

cause it is a science of the global nature of systems, it has brought together thinkers from widely diverse fields of study. In fact, many scientists now believe that the theory of chaos may be as central to twentieth-century exploration as relativity and quantum mechanics.

In classical science, chaos was attributed to randomness, a freak of nature that science might one day understand and control. Classical examples of chaotic behavior include the dripping of a water tap, the turbulence of a river, the design of snowflakes, the unpredictability of weather, the fibrillation of the human heart. Now that chaotic systems are being mathematically modeled, we are discovering hidden patterns of order and beauty embedded in the chaos — the approach adopted by Gleick (1987), Stewart (1989), Feigenbaum (1978, 1979), Mandelbrot (1977), and Wilson (1983) in his development of renormalization. There is an alternative approach, developed primarily by Prigogine and Stengers (1984), suggesting that chaos is a precondition or stimulant for activating the self-organizing creativity inherent in all living systems. These two approaches may be considered complementary rather than opposed to each other.

What in fact is happening is this: advocates of many scientific disciplines are acknowledging that our universe, at all levels of existence, has a strange and amazing propensity that often comes to light most elegantly in dealing with irregularities and chaotic behavior. Feigenbaum Constants, named after the American physicist Mitchell Feigenbaum (1978, 1979), offer an intriguing example. In attempting to calculate movement in irregular or chaotic systems such as dripping taps or pulsating stars, researchers tend to encounter period-doubling, where the solution curve breaks into two directions, known as a bifurcation. On this first break, the curve can take on two values and for some time it will oscillate between the two. Further on, more bifurcations occur leading to what is known as a bifurcation tree. The rate of dividing or branching gets faster until an infinity of possible branches is reached. This point is often described as the onset of chaos.

In numerical terms, the critical value at which chaotic behavior begins is calculated to be 3.5699. The gaps between successive branchings become closer and closer; one finds that each gap is slightly less than one-quarter of the previous one, a ratio that tends to have the fixed value of $1/4.669201$. Feigenbaum also noticed that the rate of shrinkage between the prongs on the bifurcation tree is also close to a standard two-fifths of the previous one and calculated to the numerical value of $1/2.5029$. We are describing a phenomenon known as scale-invariance: as we examine the detailed nature of

the bifurcation tree, we discover within the detailed (deep) structure patterns which enable us to comprehend and understand the whole.

Feigenbaum initially came across the curious magic numbers 4.669201 and 2.5029 by accident while toying with a small calculator. The significance of these numbers lies not in their values but in the fact that they recur, again and again, in completely different contexts. It seems that chaos has universal features and that Feigenbaum's numbers are fundamental constants of nature. Thus, although chaotic behavior is by definition dauntingly difficult to model, there is still some underlying order in its manifestation, and we now have mathematical models that enable us to understand the principles that govern this particular form of complexity.

The theory of chaos draws together many strands of research on the complexities and irregularities inherent in nature. Gone are the days when the isolated building blocks were the main target of research and exploration. We now acknowledge that our universe cannot be broken down into a few simple elementary units of matter. Not only is that ultimate simplicity based on false assumptions, but it undermines the very creativity of life which requires complexity as an essential dimension of all living systems.¹⁷

* Today chaos has become big business. Peters (1991), Wheatley (1992), and Chorafas (1994) are all specialists of the commercial, business world who are encouraging their colleagues in commerce and finance to explore the possibilities for growth presented by a fluctuating, chaotic market. Arbuckle (1988) suggests that contemporary transitions within church life need to be understood and interpreted in a way that accommodates (rather than denies) chaotic dimensions. Hayles (1991) provides a fascinating and comprehensive review of how contemporary literature explores the metaphor of chaos. Around the world, mainstream institutions — political, economic, social, and religious — are scarcely able to hold together the chaotic forces that seem to threaten the very fabric of our "civilized" society. Chaos is all around us. Chaos abounds! (For a recent survey on chaos theory in a quantum context, see Gützwiler, 1992).

The major problem confronting us is not the chaos itself but our attitudes toward it. By and large, we *deny* its very existence, because we are scared of its impact. Why? Because we perceive and interpret its significance within an old paradigmatic context. Within the old paradigm, chaos was considered to be evil, disruptive, dangerous; it threatened the status quo of our patriarchal value system, and threatened our power as the managers of a hierarchical, orderly system. Within this paradigm, there was no room for deviation,

differences, disagreements. The shadow side was totally suppressed. Our linear mindset was neat and orderly, but so much out of touch with personal and planetary reality.

Denial, more than anything else, is what we use to subvert the potential creativity of chaos. We pretend not to see what is so glaringly obvious: old institutions and their accompanying values are fraying at the seams. But we continue to plaster over the fissures, hoping that some day the storm will abate and we'll return to "normality": full employment, proper balance of payments, elimination of crime, diminution of poverty, strong religious allegiance! No, we live in a different era; the old world order is collapsing, and as we approach a new evolutionary threshold, the chaotic forces are likely to intensify before they abate. Chaos will be around for a long time to come!

