: University of Hawaii Press, 1983.

Byles, Marie B. Footprints of Gautama the Buddha, Wheaton, IL: Quest, 1957.

Byrom, Thomas, tr. The Dhammapada. New York: Random House, 1976.

Caldicott, Helen. Missile Envy. New York: Bantam, 1986.

Campbell, Joseph. The Hero with a Thousand Faces. Princeton: Princeton University Press, 1949.

_____. The Masks of God, Volumes I-IV. New York: Bantam, 1959-1968.

Capra, Fritjof. The Turning Point. New York: Simon & Schuster, 1982.

_____. The Tao of Physics. New York: Bantam, 1975.

Eppstein, Fred and Maloney, Dennis, eds. The Path of Compassion: Contemporary Writings on Engaged Buddhism. Berkeley: Buddhist Peace Fellowship, 1985.

Esser, A. H. "Synergy and Social Pollution in the Communal Imagery of Mankind." In Frontiers of Consciousness, edited by John White. New York: Julian Press, 1974.

Evans-Wentz, W. Y., ed. Tibet's Great Yogi Milarepa. London: Oxford University Press, 1928.

_____. The Tibetan Book of the Great Liberation. London: Oxford University Press, 1954.

_____. Tibetan Yoga and Secret Doctrines. London: Oxford University Press, 1958.

_____. The Tibetan Book of the Dead. New York: Causeway, 1973.

Ferguson, Marilyn. The Aquarian Conspiracy. Los Angeles: Tarcher, 1980.

Feuerstein, Georg. Structures of Consciousness. Lower Lake, CA: Integral Publishing, 1987.

Fischhoff, Bruce. "Cost Benefit Analysis and the Art of Motorcycle Maintenance." Policy Studies, 8:1977.

Fish, Stanley. "Normal Circumstances, Literal Language, Direct Speech Acts, the Ordinary, the Everyday, the Obvious, What Goes Without Saying, and Other Special Cases." In Interpretive Social Science, edited by P. Rabinow and W. Sullivan. Berkeley: University of California Press, 1979.

Fowler, Gene. Waking the Poet. Berkeley: The Re-Geniusing Project, 1981.

Franck, Frederick. The Zen of Seeing. New York: Vintage, 1973.

_____. The Awakened Eye. New York: Vintage, 1979.

Freire, Paulo. Pedagogy of the Oppressed. New York: Continuum, 1953.

Freud, Sigmund. Civilization and its Discontents, ed. and trans. by James Strachey. New York: Norton, 1930/1961.

_____. The Ego and the Id, trans. by Joan Riviere. London: Hogarth, 1950.

Deikman, Arthur J. The Observing Self. Boston: Beacon Press, 1982.

Deng, Ming-dao. The Wandering Taoist. New York: Harper, 1983.

Dennison, Paul. Switching On. Glendale, CA: Edu-Kinesthetics, 1981.

Descartes, Rene. Meditations on First Philosophy. New York: Hackett, 1641/1979.

Deval, Bill and Sessions, George. Deep Ecology. New York: Peregrine Smith, 1985.

Dewey, John. Democracy and Education. New York: MacMillan, 1916.

Dilbeck, Michael, et. al. "Consciousness as Field: The Transcendental Meditation and TM-Siddhi Program and Changes in Social Indicators." The Journal of Mind and Behavior, Winter 1987.

Durkheim, Emile. Moral Education. New York: Free Press, 1925/1973.

Eckhart, Meister. Meister Eckhart, translated by R. B. Blakney. New York: Harper & Row, 1941.

Edwards, Betty. Drawing on the Right Side of the Brain. Los Angeles: Tarcher, 1979.

Einstein, Albert. Essays in Humanism. New York: Philosophical Library, 1950.

Eisenberg, Nancy. Altruistic Emotion, Cognition, and Behavior. Hillsdale, NJ: Lawrence Erlbaum Associates, 1986.

Eisner, Elliot, ed. Learning and Teaching the Ways of Knowing. Chicago: National Study for the Study of Education, vol. 84, part 2, University of Chicago Press, 1985.

Elgin, Duane. Voluntary Simplicity. New York: William Morrow, 1981.

Eliot, Alexander. Zen Edge. New York: Seabury Press, 1976.

Emerson, Ralph Waldo. The Complete Essays and Other Writings. New York: Random House, 1940.

