

Mahayana Buddhism and the Growing Perceptual Revolution

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ONE WAY OR ANOTHER, all revolutions may be called revolutions of perception. The Copernican Revolution changed our perception of the relation of the earth to sun and cosmos. The French Revolution forever altered our perception of the relation between individual rights and power in societies. But the revolution of our age is not, as were these others, concerned with the content of perception but with the very nature of perception itself. It brings into question our most basic assumptions concerning space, time and reality in ways which are at present inconceivable to most people. In this, the growing perceptual revolution of our age, Mahayana Buddhism may be seen as occupying a central, although as yet, not commonly recognized place.

With increasing frequency we read that our times demand a new paradigm, indeed that a paradigm shift is now in process. Here we will take "paradigm" to mean that set of primary, perceptual assumptions which underlies all our thinking, feeling and behaving. By their very nature unprovable, these assumptions are most often unexamined by us and even unknown to us. Like the majority of those who have come and gone before us, we may live out our lives locked into the delimiting frame of a primary, perceptual error. We too may never question our basic assumptions about the universe and ourselves. Thus, we may pass on, unaware of our contemporaneity with what may prove to be the most profound revolution of this or any time.

In ancient times, people gazed wonderingly at the firmament and asked: What is this universe? How does it work as a whole? How can we know about it? Who are we? How do we fit into the whole scheme? Many cen-

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turies have passed but these ancient questions remain essentially unchanged, threading like warp cords through the fabric of human history:

What is reality? (Cosmology)

How do we know? (Epistemology)

Who am I? (Ontology)

Essentially the three questions are inseparably one: What is reality?

In the West, since Plato's time, the predominant paradigms have all involved certain assumptions of invariant space and time. In Plato's paradigm, for example, there is a primary assumption of the existence of a plane of pure, absolute time without space. Plato argued that the empirical or everyday world is a hindrance to truth. We should, he argued, transcend the spatial level of reality and live on a plane of time where ideas alone are real. Thus, absolute time, pure reason and pure theory should determine the underlying structure of our thought.

In Aristotle's paradigm, on the other hand, a primacy of space over time is presumed. Absolute, empirical space, he implies, limits time. It follows from this, that practice limits theory and experience limits reason. These Aristotelian assumptions have prevailed and act as the predominant supports of western thought, particularly scientific thought, to this day. With the more recent contributions of such giants as Galileo and Newton, this Aristotelian paradigm became the great rock on which the whole edifice of western cosmology stands. (Certain oriental philosophers would have dissented but no one asked for their vote.)

One of the important things to realize about paradigms is that it is almost impossible to be born into a society founded on the assumptions of a certain paradigm and, as an individual, stand outside it and see it from a comparative point of view. Hardly one among us has escaped the influence of the major paradigm of our time. It structures our perception in the most fundamental way and hence our being-in-the-world. The best name for this contemporary paradigm is probably rational materialism and the point is that ever since the beginning of the twentieth century this paradigm has been breaking down. It has been breaking down for the same reason paradigms have always broken down: the appearance of data which it totally fails to accommodate.

The first people to realize this were the physicists. The questions they began to ask penetrated to the most profound levels of human experience;

levels usually considered to be religious. Surprisingly, in retrospect, the statements of certain physicists now seem to have been among the most religious ones of the twentieth century. Now, forty to fifty years later, evidence from all sides and all disciplines points daily to the bankruptcy of the old paradigm. Not only in formal disciplines but in millions of ordinary lives, the need for a more meaningful and comprehensive one is acute. Before much longer each of us may be challenged to reexamine our own assumptions about space, time and reality.

Thus, we live in an age when a paradigm shift is developing: a great sea-change in human awareness as yet only barely visible on the surface. In a book called *The Structure of Scientific Revolutions*, Dr. Thomas Kuhn develops the theme that when a paradigm shift occurs, "our entire world view is overturned in a fundamental way that crosses and penetrates all fields of thought."¹

Let us look at this contemporary paradigm shift in the light of the three, age-old questions.

What is reality?

It is probably safe to say the assumptions most of us make concerning the nature of the universe would fit well into Isaac Newton's paradigm. In the *Optiks*, Newton wrote, in effect, that space was absolute and ever remained "similar and immoveable." Objects were solid and the space between them empty. In addition, time was absolute, a separate dimension with no connection with the material world. It flowed at an absolutely uniform rate from past to present to future. The elements of this universe were hard, indivisible particles. In fact, in the beginning God made these particles and he made them so hard they would never wear out or fall in pieces.² It is from this rock-hard world that, by random chance, we human beings are said to evolve, strangers indeed in a strange world.

To this mechanical world picture, Descartes added the concept of a fundamental gap between an observer and the world. According to Descartes, it was possible to study the world without participating in any way; in fact, without having any point of view about it at all. This became

¹ *The Structure of Scientific Revolutions* (Chicago, 1962), pp. 1ff.

² Quoted in M. P. Crosland (ed.), *The Science of Matter*, History of Science Readings (Baltimore, 1971), p. 76.

the ideal of science and remains so until this day.

Men like these, Galileo, Newton, Bacon, Descartes, courageously stood up against the excessive theorizing of medieval scholasticism. They thought of themselves as trying to give humans a more central role in their own affairs. What they accomplished has been just the opposite. For if the universe is a mechanism, then from the moment it is set in motion everything, already determined, plays itself out like a phonograph record. The status of human beings, mere cogs in this cosmic mechanism, was immeasurably reduced from what it was before.

