GLOBAL THINKING

—A Call for Reinvestment in Sacred Values—

Stephen Nachmanovitch and Abdul Aziz Said

1. We live in a time when we risk making our world uninhabitable. In times of danger, it is normal for us to look to some outside threat, to look for "causes." But in the situation we face today, we must look inward as well as outward. We are coming to realize that our whole approach to Earth's problems needs to be altered: even the best-informed and best-intentioned attempts to improve things often end up making them worse. The worldwide ecological crisis, of which the nuclear weapons threat is only the most obvious of many interrelated facets, is fundamentally a crisis of mind and spirit.

Our technological abilities are advancing exponentially with time. Our moral and spiritual abilities are not. In the course of evolution human beings have become the custodians of life on earth; but we threaten the very existence of life unless we can correct our own lopsided development. We might wish that we could press a magical button that would eliminate all weapons of mass destruction from this planet. But if we cannot change our own deeply ingrained habits of thinking, feeling, sensing, and acting that gave birth to those weapons in the first place, the weapons would be recreated in short order. By habit we think of national security in terms of military forces and capabilities. By habit we think that one people's interests can only be served at the expense of another. Such habits of thought become deeply embedded in our every day life as what we call "common sense." Our whole way of thinking and seeing such matters needs to be renovated from the inside out.

We ask here: What are the hidden, addictive patterns that we must confront?

2. Every person, every culture, operates a (usually unconscious) *epistemology*, which predisposes us to emphasize certain kinds of perception, learning, and action, and predisposes us to ignore others. Each of us is hypnotized from infancy on into perceiving the world in accordance with suggestions we have absorbed from the surrounding culture. At the core of any culture are tacit understandings about the nature of human aspirations, relationships to one another and to the universe, the source of ultimate authority, which are largely unspoken, untaught, and unquestioningly assumed. In industrial society these include something like the following:

- —Ultimate authority resides in the testimony of the physical senses and the reasoning analytical mind.
- —What is real (or at least what is important) is what is measurable.
- —Knowledge is primarily an instrument of power and domination over unpredictable and sinister forces of nature, and, ultimately, over social forces as well.
- —As individual persons we are separate and autonomous, predominantly seeking goals that relate to our physical well-being and self-gratification.

These elements of our epistemology, as well as other related, tacit understandings:

- (a) have been responsible for the great gains in material standard of living and the technological achievements of Western industrial society;
- (b) are now at the very root of the global dilemmas that have recently become apparent;
- (c) are now, because our survival is at stake, in the process of change.

"Epistemology" is usually defined as the theory of knowledge: it deals with questions like: how do we know? what do we know? how do we sort our perceptual input into categories like "knowledge", "opinion", "trivia", "nonsense", "hallucination", etc.? In the 1940's Gregory Bateson and Warren McCulloch transplanted this word into biology, because they realized that even a rat in a learning experiment "has" an epistemology, an internalized theory of knowledge that calibrates its perceptual biases. "Epistemology" thus becomes greatly extended in meaning to include, for example, the neural filtering that sensitizes a frog's eye to small moving dots that are likely to be flies—or the cultural filtering that sensitizes a person to believe or disbelieve in miracles, or in economic determinism.

We typically underestimate the power of belief and knowledge. Ideas such as "Christian love," "holy war," "the Aryan master race," "manifest destiny," "the chosen people," "the white man's burden," have shaped history. Belief in a now outmoded theory of evolution that stressed "struggle for existence" and "survival of the fittest" gave economic and political thinking in this century the moral imperatives of

STEPHEN NACHMANOVITCH, a composer, writer and computer artist, has lectured widely in the United States and Europe, on various subjects in the arts and the humanities, particularly on the spiritual underpinnings of art. His music and mixed media works have been performed nationwide.

ABDUL AZIZ SAID, Professor at the School of International Service, The American University, Washington, D.C., has written numerous books and articles on global politics. He is the coauthor (with Charles O. Lerche, Jr.) of Concepts of International Politics (Prentice-Hall). He has served in various capacities in national and international organizations concerned with global issues. He is Chairperson of the Center for Cooperative Global Development and President of The Center for Mediterranean Studies. Professor Said has been an active participant in Arb-Israel peace dialogues.