Engel, G. L. "The Need for a New Medical Model: A Challenge for Biomedicine." Science, 196, 8 April 1977.

Girard, Robert. "Intuition and the Evolution of Consciousness." Address delivered at Opening the Intuitive Gate Conference, San Francisco, January 30, 1988.

Giroux, Henry A. "Public Philosophy and the Crises in Education," Harvard Educational Review. Vol. 54, No. 2, 1984.

Goddard, Dwight. A Buddhist Bible. New York: E. P. Dutton, 1938.

Godwin, Joscelyn. Mystery Religions in the Ancient World. San Francisco: Harper & Row: 1981.

Goetz, J. O., and Lecompte, M. D. "Ethnographic Research and the Problem of Data Reduction." Anthropology and Education Quarterly 12:15-70, 1981.

Goffman, Erving. The Presentation of Self in Everyday Life. New York: Doubleday, 1959.

Govinda, Anagarika. Foundations of Tibetan Mysticism. London: Rider, 1960.

_____. The Way of the White Clouds. Berkeley: Shambhala, 1966.

_____. Creative Meditation and Multi-Dimensional Consciousness. Wheaton, IL: Quest, 1976.

_____. Psycho-cosmic Symbolism of the Buddhist Stupa. Berkeley: Dharma Publishing, 1976.

Grof, Stanislav. Beyond the Brain. Albany: SUNY Press, 1985.

Grof, Stanislav and Grof, Christina. Beyond Death: The Gates of Consciousness. London: Thames and Hudson, 1980.

Hadamard, J. The Psychology of Invention in the Mathematical Field. Princeton: Princeton University Press, 1949.

Hall, Budd. "Participatory Research: Expanding the Base of Analysis." International Development Review, 4: 1977.

Hall, Edward T. The Hidden Dimension. New York: Doubleday, 1966.

Hammitzsch, Horst. Zen in the Art of the Tea Ceremony. New York: Avon, 1982.

Hanh, Thich Nhat. The Miracle of Mindfulness!. Boston: Beacon, 1975.

_____. A General Selection for the Works of Sigmund Freud, edited by John Rickman. New York: Doubleday, 1937/1957.

_____. "New Introductory Lectures in Psychoanalysis." In Standard Edition of the Complete Psychological Works of Sigmund Freud, vol. 22, edited by J. Strachey. London: Hogarth Press, 1964.

Fromm, Erich. Escape from Freedom. New York: Holt, Rinehart & Winston, 1941.

_____. The Forgotten Language. New York: Grove, 1951.

_____. The Art of Loving. New York: Harper & Row, 1956.

_____. The Heart of Man. New York: Harper & Row, 1964.

Fromm, Erich, Suzuki, D.T., and DeMartino, Richard. Zen Buddhism and Psychoanalysis. New York: Harper & Row: 1960.

Gadamer, H. G. "The Problem of Historical Consciousness." In Interpretive Social Science, edited by P. Rabinow and W. Sullivan. Berkeley: University of California Press, 1979.

Galyean, Beverly-Colleene. Mind Sight: Learning Through Imaging. Long Beach: Center for Integrative Learning, 1983.

Gampopa. The Jewel Ornament of Liberation, translated by Herbert Guenther. Berkeley: Shambhala, 1971.

Gawain, Shakti. Creative Visualization. Berkeley: Whatever Publishing, 1978.

Gebser, Jean. The Ever-Present Origin, trans. by Noel Barstad. Athens: Ohio University Press, 1986.

Geertz, Clifford. The Interpretation of Cultures. New York: Basic Books, 1973.

Gendlin, Eugene. Focusing. New York: Bantam, 1978.

Gilbert, Donald W. Jellyfish Bones: The Humor of Zen. Oakland: Blue Dragon Press, 1980.

Gilligan, Carol. In a Different Voice: Psychological Theory and Women's Development. Cambridge: Harvard University Press, 1982.

_____. A Guide to Walking Meditation. Nyack, NY: Fellowship of Reconciliation, 1985.

_____. "The Three Gems." Karuna, Vol. III, No. 3, 1987.

_____. Being Peace. Berkeley: Parallax Press, 1987.

Hardin, Garret. The Limits of Altruism. Bloomington: Indiana University Press, 1977.

Harman, Willis. An Incomplete Guide to the Future. San Francisco: San Francisco Book Company, 1976.