By the early 1900's, however, some cracks were appearing in Newton's hard, uncrackable universe. Einstein proposed his special theory of relativity in which measurements of space and time were neither separate nor absolute. Rutherford demonstrated that atoms were not hard indivisible particles, but instead, each atom was in itself a universe made of particles in tremendous action, separated by enormous space. Planck found that heat radiation was not emitted continuously but in discontinuous packets or quanta. It became increasingly apparent that the Newtonian paradigm could not accommodate the subatomic world.

During the 1920's, therefore, physicists from many countries met in a cooperative effort to try to reconcile their observations within the Newtonian paradigm. Heisenberg, Bohr, Schroedinger, Pauli, De Broglie and Dirac were among them. All were later to win Nobel prizes. When the meetings and debates were finally concluded, the disputants had laid the foundations of a new branch of physics called the new quantum mechanics. They had also left behind all prior assumptions concerning space, time, matter, motion, objects, cause, effect and of scientific method itself.

What they came up with was a view far closer to that of eastern religions than to Newtonian physics. Here, essentially, are their newly agreed-on assumptions:

There are no solid objects and no empty space; these are relative.

Electrons and all other so-called particles are not things at all but patterns of events which occur only in relation to other events and never in isolation.

The void, which penetrates everything else, is a realm of infinite potential from which all things arise and to which all things return.

THE GROWING PERCEPTUAL REVOLUTION

Events occur not in waves, such as sound waves, but in waves of probability.

There is *no* absolute or separate time, space, or locale.

Energy is completely convertible. All things, including ourselves, are convertible to all other things, all forms of energy into all forms of matter and vice versa.

Following are a few direct quotations:

Jeans: "As the new physics has shown, all earlier systems of physics. . . fell into the error of identifying appearances with reality."³

Einstein: "There is no place in this new kind of physics both for the field and matter for the field is the only reality."⁴

Weyl: "According to field theory, matter such as an electron is merely a small domain of the electrical field within which the field strength assumes enormously high values. . . . There is no such thing as one and the same substance of which the electron consists at all times."⁵

Heisenberg: "Natural science does not simply describe and explain nature; it is part of the interplay between nature and ourselves."⁶

Schroedinger: "Inconceivable as it seems to ordinary reason, you and all other conscious beings as such are all in all. Hence this life of yours . . . is not merely a piece of the entire existence, but is in a certain sense the whole."⁷

³ Quoted in S. Commins and R. N. Linscott (eds.), *Man and the Universe*, The Philosophers of Science (New York, 1969) p. 384.

⁴ Quoted in M. Capek, *The Philosophical Impact of Contemporary Physics* (Princeton, 1961), p. 319.

⁵ H. Weyl, *Philosophy of Mathematics and Natural Science* (Princeton, 1949), p. 171.

⁶ W. Heisenberg, *Physics and Philosophy* (New York, 1958), p. 81.

⁷ E. Schroedinger, *My View of the World* (London, 1964), p. 21.

[Schroedinger:] "In truth there is only one mind."⁸

"Physical theory in its present state strongly suggests the indestructibility of mind by time."

"Consciousness is a singular of which the plural is unknown."⁹

In three significant ways, the new quantum mechanics made a radical break with the assumptions of the old paradigm. Up until then, scientific endeavor was rooted in the assumption that nature was "out there," independent and heedless of our presence. Absolute truth was also "out there," only awaiting our discovery. In one stroke, Q.M. eliminated the detached scientist watching but not interfering. It can't be done, said Q.M. There is no way we can eliminate ourselves. We are enclosed in nature. Not only do we influence reality, to some degree we actually create it.

Zukav essentially points out that, for the first time and from the most prestigious level of science, there now came the admission that a complete grasp of reality is beyond the capabilities of rational thought alone. One might say that up until this point, science had been exclusively left-brain oriented: rational, masculine, objective. With this admission, it opened its exclusive men's club doors to right brain function: intuitive, receptive, feminine; all that had long been considered dark, mysterious, subjective, and irrational.¹⁰ With that, the ghost emerged from the closet: consciousness itself.

In the late 1920's, beyond that small circle of physicists, very few persons took notice of the new quantum mechanics. Among those who did, it was almost universally assumed that these notions of theirs applied only to vast reaches of outer space and not at all to the every day, local space of jobs and daily living. But there is a serious contradiction here: an outer space totally different in every way from local space hardly fits Newton's paradigm of *absolute* space. It was another forty years before this contradiction was generally noticed.

In 1974, Dr. David Bohm, professor of theoretical physics and one-time associate of Einstein's, described a new model of the universe based

⁸ E. Schroedinger, *What is Life and Mind and Matter* (London, 1969), p. 137.

⁹ *Ibid.*, p. 95.

¹⁰ G. Zukav, *The Dancing Wu Li Masters* (New York, 1979), pp. 53ff. Note: the terms "left-brain" and "right-brain" are used metaphorically.

on the assumptions of the new Q.M. What should interest us today is that in Dr. Bohm's cosmology, consciousness is not just a by-product of the brain but the fundamental property of all reality. That is quite a quantum leap.

In Bohm's paradigm there are two levels of reality: a primary order which he calls the "implicate" or "enfolded" order of reality and a secondary order which he calls the "explicate" or "unfolded" order of appearances. "If you've ever seen a whirlpool," writes Bohm, "you've seen how the water gushes up from the center, then falls out and down and around to come up again through the center over and over, the movement in the whole being both simultaneously outward and inward."¹¹ (In mathematics, the form he describes is called a torus.) In this torus or whirlpool-like model of the universe, there is an eternal, cyclical flow of events, out of the unmanifest source into a surface world of manifest forms and then back and around in a return to the source, always eternally and simultaneously now.