But, of course, is there ever a time in which chaos is not around? Perhaps chaos is as integral to order as conflict is to harmony and darkness is to light. Life is not about the dualistic either/or, but the integrative both and. We are more aware of chaotic forces at the present time for two main reasons:

- a. Our species and our planet seem to be undergoing a major evolutionary shift, and movements of this nature have never been smooth or easy, as is convincingly illustrated by Swimme and Berry (1992).
- b. We are emerging from a protracted era of masculine domination and control in which negative experiences like chaos tended to be suppressed. Consequently, we are now having to endure the massive eruption of repressed and submerged feelings, long subdued by repressive forces.

Learning to embrace the chaos, acknowledging its cultural and personal impact, and striving to integrate its effect on our lives, personally and collectively, are among the major challenges of our time. What makes the task so daunting is that most of the main institutions (of church and state) to which we look for guidance and support are unable to assist us in this endeavor. The institutions for the greater part are playing the old games of *denial and resistance*. Only when the changing consciousness reaches a more critical mass can we hope to (co)create institutions that will enhance rather than inhibit our evolutionary development.

In today's world, traditional scientific values such as determinism and predictability yield pride of place to *openness and creativity*. Instead of equilibrium, we seek *movement and imbalance* as being

"normal" states of being. Instead of trying to conquer and eliminate the negative, we try to comprehend and appreciate its *complementary role* for the positive. Finally, instead of the second law of thermodynamics, which predicts that everything in the universe is declining in a progressive, entropic deterioration, toward the ultimate destruction of a heat-death, we now realize that our universe is an open, creative system, capable of *self-regeneration over and over again* (which, in fact, may be consistent with other interpretations of the second law; see Pagels, 1985). Once more, we encounter the inescapable paradox: *in destruction life is redesigned; in chaos it is reformed; in death life flourishes anew!*

Being and Nothingness

Starhawk (see Fox, 1984, 135) describes the dark as "all that we are afraid of, all that we don't want to see — fear, anger, sex, grief, death and the unknown." We dread the dark and we fear the chaos. In the Western world, we tend to suppress pain and we shudder at the thought of death. We are scared of being alone. We have largely lost touch with our human vulnerability and, to a corresponding degree, with our planetary home, the earth.

We surround ourselves with all types of gadgetry and material acquisition to numb our senses against the reality of life. We seek to drown out our alienation with alcohol, drugs, sex, and hedonism. We try to keep life as full as possible, totally cluttered on the outside but, alas, a lonely empty shell within.

Contemporary writers such as Wilson-Schaefer (1987) and La Chance (1991) vividly portray the addictive trap which we humans have created in our world. Its central feature is an illusion of power and control which has become progressively compulsive, acquisitive, manipulative, and self-destructive. According to Wilson-Schaefer (7-8), this cultural/global addiction is based on a fourfold myth:

- a. The White Male System is the only thing that exists.
- b. The White Male System is innately superior.
- c. The White Male System knows and understands everything.
- d. It is possible to be totally logical, rational, and objective.

In our addictive commitment to power, we ourselves have become quite powerless, but like all addicts we vehemently deny and disown

that fact. We have become a dysfunctional species, codependent on forces that alienate us from them and from ourselves, because we ourselves have created and sustained that alienation. The very resources of life, intended to nourish and sustain us, are poisoning us through our cultural intoxication (see La Chance, 1991, 46). By polluting our water, we pollute our own unconscious. We do the same when we cough industrial filth into the air. The destruction of the soil community is the destruction of the community of which we are all members. When we eliminate a species, as we do by the thousand yearly, we diminish the vocabulary of our own unconscious. Because we are the conscious phase of the earth's process, everything we flush into the earth washes back to intoxicate us.

We are caught up in a spiral of power and powerlessness; the more we try to control, the more everything gets out of control. The only way we can break that cycle is to admit our powerlessness, but that would mean the collapse of the great Western empire that we have fabricated — and it is highly unlikely we'll agree to that. We are then left with the grim option of species self-destruction, which is manifested in behaviors ranging from the chronic toxification of the planet to the elimination of so many life forms, to our rabid nationalism, to our several forms of addictive consumption. Each of these is progressive and potentially deadly to our spirit, to our culture, and even to our planet.

We live in a dark age, but, alas, nobody wishes to entertain that notion. We are unable to befriend the darkness because our addictiveness and compulsiveness keep us firmly rooted in denial. The whole thing is too painful to look at, so we choose to befriend our pathology rather than befriend its deeper truth. And our denial becomes even more convoluted when people who are striving for personal integrity realize that the social and political structures are themselves addictive. This is where the real sinfulness is embedded, where the darkness assumes demonic proportions, as we'll explore at greater length in the next chapter.