_____. The Bulletin of the Institute of Noetic Sciences, October-November, 1986.

_____. "Integrating our Knowledge and Values as we Move Toward the 21st Century." Paper delivered to Empathy Gathering II, Guadalajara, Mexico, September 1987.

Harman, Willis and Rheingold, Howard. Higher Creativity. Los Angeles: Tarcher, 1984.

Harner, Michael. The Way of the Shaman. New York: Harper & Row, 1980.

Harre, R. "The Positivist-Empiricist Approach and Its Alternative." In Human Inquiry: A Sourcebook of New Paradigm Research, edited by P. Reason and J. Rowan. New York: Wiley, 1981.

Harvey, David. "Ideology and Population Theory." Economic Geography 50(3), July, 1974.

Hatch, E. "The Call for Tolerance." Culture and Morality: The Relativity of Values in Anthropology, edited by E. Hatch. New York: Columbia University Press, 1983.

Hegel, G. W. F. The Philosophy of History, translated by J. B. Sibree. In The Age of Ideology: The Nineteenth Century Philosophers, edited by Henry Aiken. New York: Houghton Mifflin, 1956.

Henderson, Hazel. "Post-Economic Policies for Post-Industrial Societies." Re-Vision, Spring 1985.

_____. The Politics of the Solar Age. New York: Anchor, 1981.

Heron, J. "Philosophical Basis for a New Paradigm." In Human Inquiry: A Sourcebook of New Paradigm Research,

_____. "The Logic of Psychological Opposition--Or How Opposite is Opposite?" Journal of Analytic Psychology, Vol. 24, No. 4, 1979.

_____. "Teaching for Value," Educational Theory, Fall 1980.

Jaspers, Karl. Anaximander, Heraclitus, Parmenides, Plotinus, Lao-Tzu, Nagarjuna, from The Great Philosophers, Volume II. New York: Harcourt Brace Jovanovich, 1957.

_____. Way to Wisdom: An Introduction to Philosophy. New Haven: Yale University Press, 1966.

Jaynes, Julian. The Origin of Consciousness in the Breakdown of the Bi-cameral Mind. Boston: Houghton Mifflin, 1976.

Johnston, William, ed. The Cloud of Unknowing. New York: Penguin, 1973.

Jung, Carl. "Conscious, Unconscious and Individuation." In The Collected Works of C. G. Jung, edited by Herbert Read. Princeton: Princeton University Press, 1954.

_____. The Undiscovered Self, translated by R.F.C. Hull. Boston: Little, Brown & Co., 1957.

_____. The Kundalini Yoga ("Notes on the Seminar given by Prof. D. J. Hauer with Psychological Commentary by C. G. Jung, Zurich, Autumn, 1932). San Francisco: C. G. Jung Institute, 1970.

_____. The Portable Jung, edited by Joseph Campbell. New York: Viking Press, 1971.

Jung-Kwang. The Mad Monk. Berkeley: Lancaster-Miller, 1979.

Kanamatsu, Kenryu. Naturalness. Los Angeles: White Path Society, 1956.

Kapleau, Philip. The Three Pillars of Zen. New York: Doubleday, 1965.

Kennet, Jiyu. Zen is Eternal Life. Berkeley: Dharma, 1976.

Keyes, Ken. Handbook to Higher Consciousness. Marina del Rey, CA: DeVorss, 1975.

Keys, Donald. Earth at Omega. Boston: Branden Press, 1982.

Kilbourne, B. K. and Kilbourne, M. T. The Dark Side of Science. San Francisco: American Association for the Advancement of Science (Pacific Division), 1983.

Langer, Susanne. "The Cultural Importance of the Arts." In Aesthetic Form and Education, edited by M. F. Andrews. Syracuse: Syracuse University Press, 1958.

Lao-tze. Tao Te Ching, translated by C. C. Lau. New York: Penguin, 1963.

Leggett, Trevor. The Tiger's Cave. London: Routledge and Kegan Paul, 1964.

_____. Zen and the Ways. Boulder: Shambhala, 1978.

Leonard, George. Education and Ecstasy. New York: Dell, 1968.

Leonard, Jim and Laut, Phil. Rebirthing. Hollywood: Trinity, 1983.

Le Page, Andy. Transforming Education. Oakland: Oakmore House Press, 1987.