Ever since Galileo, Bohm declares, we have been looking at reality through lenses. Classical physics focused on appearances and in most instances, still does. Not only electrons, protons, planets, galaxies but we ourselves, our bodies, minds, thoughts, feelings, desires are only relatively stable appearances. All have their ground in a primary realm of emptiness, according to Bohm.¹²

"Form is emptiness; emptiness no other than form," reads the Heart Sutra (fourth century AD).

Thought, continues Bohm, is a surface activity endlessly changing. Higher insight bypasses thought and directly transforms matter. In fact, meditation actually transforms consciousness. "We must turn physics around," he goes on to say, "instead of starting with parts and showing how they work together, we must start with an unbroken wholeness which denies analyzability into separate, independently existent parts."¹³

Interesting talk from a physicist? "The universe is like a vast ocean mirror in which the infinite dramas of the universe are spontaneously and simultaneously reflected, a kaleidoscope of multi-dimensional, mutual

¹¹ From a lecture given on April 16, 1977, at the University of California, Berkeley.

¹² Quoted in M. Ferguson, "Karl Pribram's Changing Reality," *Re-Vision*, Vol. 1, No. 3/4 (1978), p. 11.

¹³ Quoted in R. Weber, "The Enfolding-Unfolding Universe: A Conversation with David Bohm," *Re-Vision*, Vol. 1, No. 3/4 (1978), pp. 27ff.

projections and interpenetrations.”¹⁴ That last sentence might also be a quotation from physicist Bohm but it's not. It's from the Hua Yen Sutra, written in the second century.

Earlier, we mentioned data which just wouldn't fit into the old Newtonian paradigm. These fascinating, unaccountable oddities are often the very contradictions that lead to the complete overturning of an old paradigm. Up until recently, writes Zukav,¹⁵ all physics and all “common sense” had assumed that the only way in which information may be carried from one place to another is by means of a signal, the fastest being a light or radio wave of 186,000 miles per second. According to this, there is no way events at point “A” can know about events at point “B” instantaneously, at great distance, without any lapse of time, however small. In physics, this is called the principle of local causes.

Yet, early researchers in quantum mechanics noticed an odd connectedness between certain types of events at great distances. In what physicists call a two-particle spin, if one particle spin is up, the other is down. If researchers separate the two particles by great distances and one particle is given a spin up, the other particle in the system instantaneously spins down at a faster than light speed. This data completely undermines the principle of local causes. It was considered inexplicable by Einstein himself.

In 1964, H.S. Bell, a physicist then working in Switzerland, published a mathematical proof that could profoundly change all our world constructs. One of its implications is that widely separated parts of the universe are indeed in immediate, faster-than-light communication. Should Bell's theorem prove to be correct, and recent research suggests it is, then our most common sense notions about the world are profoundly in error. In the most pervasive sense there can be no such thing as independent, real situations. Not alone in the submicroscopic world of Q.M., but in the everyday world of bicycles and blue jeans, Bell's theorem demands we see the world as different from what it seems. Physicist Henry Stapp of Stanford has called this “*the most profound discovery of science.*”¹⁶

¹⁴ Garma C. C. Chang, *The Buddhist Teaching of Totality* (University Park, 1971), p. 24.

¹⁵ *The Dancing Wu Li Masters*, pp. 298ff.

¹⁶ H. Stapp, “Bell's Theorem and World Process,” *Il Nuovo Cimento*, 29B (1975), p. 271.

Mathematician G. Spencer Brown says this: "Now the physicist himself who describes all this is, in his own account, *himself* constructed of it. He is, in short, made of a conglomeration of the very particles he describes, no more, no less, bound together by and obeying such general laws as he himself has managed to find and record. Thus, we cannot escape the fact that the world we know is constructed in order . . . *to see itself*. This is indeed amazing."¹⁷

How do we know?

Is there anyone among us, expert or not, who doesn't associate his mental processes with his brain? Surely certain events suggest mind is a by-product of brain? What happens when the brain is injured and the ability to talk is lost? What about mind-altering drugs? Is this not a little like asking: "If the tube goes out on my television set while I'm watching a performance of *Macbeth*, does that mean the television set produced *Macbeth*? Is *Macbeth* a by-product of the activity of the TV set?" Do we not assume that our neural processes in some way produce our ideas? Yet, they cannot. There is no known way for a biochemical-neural process to produce an idea. Do we not also assume that a thought can make a muscle contract? Yet there is no known way for a thought to make a muscle contract. We try to get around this by saying: "The whole person does it." The problem is to find the whole person. The more we pursue the question, the more the whole person becomes increasingly undefinable and boundless.

When the telescope was first invented it was said that many persons searched the skies at night looking for God. Is searching the brain to look for mind about as sensible as that? At least three of the world's leading brain scientists now think so. Sir John Eccles, Australian Nobel laureate and probably the world's most eminent neuroscientist, after a lifetime of brain research, in 1976, announced his conviction that mind is an entity that directs the activity of the brain. The view that brain events can account for consciousness can never provide an explanation of the unity and splendor of our experience from moment to moment, in Eccles' opinion.¹⁸ In 1978, in a book called *The Mystery of Mind*, its author, Dr.

¹⁷ G. Spencer Brown, *Laws of Form* (New York, 1972), p. 105; italics mine.

¹⁸ *The Understanding of the Brain* (New York, 1976).