The reader is left bewildered, wondering what to do about it. Where does one begin? Even to allow or enable oneself to become more aware is a step toward befriending the dark, which is the critical response needed to break the addictive cycle.

We dread emptiness of any type, and we dare not even think of nothingness. Yet, most of the known universe is made up of empty space, total nothingness, in the Buddhist sense of no-thing-ness. Most humans take for granted the vastness and emptiness of open space. To our mechanized, pragmatic Western consciousness, it is neither

of interest nor of concern. It doesn't earn us money, nor enable us to produce arms, oil, or motor cars. And yet, therein lies the paradoxical secret to much of life's meaning and purpose.

The emptiness is in fact a fulness from which everything emanates, what Coveney and Highfield (1991, 141–42) appropriately call “the seething vacuum.” And the fulness is not a neat smooth accumulation of life forces, but a boiling, chaotic conundrum of raw potential. When matter and anti-matter meet, physicists talk of “annihilation.” Actually, it is not annihilation, but a process of “transformation,” bringing into being a totally new reality (see Zohar, 1990, 207).

But let's not diminish the painful, destructive force; the transformation is a diminution, a dying, a dissolution, for the sake of something else, for the benefit of new life. There could be no “newness” without a painful termination of the old. Such is the mysterious interplay of life and death, chance and necessity, rest and activity, emptiness and fulness.

Salvation and Redemption

Many of the issues explored in this chapter tend to be treated in a fragmentary and partial fashion in orthodox theology. Notions such as “original sin,” “salvation,” and “redemption” explain away rather than explain the encapsulating mystery. Quantum theology offers a very different set of insights.

1. Creation is an unbroken whole, a totality within which everything — including darkness, chaos, pain, and suffering — plays an interdependent role.

2. Creation is essentially good and not *evil*. Original blessing rather than original sin characterizes life in its fundamental essence. Negative forces such as suffering, pain, and chaos ensue from the free, indeterminate nature of evolution itself. In Teilhardian terms, suffering may be understood to be the byproduct of an open and free creative process (e.g., the “waste” created in making a suit of clothes).

3. Much of the meaningless pain and suffering is directly, and often deliberately, caused by human beings. Daly (1988, 167) claims that the greatest and most meaningless sufferings ensue from human behavior, intensified by the conscious or unconscious desire to inflict pain on others. Nonhuman violence, devoid of this conscious malice, is more easily tolerated and integrated. If the human contribution to the world's pain was eliminated, or at least diminished significantly,

* the unconscious to be located in the *id* and thus emanating totally from within the individual person. It is, therefore, up to each individual to change and modify the instinctual forces by bringing them into consciousness under the guise and direct control of the ego. This was, and still is, considered to be the work of Freudian psychoanalysis.

Freud's influence on the culture of the twentieth century is largely underestimated. He is often depicted as a liberal thinker who brought sexual ghosts out of the closet of repression and encouraged us to ventilate our anger openly. Perhaps that was his intention, but what society extrapolated from Freud was his image of the sick, neurotic individual forever battling with the instinctual drives of passion and power. Proponents of original sin had a heyday with Freudian theory; so had all regimes which sought to justify oppressive measures of any type.

Jung never warmed to the Freudian image, and in fact spent his whole life striving to dismantle it. Even to this day, Jung is not taken with great seriousness — although scholars of many disciplines acknowledge the depth and profundity of his vision. Where Freud and Jung differ most radically is in their understanding of the human personality. For Freud, each person is a unique, independent phenomenon in his or her own right; the world is populated with *individual* (atomized, if you wish) beings. Underpinning the Freudian vision is the classical scientific claim that the whole equals the sum of the parts, and hence, the acceptability of Freud among mainstream scientists and theologians alike.

For Jung, people are unique, not in their own right, but in terms of the larger entities to which they belong. All of us are products of our relationships. Our very attempt to be independent is itself a statement of our mutual interdependence. And our interdependence is not merely interpersonal, but also planetary and cosmic, even in minute details. From this vision, Jung coined his notion of the "collective unconscious." He called it a *Grenzbegriff*, a concept used to describe something that feels very real but somehow beyond analysis or even description. (Kant used the same term to designate the concept of God.)

For Jung, the collective unconscious is a vital force permeating all creation; it contains both past and future, light and shadow, presently active in humans and in all created reality. It may be described as a type of ethereal energy, containing all the thoughts, feelings, and dreams of the past and all the hopes and aspirations of the future, even the evolutionary "aspirations" of the universe itself. It contains both good and evil, more as complementary rather than op-

posite poles, and its attraction or magnetism is toward growth and integration.

According to Jung, the reality of the unconscious represents the mysterious, suprarational within humanity and within creation, and this for Jung is as real, and merits as much attention, as the rational and observable. It is at this juncture that many colleagues of orthodox psychiatry and academic psychology part company with Jung, considering his taste for the spiritual and mystical to be unscientific, misleading, and even dangerous.