"social Darwinism." The use of physical science to generate new technologies has fundamentally impacted on our lives in ways so numerous and familiar as to scarcely require mention.

People from cultures that embody differing epistemologies will see reality differently. "The Sun's light when He unfolds it," wrote Blake, "Depends on the organ that beholds it" (Auguries of Innocence). Epistemology is the sieve through which we pass reality to decide! which realities are more real than the others.

Epistemology in action: A psychologist in the 1940's, using a tachistoscope (a projector that flashes images on a screen for only a tiny fraction of a second) shows American city dwellers a subway scene in which a well-dressed black man is attacked by a shabbily-dressed white man. The subjects report seeing a well-dressed white man being attacked by a shabbily-dressed black man.

Epistemology in action: A President of the United States is told by his advisors that to base his foreign policy on human rights considerations is "unrealistic."

3. The strength inherent in our rational, materialistic epistemology is the speed and efficiency with which we are able to master special-purpose technologies. The weakness inherent in that same epistemology is that we tend to ignore context and the long-term consequences of our acts. We create magnificent amenities to improve our lives and are then surprised to discover the harmful "side-effects": pollution, exhaustion of resources, starvation, and war.

In New York City in 1906 the horses were daily depositing 60,000 gallons of urine and 2,000,000 pounds of manure on the city streets. The invention brought in to clean up this pollution was: the internal combustion engine!

Jacques Prevert wrote: "The road to Hell is paved with good inventions."

Governments characteristically try to buy national security with weaponry: they arm themselves and cement "friend-ships" by arming other governments. The cause of armament (we leave out the profit motive for the time being!) is a desire for security. The effect of armament is greater insecurity, which leads to more and more armament.

This vicious circle of runaway feedback is the classical pattern of addiction. The addict is hungry for some intanglible, like love or contentment; somehow a material thing like heroin or chocolate bars or money has become falsely identified in the addict's unconscious epistemology as a substitute. So he consumes more and more substances whilst his real needs are progressively less and less satisfied.

Love, safety, contentment, and national security are contexts. Heroin, chocolate bars, money, and MX missles are things. Contexts and things are two different levels of reality. One level cannot substitute for another: this is the basic rule of epistemology established by Korzybski when he said "The map is not the territory." Bateson applied this rule to psychiatry and to the psychological roots of the ecological crisis when he showed that madness, in one form or another, is the likely result when we try to substitute one level of reality for another.

4. The thought-forms we predominantly use in academia, in governments and courts of law, in the press, in social planning, are modeled on Aristotelian logic. What we need instead are thought-forms that are structured in the same way

that our world is structured.

And what sort of structure is that? Take a look at one of those charts of the body's metabolic pathways that are always tacked up on the walls of biochemistry labs. What we see is an immensely complex network of loops which represent interconnected, interdependent chemical reactions whose products all feed back upon each other—a homeostatic circuit. There are no straight lines in such a chart, and to think in terms of "causes" and "effects" makes sense only if we cut out a portion of a circuit and treat it as though it were a whole entity.

We complicate problems of international relations due to our inability to perceive context and long-range consequences. Our information is always incomplete; natural, biological systems are always more complex and circuitous than our ideas about them.² Using lineal, cause-and-effect thinking to map a world that is an interconnected, interdependent network of feedback circuits inevitably leads to inappropriate actions that return to plague the inventors. Such thinking leads us to falsely regard the world as an object that can be manipulated rather than a home that must be lived in and with.

It is conventional now to think that ecological values are somehow in conflict with economic values, and that we are faced with an either/or choice between taking care of our environment vs. taking care of ourselves. But this is nonsense. The words "ecology" and "economy" are identical: they mean "study of the house" in Greek. They refer to house-keeping. The physiology of the human body, the complexities of family life, the network of global trade, and the infinitely varied and delicate interdependencies of the totality of life on earth, are alike in structure. There exists in Buddhist mythology something called "Indra's net:" an immense, multiply-interconnected latticework of jewels each of which reflects all the others at once—what we now call a hologram. This is a very accurate description of how our world really is.