Wilder Penfield, distinguished Canadian neuroscientist, after more than 30 years of brain research, concluded that the mind stands above the content of consciousness at any moment as an independent entity; that the brain is messenger to a higher consciousness.¹⁹

Probably, the most fruitful suggestions along these lines come from Dr. Karl Pribram of Stanford. For many years, Dr. Pribram has accumulated a mass of evidence which indicates that, at least in part, the brain functions in ways comparable to a new kind of lensless photography called holography.²⁰ Pribram suggests that just as with a holographic plate, every minute portion of the brain contains the entire body of our learning. He believes that rather than by means of nerve impulses, the brain analyzes the information it receives by means of slow wave potentials that wax and wane. In other words, our brains function as frequency analyzers. More than this, his work suggests the brain acts as a lens or filter so that reality is never what we sense. Pribram writes: "Our brain mathematically creates what we call reality by interpreting frequencies rising from another realm of primary reality that transcends time and space. Thus, the brain is a hologram interpreting a holographic universe."²¹ Pribram further declares that the extraordinary experiences reported by so-called "mystics" from all ages and all places may suggest that they found a way, perhaps through meditation, to bypass the filter and gain direct access to this more primary reality. "We have been looking at the world through lenses," continues Pribram, "not just the lenses of microscopes and telescopes but the lenses of our senses."²²

This is not, you understand, to say that the world as we perceive it is not "real." But rather to say that for far too long we have fallen into the archaic, perceptual error of attributing solid independence to our percep-

¹⁹ *The Mystery of Mind* (Princeton, 1978).

²⁰ Briefly, in holography, a laser or highly coherent beam of light is split in such a way that one half travels on to a photographic plate, while the other half is deflected, first on to an object and then on to a plate. When the image is reproduced it appears to be unbelievably real, so much so that the unprepared observer can scarcely believe it isn't the real object. It can even be photographed with an ordinary camera from all angles just as can a real object. But most amazing is the fact that one may smash the plate into a thousand pieces and every small piece will reproduce the total image just as the entire plate will! Hence the name holography.

²¹ Quoted in Ferguson, "Karl Pribram's Changing Reality," pp. 8-13.

²² K. Pribram, "What the Fuss is All About," *Re-Vision*, Vol. 1, No. 3/4 (1978), pp. 14-18.

tual creations. Yet, right from the first moment of sensation, the possibility of our sensing an objective world out there is totally out of the question. For instance, when light contacts the retina, biochemical and physiological changes instantly occur which totally transform the basic nature of the energy. These changes are picked up by the optic nerve and again transformed into coded messages. Reaching the brain further transformations occur at every level. Where is the blue sky and the brown earth here? Even if an original image could be traced through the dark labyrinth of the nervous system, we would have only shifted the problem several stages back, still having to ask: "*Who sees the original image?*"

The implications of the Bohm-Pribram models are so revolutionary as to shake the scientific world to its foundations should they be suddenly accepted. Take, for example, the age-old assumption that we perceive in order to behave. We are now forced to consider that we may behave in order to perceive. For over forty years behaviorists looked for stimulus-response relationships assumed to underlie learning. More recently, cognitive psychologists have searched for primary motivations thought to underlie behavior. But the transpersonal psychologist will look for transformations involving quantum leaps from one domain of consciousness to another. He will view the human person, not as functioning from a single level of consciousness but as having the potential for a vast array of subtle levels of increasingly higher transformations, possibly infinite in number.

As for education, the potential is incalculable. According to the holographic model the capacity for memory is not only far greater than we imagined, it is simpler. All that will be needed will be to store a few rules in our minds rather than the vast amount of content with which we have been stuffing the young in schools, with little effect, for centuries. Just as a computer does correlations with unbelievable speed by subjecting data to what is known as a Fourier analysis, Pribram believes the brain may do the same. One would take in a situation holistically and correlate it as a whole pattern. Effortlessly a decision would emerge. Echoing Plato, Pribram suggests we may soon be speaking of image processing rather than information processing.²³

One thing is certain, not for much longer can many of us make the primary perceptual error, unaware even of making it, that there, entirely

²³ Ibid., p. 16.

outside us, stands a material world just waiting for us to reflect it. It appears that such an assumption, useful in developing our survival skills, becomes a hindrance to developing our higher potential.

It is society that fills us with these filtering fictions, said Eric Fromm. Each society, he wrote, is caught in its own need to survive in the form in which it developed. It accomplished this survival by ignoring the higher human aims common to all persons. The role of society, according to Fromm, condemns us to a fictional existence. It prevents our full awareness of reality. Every society thus develops a system that determines what shall enter our awareness and what shall not.²⁴

In *Journey to Ixtlan*, Carlos Castaneda writes: "Don Juan concentrated . . . on leading me to a conviction that what I held in mind as the world was merely a description of the world that had been pounded into me from the moment I was born. He pointed out that everyone who comes in contact with a child is a teacher who incessantly describes the world to him."²⁵

From the moment of our births, we are immersed in a social filter of language and cerebration more intense in modern culture than ever before in history. No sooner, as little children, do we smell a wildflower than someone slaps a label on it for us. So begins the process of making experience unreal. Before long, we merely think we see, think we touch, think we feel, indeed think we live.

It is particularly the trainability of our attention that makes this social filtering possible. Attention may be narrowly focussed and habitually constricted. Or it may be widely de-focussed and free floating, intense as a laser beam or diffuse as soft light, mobile as in creative freedom or immobilized as in psychotic panic. All social filters act by teaching us to narrowly focus and constrict our attention in habitual ways. All spiritual disciplines ultimately teach us to de-focus our attention. Indeed, it is when we learn to re-attend to all which was previously unattended, that only then do we regain our long lost, whole and cosmic selves. For that which has been unattended is the inorganic in us, the subatomic, the plant, the animal and ultimately the highest spiritual potential.

So long as we continue to identify with these limiting, social filters just so long will we be strangers to ourselves, blind to the wholeness of reality.