What I wish to adopt from the Jungian vision for the purposes of the present study is:

- a. the commitment to the greater totality (the quantum) as being the more authentic reality;
- b. the rejection of dualistic thinking and dualistic value systems, because dualisms misrepresent reality in its deeper meaning.

The Power of Dualisms

Dualisms are so attractive, and yet so lethal! They enable us to divide things up into neat constructs of opposing forces. Obviously, we all favor what we perceive to be good, and we begin to develop mental constructs, attitudes, values, educational systems, and political regimes which set us so defiantly on the pursuit of the good that we, unconsciously, adopt all sorts of strategies to eradicate the "bad." Every now and again, something reminds us that the negative is also part and parcel of life, which usually provokes us to activate yet another set of culturally learned reactions (defenses), first to deny what we perceived and, second, to bury it even more deeply in the personal unconscious. Unknowingly, we are driving ourselves mad, in a world that is already largely insane. Why? Because it has chosen to cut itself off from 50 percent of its essential nature.

Let's take the case (already cited) of an alcoholic, a person who, according to the medical/psychiatric textbook, is addicted to alcohol, a condition that cannot be cured, but can be remedied by eliminating the consumption of alcohol. We assume the condition to be an *individual* one and we label the condition "alcoholism." No matter how we try to understand the condition, the label takes on a negative, derogatory connotation. So do all labels ("schizophrenic," "manic-depressive," "homosexual"). Labels are also highly dangerous insofar as they provide a partial explanation of what is usually

a complex condition, demanding not one, but several frames of reference.

The traditional treatment for alcoholism involved hospitalization (drying out) and counseling. Often the recovery was remarkable and lasted, perhaps, for the rest of one's life, but not always! On returning to the social context of one's family or workplace, the old habit commenced again, or if it didn't, it recurred elsewhere in the social system, e.g., the spouse or another family member began to drink heavily, and not infrequently the pattern recurred in a subsequent generation.

Today the focus of treatment has shifted significantly. Even in orthodox medical circles, it is generally recognized that alcoholism can have not just one, but a range of significant meanings. The biomedical model is perceived to be too individualistic and mechanistic. Systemic factors have become quite central, especially the family unit, for which the alcoholic person may be serving the unconscious role of scapegoat. In other words, it is the family as a system that is sick, and within the intriguing dynamics of the family system, a vulnerable member has been loaded with the unresolved pain of the sick system. Hence the popular but poignantly true statement: "They drove me to drink."

It is when we refuse to deal with the sickness within the system that the problem recurs in all sorts of unexpected places, especially in subsequent generations, and even in the partners we choose as significant others. Healing, therefore, is mediated by addressing, not just the individual problem (which may not even need address at an individual level), but the whole system, for which the individual problem serves as a symptom, as a classic example of scapegoating. Only by healing the "family tree" can we hope to bring healing to the individual person. Hence, the increasing popularity of family therapy and systems therapy to address addictive behavior today.

What we are witnessing here is another shift from the mechanistic to the wholistic worldview, from the atomized (individualistic) approach to the quantum (whole) one. It makes so much sense, and yet meets with enormous resistance — for a range of reasons:

a. Our traditional mode of thinking is so deep-seated; we have turned individualism into such a heroic ideal that we shudder at the thought of destabilizing it.

b. In the systems approach, we are all called to be coresponsible and to carry the burden of our mutual deviation. That presents a totally unacceptable option for our patriarchal culture. Patriarchy of its very nature demands idols to be emulated and deviants that

stand condemned. Patriarchy thrives on dualistic divisions; it would crumble to pieces if it didn't have scapegoats. (In former times, women were classic scapegoats for our predominantly patriarchal culture.)

c. Our mechanistic, patriarchal culture cannot stomach too much vulnerability. Feelings, emotions, woundedness — and even positive feelings of joy, exuberance, and imagination — must not become public property. They are relegated to the private domain of the clinic, the surgery, the psychiatric hospital, the confessional, to be sorted out before they become too public. Our dominant culture today is fundamentally alienating, deceptive, oppressive, and immoral.

d. The systems approach invites us to acknowledge and own our darkness as well as our light. It invites us to integrate our fundamental goodness, but also our fundamental self-destructiveness. This is enormously difficult and very threatening to a culture that from the cradle to the grave is being brainwashed, through advertising and patriarchal propaganda, but also through childrearing, education, and social influence, to strive for a perpetual high of achievement and success. Little wonder we live in such an addictive society.

e. The systems approach seeks to confront our subtle (and at times very open) tendency to collude with evil rather than engage meaningfully with it. Western political systems and mainstream religious organizations are notorious for duplicity and collusion. Both Christianity and Islam morally endorse modern warfare (the just war and jihad theories). The British government proudly displays its National Health Service, which is effectively a National *Sickness Service*, with the national quality of health deteriorating all the time while annual health costs continue to rise. Governments all over the world give assent to helping Third World nations and add injury to insult by spending approximately ten times more on armaments than on food relief. Little wonder that our Western culture — along with its major institutions — is scared of systems analysis, wherein *all* are called to be accountable.