5. In Darwin's theory of evolution, the unit that evolves is the organism or species. In Bateson's theory of evolution, the unit that evolves is organism-plus-environment. The horse does not evolve, the grass does not evolve; rather the system horse-plus-grass co-evolves.

We try to maximize U.S. "interests" and then wonder why our policies backfire or produce the opposite of the intended effects. The reason is that we are thinking in terms of an incorrect unit of analysis. A correct unit is nation-plus-environment, interest-group-plus-environment.

The equivalent (epistemologically false) unit of analysis at the level of daily life is the individual "me" or "ego."

Perhaps the main factor that gave rise to the dilemmas of modern civilization was the myth of body/mind dualism, matter/spirit dualism, and the associated concept of the person as an individual surrounded by skin, with a distinct inside and outside. In other civilizations, "progress" had been associated more with the perfection of the human soul within the wholeness of society and the universe. Early Christianity saw the individual as being born for immortality, born to go beyond himself, for, as St. Augustine stated, to be human is to be more than merely human. This also implies that to seek to be merely human, to maximize narrowly concerned human interests, is to fall below the human to the subhuman level, as the history of the modern world amply demonstrates.

Viable units of evolution are always expressed in terms that

involve wholeness, context, community. Self — other, me — environment, yield the big-self or true-self of Jungian psychology or of the various mystical traditions in Vedantism, Kabbalah, Christianity, Buddhism, and Sufism. Schools of mystical training or self-development the world over invariably involve a process of dissolving excessive identification with the little-self.

The world community is now threatened by the very mechanisms which, in the past, have served an evolutionary purpose, and, because humans did not until recently possess the technology to render their environment lethal, were at least evolutionarily tolerable. But now we have run out of room. The competitive mechanisms that are still taught as the subject matter of international relations cannot serve us well in a finite, spherical, homeostatically interconnected world. We have moved into a new context for humanity as a whole. We need to be committed to a world which includes everyone. This idea is alien or at best seems like a pipe dream to present-day national leaders who continue to look at the world in terms of a competitive epistemology. Whether this idea is regarded as "impossible" or not is itself a matter of epistemology. We know it is possible in practice because that is the way Earth's biosphere has been functioning for some hundreds of millions of years.

6. Since rational, materialistic epistemology came to define the direction of Western culture in post-Renaissance times (with roots going far back into antiquity), we have progressively denied the reality of those processes that relate (re-ligio) us to context and environment: namely art, dreams, religion, and other roads to the unconscious. Meanwhile, the conquest of the New World, Africa and Asia was bringing great wealth into Europe and creating a new mercantile society which saw in its power to manipulate the world the possibility of perfecting it in a material and economic sense. Parallel with this development, the role of the messiah in rejuvenating the Kingdom of God on Earth became converted into that of the revolutionary bringing about the perfect social order through revolutionary and violent means. Marxism, for example, is a Western religion based on the idea of inevitable material progress and merging messianic ideas with utopianism. However, such attempts at social change usually backfire, due to the inevitable narrowness of outlook. As Blake wrote duing the Napoleonic Wars:

The hand of Vengeance found the Bed To which the purple Tyrant fled; The iron hand crushed the tyrant's head And became a tyrant in his stead.

(The Pickering Manuscript)

Both Marxism and Capitalism (which are two sides of the same coin) tend to become exclusively preoccupied with material well-being, committing the epistemological error of mistaking the part for the whole. Both spiritual and esthetic matters are dismissed in these systems as archaic or disreputable or irrelevant.