²⁴ E. Fromm et al., *Zen Buddhism and Psychoanalysis* (New York, 1963), pp. 97-113.

²⁵ *Journey to Ixtlan* (New York, 1972), pp. viii-ix.

There is an Asian folk tale in which a thief, having looted a house, carried an exquisite handwoven rug to the marketplace to dispose of it. "Who will give me a hundred silver pieces for this rug?" he cried out. After a sale was made, a man approached him and asked why he had sold so valuable a rug so cheaply. "What," cried the thief in astonishment, "is there any number higher than a hundred?"

The human being, as William James frequently observed, lives far within his limits . . . in every conceivable way contracted.²⁶ It has often been observed that we use less than 5% of our brain's capacity. What is the other 95% for? "Like everyone else," wrote Aldous Huxley, "I am functioning at only a fraction of my potential."²⁷ Our business is to wake up. It is, in short, to see through the necessary but limiting social filters, to see that what we thought to be outer darkness is light indeed.

Consciousness Itself

Now consciousness was originally thought to be the domain of psychology. But when the physicists turned to western psychology for help in developing a new paradigm they found that consciousness, like the Sleeping Beauty, had been in a deep, neglected slumber in the halls of academic psychology for over fifty years. You might say that while the physicists were upstairs poking around in the deserted castle halls of the abandoned Sleeping Beauty, the psychologists were down in the basement counting rat feces and other trivia in a diligent attempt to imitate the physicists. How disappointing for the physicists to search the western psychological literature and find so little about that flow of images, memories, feelings, thoughts, wishes, fantasies, hopes, and plans that makes up our everyday experience of life, at once familiar and mysterious.

Fifty or more years ago, when consciousness was abandoned by the psychologists, the deserted castle halls were entered by another group altogether, in fact, by some of the most gifted writers, poets, and philosophers of the twentieth century. Novelists James Joyce and Virginia Wolff marvelously recreated the turgid, undisciplined flow of everyday experience. Other novelists went even further and sought a door opening

²⁶ R. P. Perry, *The Thought and Character of William James* (Cambridge, 1948), pp. 305-22.

²⁷ S. Bedford, *Aldous Huxley, A Biography* (New York, 1974), p. 593.

within to a more primary awareness. In *Steppenwolf*, Herman Hesse wrote:

I was now in the old quarter of town. . . . I scrutinized the old wall opposite in the secret hope that the magic might begin again, the writing invite me, the madman: the little doorway give me admittance.²⁸

In a vivid passage, the American novelist, Thomas Wolfe, wrote:

O waste of loss, the hot mazes, lost among bright stars on this most weary, unbright cinder, lost! Remembering speechlessly, we seek the great forgotten language, the lost lane-end into heaven, a stone, a leaf, an unfound door. Where? When?²⁹

None of this eloquence was enough to bring the psychologists, off in the barren fields of behaviorism, back to the deserted castle. Just as it had with the physicists, it took something else: data, irrefutable data, which could not be reconciled with the old paradigm. In the 1950's, a kind of data, virtually unknown in the West and generally classified under the heading of altered states of consciousness, began to penetrate the defenses of the western psyche. It came from the National Institute of Mental Health at Bethesda, from other research centers in Europe and America, from hypnosis research, drug research, and finally, in the 1970's, from biofeedback research.

Complex memories concerning subjects' biological birth were reported, vivid recollections of the nine months in embryo; beyond this, experiences from ancestral, racial, and phylogenetic levels down to seemingly first-hand experiences of DNA. Detailed data about the religion, art, and social structure of numerous and ancient cultures were included. Already far exceeded were the bounds of any paradigm whereby every memory had to have a precise, locatable, physical correlate.

This was only the beginning. In certain altered states, according to Grof,³⁰ subjects apparently transcend ordinary spatial boundaries to penetrate the universe at large, reporting direct experience of dimensions

²⁸ *Steppenwolf* (New York, 1963), p. 41.

²⁹ *Look Homeward, Angel* (New York, 1947), facing p. 1.

³⁰ S. Grof, "Modern Consciousness Research and the Quest for a New Paradigm," *Re-Vision*, Vol. 2, No. 1 (1979), pp. 41ff.

all the way from subatomic to galactic. Time is reported to accelerate, slow down, flow backward or cease to exist. Space may be experienced as curved, self-enclosed, infinite or constricted to a dimensionless point. The world of objects is frequently replaced by undifferentiated awareness in which domains and boundaries are seen to be playful and arbitrary. The distinction between existence and non-existence is transcended; form and emptiness are realized to be one and interchangeable.

It was not long before persons involved in such research realized that already available was a vast, pragmatic literature concerning such altered states, going back thousands of years. It was to be found in Sufism, Hasidism, the Kaballah, Yogic and Tantric literature, Christian mysticism, Buddhism, and the literature of North and Central American Indians. The impact of this in some quarters was stunning. With dazzling clarity, the poverty of our assumptions about human nature and human experience was revealed. Henceforth, we might disagree on points of theory. But our ideas about the limits of consciousness would never be the same again.

Now persons from many mental health professions joined the physicists in their symbolic journey to the East. In the past ten years, we have witnessed the extraordinary spectacle of western scientists, many from the pinnacle of creative accomplishment, going, hat in hand, to the ancient religious traditions for the most fundamental assumptions of their new paradigms.

What are the stages through which life unfolds?