Integrating the Shadow

Jungian psychotherapy (and analysis) focuses very specifically on the integration of the shadow. Instead of splitting off the nasty bits of ourselves (and thus giving them power over us), we are invited to acknowledge and own those aspects of ourselves we would ordinarily

Sins of Our Time¹⁸

For the quantum theologian, the following are among the major sins of our time, needing urgent redress:

Biocide/Geocide

All the formal religions include suicide, homicide, and genocide among their major moral transgressions, with only scant or negligible attention to our destruction to, or neglect of, the earth itself and its various life forms. Legally and morally we seek to protect human beings, with legislation also intended to foster growth and development. Only in recent years have we begun to recognize that the resources of creation, on which we depend for life and meaning, also have a claim on our concern and protection. The political gestures made to date, particularly by the United Nations, on issues of environmental protection, fall well short of comprehensive moral responsibility; and in not a few cases Western governments ignore these guidelines to suit their individualistic self-aggrandizement.

On an international and global scale, the religions and churches are so anthropocentric in their moral teachings that environmental and ecological issues scarcely get a mention. We are still stuck in the anti-world polemic of being on the side of the sacred and, therefore, must not be contaminated by the affairs of the world. Such dualistic rationalization is untenable in the precarious world situation of the present time.

Specieism

Specieism is based on the conviction (rarely articulated) that we, the human species, have inalienable rights over the rest of creation and consequently can claim the right to manipulate and control universal life as we deem appropriate. We either ignore or deny the fact that Planet Earth herself — and the entire cosmos — is also endowed with life (of which we are an interdependent part). We also tend to ignore the fact that the cosmic evolutionary process predates our existence by billions of years and will outlive us by billions yet to come.

Specieism refers to the grossly exaggerated and highly destructive role we attribute to our human species. Implicit in this claim is the perception that we, at this stage in our evolutionary unfolding, comprise the highest possible form of creaturehood. In other words, we assume that we are the end of the evolutionary line, with

no possibility of a better or more enlightened being evolving in the future.

This sin often manifests itself as anthropomorphism: the tendency to understand, interpret, and absolutize various aspects of life (e.g., our images of God) according to our limited understanding of the human condition (see Guthrie, 1993). A great deal of scientific modeling — which considers the human mind to be inflexible and insurmountable in terms of future evolution — is affected by this immoral disorder. Even some theologians succumb to the anthropomorphic flaw, as indicated in the following quote from a contemporary, reputable theologian (Cupitt, 1988, 24, 26):

The old objective theological drama of creation, judgement and redemption is now hominized. It has become the drama of our own responsibility for creating our own future. Our life and our death are in our own hands... Salvation is full personal integration.

Dualisms

Dualisms are human fabrications of reality, designed to reinforce our human, addictive compulsion to conquer and control. Dualisms undermine the wholism and mystery of life; they present a false, divisive, and misleading picture. They encourage thwarted growth and development, always tending to project the "negative" on to an external scapegoat, and thus discouraging the integration of our personal, social, and cultural shadows.

Insularism

The sin of insularism has several familiar forms:

- personal individualism: always putting "me" first;
- tribal exclusivity: acting out of a false superiority in terms of family or business status;
- nationalism: rating my (our) national needs above those of the planet (and cosmos), and acting aggressively to defend my national "rights";
- time restriction: examples being our tendency to define civilization as a "post-Christian" phenomenon in a world at least fifteen billion years old, or our tendency to teach history in a manner that begets sectarianism, nationalism, and specieism;

- sexism and racism: two of the most obnoxious manifestations of the insular mindset, whereby we categorize and label people in order to exert destructive pressure or power over them.

Idolatry

Anything to which we are deeply committed can become a "god." Money, power, possessions, pleasure, scientific certitude, religious dogma are among the leading gods of our age. Insofar as none of these can bring us ultimate happiness or fulfillment, they are false idols. We worship them not out of love, but out of an unconscious need for power.

Many of the gods of formal religion are also false, in the sense that they are caricatures of our own perceptions. Even in the revealed religions (Judaism, Christianity, and Islam) we use *human* language and ideas to describe the Godhead, and then turn our humanized image into a divine caricature in the name of which we often carry out outrageously immoral acts of control and domination. The fact that two mainstream religions, Christianity and Islam, morally justify war (the just war and jihad theories), is evidence of a perverted religious ideology.

A recent Christian document, signed by Christians from various parts of the Third World, describes idolatry as the denial of all hope for the future. We become so locked into the religious/political/scientific ideologies of the past, that we prevent ourselves and others from addressing the pressing needs of the present and future. We become blind to the real world. In fact, we become "gods" unto ourselves.

Our world today is rampant with idolatry, specieism being one of the most pervasive manifestations. All forms of idol worship tend to be self-validating and self-perpetuating, resistant to change, and consequently deaf to the call to conversion.