However, just as we find that the naive materialism of the post-Renaissance centuries is not working out in the long run, things have begun to change in the direction of a more inclusive epistemology. With the rediscovery of depth psychology at the turn of the century (thanks to Dostoyevsky, Freud, Jung, and others) we have come to recognize the reality of the unconscious. We have begun to

recover some of the material that was lost from industrial culture. Now, towards the end of the twentieth century, we are discovering³ that the deeper we delve into the fundamentals of science, the closer they approach the fundamentals of many of the traditional mythologies and mysticisms. We are now coming to recognize the reality of the sacred.

Concurrently, biologists, historians and other scholars are developing an increasingly substantial foundation for the "Gaia hypothesis," which recognizes that the Earth itself is in fact a single living organism.

Perhaps no finding in the social and psychological sciences is so well established as the discovery (more accurately, rediscovery) that the greater portion of our mental activity goes on outside of conscious awareness. We believe, choose, and know unconsciously as well as consciously. Yet we typically live, think, and behave without taking seriously the implications of that finding. Our lives are probably more affected by the beliefs we hold unconsciously than by our conscious beliefs. The conscious beliefs (e.g. that the earth travels around the sun) may be changed by rather straightforward educational processes. More deeply held, partially conscious beliefs (e.g. that I am basically inadequate or unworthy) are not so easily changed, and their reexamination in psychotherapy often entails considerable inner struggle. Still more deeply held unconscious premises (e.g. about the basic nature of myself and my relationship to the universe) may be formed early in life and remain essentially unchanged throughout life; if they are altered it is likely to be in the context of a life trauma of major proportion.

We believe unconsciously; therefore we choose unconsciously. The unconscious choices are often in conflict with the conscious ones. The Freudian superego, an authoritarian inner parent, chooses certain behaviors and goals and punishes deviations with guilt feelings. Another part of the self, some sort of deep intuition, knows the directions of wholesome growth and development and gently guides these directions. Unless the various fragments of the self can be induced to align their choosing in the same direction, inner conflict is unavoidable. The person in whom an integration of the inner fragments is more or less accomplished we recognize as a person of integrity.

Research in biofeedback training discloses that we know unconscioulsy how to relax muscle tensions, change brain waves, alter heartbeat or blood pressure, change flow of blood and skin temperature—but we don't know we know without the feedback signal to instruct us.

We now find ourselves, as individuals, as nation-states, and as a species, involved in a period of intense and often bewildering transformation. The systems of government, production, culture, thought, perception, to which we have become accustomed and which have functioned for so long are not working. This presents us with a challenge: shall we cling to that which is passing, or has already passed, or can we remain accessible to, can we even surrender to, the creative process without insisting that we know in advance the ultimate outcome for us, our institutions, our planet? To accept this challenge is to cherish freedom, to embrace life, and to find meaning.

Freedom of the individual is not the ability to manipulate life. It is the ability to experience life as it is. The experience of existence is a reflection of Being which is beauty and consciousness. Freedom is that which makes this experience accessible to the individual.

7. In this discussion, "the sacred" is defined as any process that explicitly links us back to the largest possible context to which we belong.

Among the Sufis, who represent the mystical dimension of Islam, the most important daily practice or litany is called the *zikr*, which means "rememberance." This is not a bad name for the issue that here confronts us: remembering where we come from; remembering what we are, remembering what we are part of. Unity is never absent from us, but seldom realized.

The role of the prophet (in all of us) is then not the simpleminded notion of someone who can foretell the future, but rather someone who reminds us of what has always been there, bringing rejuvenation to the world around.

The *zikr* invokes a state of mind called *tawhid*, which means unity of existence, the direct personal experience of Reality, the grasping of our relation to the absolute, and maintenance of harmony with the universe. Invoking this unity does not deny the apparent existence of a multiplicity of created things. Multiplicity is due to single reality being filtered through differing points of view rather than to the intrinsic nature of things. The world is more than a collection of persons and things.

The same phenomenon appears in the Buddhist tradition. This is why in the Zen sutras it says that there is no attainment, and nothing to be attained. They make a declaration, a personal stand, in the Four Great Vows of Buddhism:

Sentient beings are numberless: I vow to save them. Delusions are inexhaustible: I vow to put an end to them.