Have not most of us been taught to think of life as a kind of one-way street, a no-return journey from birth to death? Should death not be considered the absolute end, then "something more" tends to be vaguely envisioned out beyond the end of the track somewhere. The stations along this linear track tend to be divided into five psycho-physiological ones: infancy, childhood, adolescence, and adulthood, where the line peaks and turns downward toward relatively useless old age. As infants, we are said to be ignorant and unself-controlled. Ideally, by the time we have peaked in adulthood, we may then be said to have become educated, self-controlled, thinking, rational, and socially-oriented people. In most of the western world, this is called maturity and it is taken for granted as the goal of life.

All major western psychologies subscribe to this model. Provided we

add the words, "church-going," so do all exoteric, western religions. Western religion is predominantly exoteric. We are offered our religion in groups and in churches. There we are invited to become members of a captive audience gathered around the egocentric pulpit. These polite social experiences are rarely deeply transforming and rarely expected to be. Should a hapless member of such a congregation find himself in the truly awesome throes of a genuine, firsthand, transforming religious experience, probably there are scarcely a half dozen ministers, priests or rabbis in the entire western world who could either recognize the signs or offer guidance. The suffering parishioner most likely would be referred to the nearest psychiatrist who would, all too likely, prove even more ignorant of the true nature of the problem. In this vast, spiritual wasteland, thousands rot in mental hospitals less for lack of psychiatric help than for spiritual guides.

The Aristotelian-Newtonian paradigm lends appropriate support to such large scale, exoteric religious activity. Events are assumed to occur in a certain fixed space common to us all and the time of our lives to run along a fixed track from *A* to *Z*. Western religions subscribe to an historical model in which events flow from past to future and an evolutionary model of forms developing from simple to complex.

There is an alternative model of the basic stages of life available, however. This model is cyclical or non-linear. According to this model all events are in continual flow, out from the source and back again recurrently, simultaneously and eternally. This is the model revealed in the great archetypal mandalas of Tibetan Buddhism, in the unclosed circles of Zen art, and more recently, in the whirlpool model of physicist David Bohm. It represents the eternal return of all things to the source, always and already now. Its spiral form is found everywhere throughout the natural universe, from the spiral nebulae to the shell of the chambered nautilus, the center of a daisy, and the double helix of DNA.

Here the stages of life are generally divided into seven stages. These are not seven stages in sequence along a track, however. The first three stages are seen as predominantly outward and downward implying a simultaneous rhythm of ebb and flow. Nor are these first three stages seen as on a rising line, as in the West, but as "the fall of man" out of the unitary source into an increasingly fragmented, delusive perimeter of being. According to this cyclical model, what we in the West see as the entire path of life, is but a foreshortened, truncated vision of the first three stages. Indeed, the cyclical vision opens at the very point ours cuts off.

At the critical fourth stage, a turning is said to occur. Upon this all that follows depends. If the turn is successfully made, the journey of return may begin. Stages Five, Six, and Seven lie beyond. The first three stages may be called, in order: the physical, the emotional, and the lower mental. The critical Fourth stage may be known as the intuitive or higher mental. The Fifth may be called the astral or parapsychological. The Sixth is often known as the causal or the stage of pure light. Beyond, encompassing them all, is the Seventh: the source, ineffable and unnameable. No stage may be omitted; each depends on the one before; each includes all that went before yet, paradoxically, all are always and already present.

Cyclical stages are seen as being neither time nor space-bound. They are not strictly historical. They are, however, creative and, in a radical sense, evolutionary. They are considered to be not alone stages through which a fully realized life will unfold but also occurring at every timeless moment. They are essentially states of awareness, of perception. In Yogacara writings, it is said "A Buddha does not know, *he sees*." The journey of return is, therefore, not so much a journey toward a goal but a falling back, an unpeeling, an undoing, unlearning, unfocussing, deconditioning, re-opening to that which we have been always and knew all along but only forgot. This is our return to our original home that always and ever awaits, closer than we know. As T. S. Eliot wrote:

We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And to know the place for the first time.³¹

The myths and legends of all places and times tell us, in countless poetic variations, that the true hero of our species is the one who overcomes all challenges of the journey and at last penetrates to the source.

According to this model, and to Wilber,³² we begin life with the open, global but undifferentiated, perceptual field of the infant. Then, under social pressure from all sides, a narrowing of the focus of our attention occurs until we achieve the highly focussed, constricted attention patterns

³¹ T. S. Eliot, *Four Quartets* (New York, 1943), in *Little Gidding*, p. 39.

³² For an extensive development of this model, see K. Wilber, *The Spectrum of Consciousness* (Wheaton, 1977), pp. 106ff.

of socially conforming adults. With this winding down into successively more impoverished, isolated units, each of us becomes increasingly ignorant of our origins, of our birthright. Heirs to the kingdom, we lose our way. All too well do we learn the lesson to delimit our consciousness to the secondary needs of our seemingly discrete organisms. With this comes all the built-in misery and suffering this delusion brings in its wake. The way of return now appears dangerous, threatening to all we have come to believe ourselves to be. Dark is the void that looms ahead. "Time draws tight the veil that hides the face of eternity."

The Fourth is the critical stage. It is the bridge, the long-sought door of poetry and legend. Often it is sought only when the limits of reason are first glimpsed. In the opening lines of Goethe's *Faust*, Faust speaks:

I've studied now Philosophy
And Jurisprudence, Medicine
And even, also, Theology,
From end to end, with labor keen;
And here, poor fool with all my lore
I stand, no wiser than before.³³

Knowing not what we seek, Stage Four may plunge us into a period of the deepest despair, called by John of the Cross, "the dark night of the soul." For many, a terror-filled abyss lies on either side of the way; the path to heaven may lead through hell. A guide is needed.