Militarism

Modern warfare is largely a byproduct of the Agricultural Revolution, commencing about 8000 B.C.E. Armies and the general infrastructure of warfare claim to be the guardians of freedom and democracy. In effect, they serve now in subtle and devious ways what they set out to achieve at the dawn of the Agricultural Revolution: to conquer and divide the planet, at the whim of male, insatiable craving for power and domination.

Currently, the production, distribution, and use of arms absorbs more time, money, and energy than any other activity of the human species. As a species, we are engrossed — to an irrational degree — in lethal war games. Unconsciously, we are bent on self-destruction.

Today there is no justification whatsoever for warfare. It is an inheritance from bygone days that may have been appropriate then (that, too, is disputable), but in our wholistic era, it has neither sense nor meaning. Nor can we any longer ignore the grave moral and ecological side effects of modern weapons of destruction.

To reverse, or even diminish, our addiction to warfare is a huge moral challenge for the twenty-first century. It will take something of a miracle, probably a catastrophe, to bring about such a deep change of heart.

(Man) Power

The issue of power is closely related to warfare. Here I am referring to the use of power in a masculine, rational, competitive, and compulsive manner, leading to the subjugation of some people by others, and the notion that the earth (and cosmos) exists to be conquered and controlled according to human whim and fancy. In other words, human beings try to play God, assuming that in God's name, they will do what is best for all, thus failing to recognize that there is also a shadow side to the God-power, which often manifests itself in barbarity, crime, destruction, and warfare.

Injustice

The fact that our world is so blatantly divided between "haves" and "have-nots," the fact that the daily expenditure on armaments would feed the world's population for a whole year, that most Western nations give less than 1 percent of their GNP to developing countries are just a few of the flagrant structural sins of our time. Our world is riddled with injustices, and most of these are political and structural in nature, often initiated and sustained by greedy, insatiable Western multinationals.

The Christian churches, often caught in a collusive web with Western political oppressors, champion the cause of love, but rarely preach justice with comparable or compelling conviction. Love without justice, which is often the ambivalent message from the churches, is a charade which often leaves millions with neither love nor justice, care nor compassion, in their daily lives.

There is also an "eco-justice," or what Conlon (1990) calls "geo-justice," claiming our attention today: the painful reminder that we humans cannot live in dignity and freedom while we exploit and pollute our planetary home (see also Kroh, 1991). In the oft-quoted phrase of Theodore Roszak, we need to recall, again and again, that "the needs of the planet are the needs of the person and the rights of the person are the rights of the planet."

Blasphemy

Traditionally associated with taking God's name in vain, blasphemy today is evident in convoluted, pernicious activities, such as clergy blessing nuclear weapons before they are disseminated to bunkers around the world, or religious leaders, committed to simplicity and frugality of life, living in luxurious palaces. To invoke God's name to justify oppressive regimes is another example of this moral outrage.

Even in our largely nonreligious Western culture, we continue to invoke God's name (and blessing) on all sorts of politically and religiously deviant systems. It gives a veneer of respectability to what are fundamentally immoral or, at best, morally ambivalent consumerist and oppressive regimes.

These structural sins of our time create an immoral enigma of huge proportion, yet millions take them for granted and assume them to be inevitable consequences of "the way things are." While the major religions preach and admonish ethical and responsible behavior at a personal and interpersonal level, they largely ignore the massive structural and systemic caricature of gross immorality. How can people be expected to act and behave morally in a world so riddled with immoral incongruity? How can any of us hope to create a more just society when many of our major institutions (including religious ones) are riddled with injustice?

For quantum theology, morality is one of the most critical and engaging issues. Our value-free culture has largely become a value-less culture, or rather the values of insatiable power, manipulation, and hedonism prevail in ways that have become culturally acceptable (and often politically and religiously validated) but, nonetheless, potentially lethal for the future of life on earth. We pride ourselves in having drawn up an international charter for human rights, and in many parts of our world we have courts defending people's rights. Rarely do we emphasize the complementary value of duty. And without this complementary emphasis, our rights often become in-

struments for manipulation, to enhance our insular, anthropocentric concerns.

There is great urgency in drawing up a new international, global moral code, one that will strive to safeguard the interdependent nature of all life forces at the service of our evolving cosmos. It's not merely people who need moral values and guidelines. The planet also needs them and so does every institution and sociopolitical system that we humans invent. Without such guidelines, the shadow side of life (the tendency toward the irrational) is either ignored, i.e., denied, or reaps uncontrolled havoc, as is currently happening. In quantum terms, the purpose of morality is the integration of the shadow in all its various expressions, ranging from the personal to the global. Traditional morality often seemed to be unaware of the power of the shadow and alienated the darkness even further by labelling it as "evil."