The Dharmas are boundless: I vow to master them. The Buddha way is unsurpassable: I vow to attain it.

(Dharma, like tawhid, refers us to the overall harmony and patterning of the universe, to Natural Law in the broadest possible sense, or to the place and fittingness and obligation of each individual human being in support of that pattern. Gregory Bateson, when once asked to define "sacrament," said "Recognition of the pattern which connects." "Buddha," which translates literally as "the one who woke up," refers not just to a historical personage but to any human being in the state of mind of full awareness which means a person is dedicated to the support of the total patterning and harmony of our world).

Divine will functions in all phases of human history and in all aspects of human life. It is not relegated to the beginnings of creation as in 18th and 19th century Deism, but is eternally present and eternally integrated with human responsibility.

8. Our current research into the fundamentals of science shows increasingly the common ground on which science, religion, art, and philosophy stand. Our current discoveries of the tenuous nature of Earth's ecology and human stewardship of this world show the vital necessity of recognizing and reorienting ouselves to that common ground, reinvesting the sacred into our daily activity and reinvesting ourselves in the sacred.

Scientists of an earlier generation were guilty of overclaiming when they dismissed religion as pre-scientific theorizing about matters on which scientists would eventually have a later word, if not the last. To be sure, the religionists were myopic and vulnerable to criticism when they insisted that characteristics of the physical world—such as the relative positions of the earth and sun—should be established by holy writ rather than empirical observation. But the scientists, on the other hand, were equally narrow-minded in insisting that all the religious traditions of the world were based in illusion since the realm of human experience they took as central was not empirically verifiable.

9. We need to cultivate a vision for the development of our identity as a planetary species that is whole and cooperative. Cooperative global development means a multiplication of all possible dimensions of human life. A developed country is one where obstacles to human freedom, community, and creativity have been eliminated, or better yet, absorbed and transcended.

Individual and societal growth are one and the same; each person is part of this open-ended process. Development is conscious, participatory, self-managed, cooperative, and seeks the full humanization of the person. Culture is a resource. Culture can be a unifying force for cooperative global politics. Creation, in the arts, science, technology, and daily life, is essentially a communal process, a primary source of human realization. Creativity can replace conformity as the primary mode of political action. We need a profoundly healing vision of cooperative global politics. The distinction between First, Second, and Third Worlds is a dangerous illusion; there is only one interdependent world, and this is it. Oppressor and oppressed are united in their mutually addictive pattern, whether they know it or not. This is the only planet we have.

The material and spiritual worlds are one. We need to redefine freedom away from a purely individualistic doing of one's own thing, both for people and societies. The individual can no longer be seen as the victim of society. The goal of freedom, and of development, is human creativity, the enhancement and elaboration of life. Creativity always involves a certain amount of discipline, self-restraint, and self-sacrifice. Planning and spontaneity become one. Reason and intuition become two faces of truth. Propositional knowledge and anecdotal knowledge become the two faces of storytelling.

We envision a cooperative global economics based on love, sacrifice, and cooperation, supporting individual and communal self-reliance, fair distribution of the earth's resources, caring for the planet, and control of human destructiveness. In such a world global and personal concerns inevitably fuse.

Reinvestment of the sacred means the humanizing of the sacred: the destruction of idols, which are delusive belief systems. It also refers to the consecration of the human, the recognition that sacred activity is not separate from immediate, personal, interpersonal experience. Our being together on this planet becomes, then, a sacred day-to-day reality, and what we call God becomes human. This seemingly impossible process of transformation has already begun, though it is often hard to see the signs. The signs are waiting to be created by us, here, today.

- 1. DE-CIDE, from Latin de-cidere, to cut apart.
- 2. Godel's Proof (1929) showed that any system of logic can be either consistent or complete, but not both.
- 3. See Erwin Schrodinger, What is Life? (1967), Fritjof Capra, The Tao of Physics (1975), Willis W. Harman, An Incomplete Guide to the Future (1979), and Willis Harman and Howard Rheingold, Higher Creativity (1984).