In Canto I of the *Divine Comedy*, Dante invokes Stage Four and the beginning of his own Journey of Return:

In the middle of the journey of our life
I came to myself in a dark wood where the
Straight way was lost.³⁴

These following lines describe the first of the ten remarkable Ox-herding pictures from the twelfth century:

Desolate through forests and fearful in jungles,
He is seeking the Ox which he does not find.
Up and down dark, nameless, wide-flowing rivers,
In deep mountain thickets, he treads many bypaths.

³³ *Faust* (New York, 1912), p. 15.

³⁴ *The Divine Comedy* (New York, 1932), p. 11.

Bone-tired, heart-weary, he carries on his search
For this something which he yet cannot find.
At evening he hears the cicadas chirping in the trees.³⁵

As our minds slow to a meditative stillness we may catch our first glimpse of the tracks of the Ox. When the time is ripe, a guide appears.

The religious traditions from which this cyclical model is taken are usually called esoteric in contrast to exoteric. Here, the relation of teacher to individual student is primary. Each disciple is taught according to his level of insight. The true esoteric path is above all instrumental and pragmatic. Philosophy and doctrine play only supporting roles. Nor is the esoteric perceived as opposite to or alternative to the exoteric religious modes but rather as inner or central to them all. For example, in Zen Buddhism, zazen or practice is said to in no way contradict any exoteric, religious expression. All such outward forms of expression, including the Buddhist, are seen as relative and ever-changing.

In Zen teachings, sunyata or emptiness is less a philosophical doctrine than a therapeutic device. It is a practical means of removing the blinders from perception, allowing direct access to a realm of timeless awareness. The back door of the Temple remains ever open, inviting us to go beyond all teachings. It follows that an accomplished teacher or guide teaches principally by example. For this, there can be no higher qualification. Such a teacher must have so established himself in the realm of sunyata that clear vision permeates every aspect of his life and teaching.

The holographic model again

Having briefly considered the esoteric model of life's path, let us return to the holographic model of the universe presented by Dr. David Bohm. The language employed by certain physicists is often disarmingly close to that found in the mystical literature of all ages. In a recent interview, Dr. Bohm discussed his thesis that the universe is one and inseparable.³⁶ Are we now to assume that Dr. Bohm and certain other physicists directly and experientially perceive the universe as one and inseparably whole as the enlightened sage or the fully realized practitioner of zazen is said to do?

Robert Chōtan Aitken Rōshi writes: "The holomovement paradigm

³⁵ P. Kapleau (ed.), *The Three Pillars of Zen* (New York, 1966), p. 302.

³⁶ Quoted in R. Weber, "The Enfolding-Unfolding Universe," pp. 31ff.

[of David Bohm] is fascinating for the Zen student because it presents a conceptual parallel to realizations experienced in Zen study. There is, however, an important difference between the two which arises from the different methods of religion and science. The scientific distrust of the observer hinders realization of the self as the nexus of insight. . . . The student of religion knows that the unity of the enfolded (essential) world and the unfolded (phenomenal) world is realized as the self. Of course, it is an error, as the Diamond Sutra says, to presume that this self exists as a separate entity. But who realizes this? Exactly this fellow sitting here at this typewriter; exactly you there, with the book in your hands. This self. The holomovement paradigm seems to obscure the role of the one who experiences. . . . (It) falls far short of Hakuin's position:

This very place is the Lotus Land
This very body the Buddha."³⁷

Enlarging upon this theme, Wilber declares there to be three distinct, irreducible levels of perception which have been confused throughout human history.³⁸ Known in medieval times as the eyes of the flesh, of reason, and of contemplation, in modern times they are often referred to as body, mind, and spirit. Each way of perceiving, Wilber declares, produces data appropriate to its own domain; no level can be reduced to or accounted for in terms of one of the other levels. To do so amounts to making a "category error." Further, continues Wilber, the relationship of the three levels or domains of perception is hierarchical; the physical being least comprehensive, the mental second and the spiritual encompassing and transcending both the other two. Yet, writes Wilber, all three ways of perceiving share a common strategy: at every level knowledge for that level is attained by following the same three successive steps:

- 1) An instrumental step in which one follows certain instructions to perform.
- 2) A step of trained, developing, perceptual practice which may feed back upon step 1 and activate it further.
- 3) A consensual step wherein an elite or brotherhood of trained perceivers validates the perceptual skills of the aspirant.

³⁷ "The Holomovement Paradigm of David Bohm," an unpublished paper (1979).

³⁸ K. Wilber, "Eye to Eye," *Re-Vision*, Vol. 2, No. 1 (1979), pp. 3-25.

Thus, at the sensory level, one person may say to another: "If you don't think it's snowing, go outside and see for yourself." On the level of reason, the mathematician may say: "Begin with this hypothesis, work out its logical consequences and see to what conclusions it brings you."

Having correctly followed Steps One and Two, the aspirant may become ready for Step Three: testing by the trained company of those well established on this third level of achievement. Should the aspirant decline to proceed through Steps One and Two, however, the possibility of his being accepted for testing by those who have reached Step Three will be considerably lessened. According to Wilber, Step Three of the transcendent realm is gained in precisely the same manner as in the two other domains:

Step One: Injunction as to how to perform.

Step Two: Illumination.

Step Three: Confirmation by a qualified teacher.³⁹

In Zen training the three steps are known as zazen, satori, and recognition.