Quantum theology believes that:

- the shadow is a real and powerful dimension of all life;
- we cannot eradicate or eliminate the shadow, and the more we try, the more power we give it over us;
- the shadow becomes a potential source for creativity precisely when we engage with it in a spirit of receptivity and dialogue, as we strive to integrate it into the rhythm and flow of life.

Consequently, quantum theology adopts as a key principle: Structural and systemic sin abounds in our world, often provoking people to behave immorally. To integrate the global shadow, we need fresh moral and ethical guidelines to address the structural and systemic sinfulness of our time. The formulation of these guidelines is as much a political as a religious obligation.

The morality called for in this chapter seeks to outgrow the dualistic distinction between church and state. All people and all institutions are coresponsible for a world order that enables and empowers people to live in a creative and responsible way with each other, with the planet, and with the cosmos. Morality is not the sole nor even the primary concern of churches or religions. It is everybody's responsibility, mediated through all structures and systems that impinge upon our daily lives. Only cumulative good will on the part of all is likely to address adequately the moral vacuum that poses such a threat to our world today.

Our moral sensitivity is heightened and our moral consciousness is sharpened when we acknowledge our mutual sinfulness, when we

learn to befriend the darkness that we all inhabit. In one degree or another, we are all tainted; in Christian language, we all have sinned. A precondition, therefore, for a more responsible and compassionate world is that we learn to forgive, beginning with ourselves and extending our forgiveness toward the many others we have hurt or used.

Many people today are disillusioned, some embittered, others apathetic, when they confront the plight of our world. We cannot undo or change the past; recrimination or bitterness is futile. Forgiveness is the only disposition whereby we can let the past be the past — in the deep, and often painful, awareness that it cannot be changed — and redirect our creative energy to a fresh future. Forgiveness is a liberating mode that promises hope and new life. We learn to trust once again and give of ourselves more fully to each other and to the universe.

Forgiveness opens up fresh possibilities. We begin to let go of old animosities. We acknowledge more readily our own limitations and those of others. (We tolerate inconsistencies without becoming complacent or indifferent.) And we are disposed to grow into that liberating and healing wisdom that respects the shadow side of life for what it really is: an essential incompleteness forever awaiting fulfillment, a fertile emptiness (a nothingness) out of which creativity yearns to explode. Such is the paradoxical nature of the great shadow, the ecstasy and pain of life which we are ever invited to embrace anew.

Part Six

The Light

*What immortal hand or eye
dare frame thy fearful symmetry?*

— WILLIAM BLAKE (referring to the tiger)

becomes holographically decoded, and the individual experiences a state of unitive consciousness with the entire universe.

The potential to be more enlightened people and relate to life in a more enlightened way seems to be largely unrealized. At this moment of our human, evolutionary unfolding, our capacity and need to become more enlightened people is evoking new ways of connecting us to the sources of universal wisdom. Meditation, of course, is an ancient wellspring of wisdom, but its popularity today among people of such diverse cultural and spiritual backgrounds seems to suggest that it is mediating something of immense significance for our times.

There are several methods or techniques of meditation. Following the great mystical traditions of our world, we could say that it is not we who meditate; rather, the divine life force meditates within us. Meditation is very much a matter of letting go, releasing the props, the attachments, the will to power and control, which has so dominated our Western mind and psyche.

The mystical mode of meditation is that of disposing oneself, in quietness and solitude, to the vibrations of inner power, especially the inner resourcefulness we Christians call "grace." In the East and West alike, there is a well-established tradition of *Centering Prayer*, sometimes called mantric meditation; the Jesus Prayer of the West and Transcendental Meditation from the East are among the better known versions. In this approach, the emphasis is on gathering together our scattered energies so that we may use them in a more creative and wholistic way. In the Buddhist tradition, there is a strong emphasis on concentration (especially of the breath) in order to bring the mind to the still point, whence enlightenment begins.

Matthew Fox (1983, 188-200) devotes considerable attention to the notion of meditation through *art*, a creative medium that unleashes repressed and unintegrated energies for novel use in more integrated living. In Fox's outline, art may be that of music, sculpture, poetry, or movement (dance). Modern psychotherapy often employs these approaches to help the client become more centered, focused, and integrated in behavior.

Finally, we need to emphasize that meditation is a natural birth-right, a potency awaiting realization within every human being. There is a danger today that we perceive meditation as a highly specialized skill (especially for religious freaks) that we can buy with money or learn from a textbook. We are in danger of trivializing this precious commodity which, although innate to the human psyche, needs tender and careful nurturing by experienced medita-

tors, whether spiritual gurus, creative artists, mystics, or spiritual directors.

As a means of enlightenment, meditation breaks open new horizons of light, hope, beauty, and truth. It reconnects us to the fundamental goodness upon which life relishes and thrives. It challenges us to inflame the true Light which ignites, enlivens, purifies, and sanctifies. It helps us to make that quantum leap of mind and spirit that compels belief in, and commitment to, an unfolding evolutionary process that is benign in its fundamental orientation.