Lodru, Lama. Bardo Teachings. Boulder: Karma Dawa Tashi, 1979.

Luk, Charles. Ch'an and Zen Teachings (1st Series). Berkeley: Shambhala, 1960.

_____. Ch'an and Zen Teachings (2nd Series). Berkeley: Shambhala, 1960.

_____. The Secrets of Chinese Meditation. London: Rider, 1964.

_____, tr. The Surangama Sutra. London: Rider, 1966.

Lynn, Frances. The Interplay of Science and Values in Assessing Environmental Risk. Doctoral Dissertation, School of Public Health, University of North Carolina, December 1983.

MacIntyre, Alasdair. After Virtue. Notre Dame: University of Notre Dame Press, 1981.

Macy, Joanna R. Despair and Personal Power in the Nuclear Age. Philadelphia: New Society publishers, 1983.

_____. Dharma and Development. West Hartford, CT: Kumarian Press, 1983.

Marcuse, Herbert. One-Dimensional Man. Boston: Beacon, 1964.

Maslow, Abraham. Religion, Values, and Peak Experiences. New York: Penguin, 1964.

Needleman, Jacob. The Heart of Philosophy. New York: Knopf, 1982

Neill, A. S. Summerhill. New York: Hart, 1960.

Noddings, Nell. Caring: A Feminine Approach to Ethics and Moral Education. Berkeley: University of California Press, 1984.

Noddings, Nell and Shore, Paul. Awakening the Inner Eye: Intuition in Education. New York: Teachers College Press, 1984.

Nyanaponika Thera. The Heart of Buddhist Meditation. New York: Samuel Weiser, 1962.

Ornstein, Robert. The Psychology of Consciousness. New York: Simon & Schuster, 1972.

Ostrander, Sheila and Schroeder, Lynn. Superlearning. New York: Dell, 1979.

Packer, Martin. "Hermeneutic Inquiry in the Study of Human Conduct." American Psychologist, October 1985.

Panchen Lama (First). The Great Seal of Voidness. Dharamsala, India: The Library of Tibetan Works and Archives, 1975.

P'ang, Layman. A Man of Zen. New York: Weatherhill, 1971.

Park, Sung Bae. Buddhist Faith and Sudden Enlightenment. Albany, NY: SUNY Press, 1983.

Patton, M. Alternative Evaluation Research Paradigm. Vermillion, SD: University of South Dakota, 1975.

Phenix, Philip. "The Aesthetic Realm of Meaning." In Realms of Meaning: A Philosophy of the Curriculum for General Education, edited by P. Phenix. New York: McGraw-Hill, 1964.

Piaget, Jean. The Moral Judgment of the Child. New York: Free Press, 1932.

Pitkin, H. and Shumer, S. "On Participation." Democracy, Vol. 2, No. 4, Fall 1982.

Plato. Great Dialogues of Plato, translated by W.H.D. Rouse. New York: Mentor, 1956.

Plotinus. The Essence of Plotinus, translated by Stephen MacKenna. New York: Oxford University Pres, 1948.

Rittell, H. and Webber, M. "Dilemmas in a General Theory of Planning." Policy Sciences, 4: 1973.

Roberts, Bernadette. "What is Self?" Unpublished paper.

Rohrlich, Ruby and Baruch, Elaine. Women in Search of Utopia. New York: Schocken Books, 1984.

Rudolph, Frederick. "The Power of Professors: The Impact of Specialization and Professionalization on the Curriculum," Change: The Magazine of Higher Education, Vol. 16, No. 4, May/June 1984.

Russell, Peter. The Global Brain. Los Angeles: Tarcher, 1983.

Ryan, William. Blaming the Victim. New York: Vintage, 1976.

Ryokan. One Robe, One Bowl, translated by John Stevens. New York: Weatherhill, 1977.

Sampson, Edward. "Psychology and the American Ideal." Journal of Personality and Social Psychology. November 1977.

Sandars, N. K., trans. The Epic of Gilgamesh. New York: Penguin, 1960.

Sannella, Lee. Kundalini: Psychosis or Transcendence?. San Francisco: H. S. Dakin Co., 1976.

Sato, K. and Kuzunishi, S. The Zen Life. New York: Weatherhill, 1972.

Schopenhauer, Arthur. On the Basis of Morality. New York: Bobbs-Merrill, 1965.