Imagine now, a physicist who, rather than to the scientific community, presents this statement: "The whole universe is one and inseparable," to a Zen Buddhist sangha. Here his statement implies something radically different than it would to the scientific community. Here his claim is of direct, Step Three vision into his own "true, original nature outside all words and scriptures" (not to mention outside all electron microscopes and differential equations). In the Zen community, just as in the scientific, he will be expected to submit to Step Three testing by an accomplished master. Pass the test he well may, since there is no inherent contradiction between being an enlightened sage and a physicist. However, should he fail, Wilber concludes, the Zen community would be justified in declaring the physicist's statement to be no other than a controversial, conceptual scheme perceived by the eye of the mind alone and appropriate only to the realm of reason.

The community might add, in order to reach Step Three of the transcendent realm, the physicist will have to pass through Steps One and Two specific to that realm alone. Should he proceed to do so then, as described in the koan, perhaps he too may "leap from the hundred-foot pole" to a different order of awareness altogether.

³⁹ Ibid., p. 24.

Who am I?

Zen is unique in placing this first direct, illuminating insight called *kenshō* or satori, at the very heart of the practice. D. T. Suzuki called this first breakthrough, “the most startling event that can happen in human consciousness.”⁴⁰ In this context, enlightenment is considered to be a universal, human potential, in essence unvarying from one person to another but with many levels or depths. To deepen this first insight, a long period of patient, persistent practice is said to be needed. The more you practice, says Zen, the deeper will your realization become, endlessly. Too often the student, after his first realization, feels himself to have arrived. The seasoned Zen master then seeks to relieve him of this last illusion and to lead him resolutely on.

While many religious disciplines tend to explore the various horizontal levels of the journey, Zen inquires straight into the nature of the experience. Where, in some disciplines, one may be encouraged to see entrancing visions or to hear certain subtle sounds, Zen cuts to the root and asks: “Who sees the vision?” “Who hears the sound?” Right from the start it refuses to allow the assumption of a fixed, absolute “*I who hears.*” It neither denies or rejects the subtle realms of existence. It simply brings us back from our wanderings on these horizontal planes to a timeless, vertical path that cuts at right angles through them all.

Zen is not experiential. It could scarcely care less about the often fascinating side effects. Neither is it theoretical. Nor can it be said to be either inner or outer. It simply asks again and again: “Who is this experiencer?” “What was your original face before you were born?” When this “who?” is finally penetrated, everything then arises as one’s very self, a self that turns out to be all that is. Now there is only “what?” only universe—just so. Every moment becomes at once the last and the first, eternally.

Summing up

From the Pentagon to the small town school, our entire society is still caught in the bonds of the old Newtonian paradigm and like dolphins entangled in tuna nets, we suffocate for lack of air and freedom. Cut off

⁴⁰ D. T. Suzuki, *The Essence of Buddhism* (Kyoto, 1968), p. 7.

as we are from the enlivening mystery at our life's core, our task is to re-source. "May God keep us from single vision and Newton's sleep," cried William Blake.⁴¹ Like the heroes of Greek tragedies we are guilty of hubris and helplessly wait the fury of the aroused Gods. Not in the content of thought but in the very nature of thought lies the problem. We have become a race of addicts, addicted to mentalizing all things. Our higher priority will be to liberate ourselves from the strangling dominance of thought and return it to its proper place in the repertoire of our tools.

Heresy it may be but we will never solve the rational problems of our times by rational means alone. The best kept secret in any university is that no one can know reality whole in the terms we have been taught to think we can: that is, objectively. We have been misled into thinking scientific formulas reveal reality. They do not. The typical scientist still thinks that what can not be seen in his instruments and measured does not exist. But reality is what is lost, not found, by such methods. All the greatest scientists knew this: Einstein knew it, as did Schroedinger, Planck, and Heisenberg.

In his *Autobiographical Notes*, Einstein himself stressed his conviction that logic alone can never lead us to the laws of the universe; that what is needed is a higher intuition, something more akin to love.⁴² "The dismantling of the thinker," declares physicist Bohm, "yields energy that is whole, n-dimensional and compassionate. . . . In short, energy that is itself love."⁴³ "I believe quite simply that the new is upon us," declared Karl Pribram, ". . . that none of us will be untouched, for these models as they become understood will revolutionize every aspect of human perception, thought and behavior whether labeled scientific, religious, artistic or whatever."⁴⁴ "I don't see the exploration into consciousness as some sort of side exercise," said Buckminster Fuller. "I see it as a part of the absolute frontier of whether we are going to survive on this planet or not. Every moment is counting now."⁴⁵

⁴¹ G. Keynes (ed.), *The Complete Writings of William Blake* (London, 1966), p. 818, lns. 87-88.

⁴² In P. Schilpp (ed.), *Albert Einstein, Philosopher-Scientist*, Vol. 1 (New York, 1949).

⁴³ Quoted in R. Weber, "Field Consciousness and Field Ethics," *Re-Vision*, Vol. 1, No. 3/4 (1978), p. 21.

⁴⁴ From a lecture given in August 1978 at the University of California, Santa Barbara.

⁴⁵ From a lecture given in May 1971 at Occidental College, Los Angeles.

COURTOIS

Of all major religions, Mahayana Buddhism has kept alive in the Zen tradition its pragmatic, mystical core, passing its incomparable body of practical teaching skills and insight down from master to student for over 2,000 years. What has been suggested here is that the westward movement of Buddhism, and of Zen in particular, has not been an incidental matter. Rather, that its teachings stand at the heart of an incipient revolution in consciousness which promises to alter our lives and hence, our worlds, more profoundly than we can ever imagine. For the first time in history, the incalculable resources of science will be drawn within its influence as the harmony of the new models with the ancient teachings becomes increasingly apparent. Embarked upon our own journeys of return, we may better prepare ourselves for these changes. To paraphrase Christopher Fry, "Affairs are now soul size. Our enterprise is exploration into God, where no nation's foot has yet trod."