In all the great mystical and religious traditions, light is an enduring and predominant symbol. In the major religions it is the most frequently used word to describe the essence of God (*Noor* in Islam, *Jote* in Sikhism). It denotes ultimate yearning and fulfillment (as in the phrase: "may light perpetual shine upon them"), the resolution of pain and suffering ("light in our darkness"), the presence of the divine in our midst ("the light has come into the world"), the sure pathway to truth and ultimate happiness ("follow the light"). (For further examples, see Eliade, 1965.)

In orthodox theology, light is not a topic of serious consideration like salvation, sacrament, God, or sin. Theologians seem to allocate it to the realms of the spiritual life or the mystical journey, thus underestimating its more universal and generic significance. It is often contrasted with sin, evil, and the powers of darkness in a classical dualism whereby light denotes all that is good and dark all that is evil. As indicated in previous chapters, this simplistic dichotomy belies the rich complementary value of both concepts.

The Sacrament of Light

Why are people so fascinated by light? What is its deep, archetypal significance for our personal lives and for our universal culture? Might it point to some ultimate state of completion to which all life yearns for fulfillment? Perhaps the Omega point is a fulness of light!

Eastern mystics tend to identify sound as the primal energy of life. Sound is considered to be the original life force out of which all else unfolds. Hence the Christian and Jewish idea: in the beginning was the Word (*dabhar*), the energy of sound. Many Eastern meditation techniques use mantras, not for their theological or religious meaning, but for the sound quality of the words. They believe that the regular use of the mantra realigns the meditator with the original

Chapter 13

Reaching toward Infinity

i We are, as the aborigines say, just learning how to survive in infinity.
—MICHAEL TALBOT

Where the telescope ends, the microscope begins.
Which of the two has the grander view?
—VICTOR HUGO

* There are moments where time suddenly stands still and leaves space for eternity.
—FYODOR DOSTOYEVSKY

In Christian theology, “demythologization” became a central concept for much of the nineteenth and twentieth centuries. It was an attempt to strip away the mythic elements in the scholarly pursuit of pure, *factual* truth. Applied to the Bible and other sacred texts, it involved the recovery of historical facts over against the literary or cultural trappings that created an impressive story but not necessarily true-to-life history. Events in the Gospels, such as the birth of Jesus, the miracles, and the resurrection, came under intense scrutiny, and in the absence of hard historical data were often considered to be theological fabrications of no real factual significance and, therefore, not deserving of serious theological reflection.

This trend, more fashionable in Protestant than in Catholic theology, emulated the rational, scientific consciousness of the time. Pure truth was based on observation and measurement, carved out by the human mind, whose basic level of intelligence was assumed to be the ultimate barometer of verification and veracity. In this context, myth was considered to be the product of a fanciful imagination which added color, and perhaps excitement, to the facts, but deviated from the true nature of reality. Myth was deemed to be a primitive, infantile instinct which, in a mature, rational, developed culture should be outgrown and discarded.

Meanwhile, scholars of a different intellectual pursuit — especially anthropologists, psychologists, and social scientists — were proposing quite a different way of viewing reality. Facts were deemed to be superficial impressions; the real meaning resided much deeper, in the subtle and often undetectable realms of consciousness. Of particular interest to anthropologists were the great universal stories of beginnings and endings, which occur time and again across human cultures. There were universal and deeper truths which could be accessed only through a quality of story called “myth.” Myth contained a depth and intensity of truth that no amount of scientific verification or rational thought could ever hope to explore.

All sacred texts — including the Christian Bible, the Muslim Koran, the Sikh Guru Granth, and the Indian Bhagavagita — are predominantly mythic in nature. This is what authenticates them as sacred texts. The historical facts are relatively unimportant; in themselves, they are incapable of eliciting or confirming genuine faith (belief). It is the myth that awakens the sense of numinosity, that evokes the spiritual energy, that empowers the person to respond to the divine urge (whether we consider that to come from within or from without).

Resurrection from the Dead

Among the better known mythic tales is that of resurrection from the dead. It occurs in many of the major religions in one form or another, and several examples occur in prehistoric belief systems. In the Christian Scripture, it provides the grand finale to the life and ministry of Jesus. “Finale” may be the wrong word, because, in fact, resurrection leaves everything open to fresh possibility, and the story of the Ascension in Luke’s Gospel (Luke 24:50–53), which is intended to get Jesus back to heaven after the resurrection, is yet another mythic tale with the motif of *closure* or *completion* as its obvious goal.

The historical facts of the Christian resurrection narrative are a subject of intense debate among biblical scholars and theologians. Basically, we do not know when, where, or how Jesus was buried, nor have we any concrete, historical facts or artifacts to verify his miraculous rising from the dead. What we do have is the life-witness of a group of disenchanted followers, so transformed by the *experience* (whatever that was) that they give their very lives for their Christian convictions and, second, a Christian culture of two thousand years numbering today 1.5 billion people spread throughout the