_____. The Will to Live, edited by Richard Tayler. New York: Doubleday, 1962.

Schumacher, E. F. Small is Beautiful. New York: Harper & Row, 1973.

_____. A Guide for the Perplexed. New York: Harper & Row, 1977.

Schwartz, P. and Ogilvy, J. The Emergent Paradigm: Changing Patterns of Thought and Belief. VALS Report No. 7, SRI International, Menlo Park, 1979.

Schweder, Richard. "Divergent Rationalities." In Metatheory in Social Science, edited by D. W. Fiske and R. A. Schweder. Chicago: University of Chicago Press, 1986.

_____. The Living Thoughts of Spinoza, edited by Arnold Zweig. New York: Fawcett, 1939.

Spretnak, Charlene. "Naming the Cultural Forces that Push us Toward War." Journal of Humanistic Psychology, Summer 1983.

Sternberg, J. J. "Human Intelligence: The Model is the Message." Science, 230, 6 December 1985.

Strauch, R. "A Critical Look at Quantitative Methodology." Policy Analysis, Winter, 1976.

Stravrianos, L. S. The World Since 1500. Englewood Cliffs, NJ: Prentice-Hall, 1966.

Suzuki, D. T. Essays in Zen Buddhism. (Series 1 - 3). New York: Samuel Weiser, 1953/1971.

_____. Essentials of Zen Buddhism, edited by Bernard Phillips. London: Rider, 1962.

_____. Manual of Zen Buddhism. New York: Grove, 1960.

_____. Shin Buddhism. New York: Harper, 1970.

_____. Studies in the Lankavatara Sutra. London: Routledge & Kegan Paul, 1930.

_____. Zen Buddhism, edited by William Barrett. New York: Anchor, 1956.

_____. Zen and Japanese Culture. Princeton: Princeton University Press, 1959.

Suzuki, Shinichi. Nurtured by Love: A New Approach to Education. New York: Exposition Press, 1969.

Suzuki, Shunryu. Zen Mind, Beginners Mind. New York: Weatherhill, 1970.

Tame, David. The Secret Power of Music. New York: Destiny Books, 1984.

Tart, Charles. Waking Up: Overcoming the Obstacles to Human Potential. Boston: Shambhala, 1987.

Tarthang Tulku. Time, Space and Knowledge. Berkeley: Dharma, 1977.

Taylor, Charles. "Interpretation and the Sciences of Man." In Interpretive Social Science, edited by P. Rabinow and W. Sullivan. Berkeley: University of California Press, 1979.

Wei, Wu Wei. All Else is Bondage. Hong Kong University Press, 1964.

_____. Open Secret. Hong Kong University Press, 1965.

_____. The Tenth Man. Hong Kong University Press, 1971.

Wells, H. G. The Outline of History. New York: Doubleday, 1949.

Westcott, Malcolm. Toward a Contemporary Psychology of Intuition. New York: Holt Rinehart & Winston, 1968.

White, Morton, ed. The Age of Analysis: Twentieth Century Philosophers. New York: Houghton Mifflin, 1955.

Wilber, Ken. The Spectrum of Consciousness. Wheaton, IL: Quest Books, 1977.

_____. "Psychologia Perennis: The Spectrum of Consciousness," in Beyond Ego, edited by R. Walsh and F. Vaughan. Los Angeles: Tarcher, 1980.

_____. The Atman Project. Wheaton, IL: Quest, 1980.

_____. Up from Eden. Boulder: Shambhala, 1983.

_____. A Sociable God. Boulder: Shambhala, 1984.

_____, ed. Quantum Questions: Mystical Writings of the World's Great Physicists. Boulder: Shambhala, 1984.

Wilhelm, Richard, tr. I Ching. Princeton University Press, 1950.

_____, tr. The Secret of the Golden Flower. New York: Harcourt, 1931.

Wofsy, Leon. "The Life Sciences and the Public: Is the New Biology too Important to be Left to the Entrepreneurs?" Politics and the Life Sciences. August 1984.

Wolin, Sheldon. "Higher Education and the Politics of Knowledge." Democracy, Vol. 1, No. 2, April 1981.

Wolters, Clifton, tr. The Cloud of Unknowing. New York: Penguin, 1370/1961.

Wong Mou-lam, tr. The Sutra of Hui-Neng. Boston: Shambhala, 1969.