The telephone, the transistor, and the home computer transformed the society by quantum leaps, driven by the extraordinary power of the enhanced connectedness made possible through the controlled channeling of electric current, and by the market forces such possibilities generated. Before that, it was the steam engine, the railroad, and the automobile, the harnessing of chemical and mechanical power.

The transformative effects on society of large numbers of people purposefully cultivating a more mindful and contemplative life are potentially as powerful, if not more so, than such technological advances in power and connectivity and the capabilities they give rise to. However, widespread adoption of contemplative "technologies" and their associated shifts in worldview will be very different, given their inner orientation and use of more subtle energies. For one thing, they offer scant opportunities for economic exploitation, which would be highly undesirable in any event. This does not mean that a widespread adoption of contemplative values and practices would not have profound economic and political benefits. I believe it certainly would.

In the past 150 years, human beings have learned to interact comfortably with machines and, in the past decade or so, with emerging information/digital technology. Many people are becoming computer literate on an operational level, and this skill is now being taught in the schools as fundamental to economic survival in the job market.

But, as a society or a culture, we have yet to come to grips with the profound and irreversible implications of such technological changes and their effects on the pace of life, the rate, amount and quality of information and images that human beings, even children, have to "process" in a day, the quality of our individual and family lives, the meaning and quality of our work lives and environments, and our greater political and cultural goals and social values to say nothing of our tremendous capacity for self and eco-destruction. All this technology, although itself potentially enhancing of connectivity and communication, is also alienating, intrusive, and isolating.
I would suggest that it is now time for society to turn attention to developing what we may call "inner technologies." The untapped potential of the human mind for individual and collective creativity and wisdom has to be intentionally cultivated. It needs training of a certain kind (for example, as found in many contemporary consciousness disciplines) if it is to keep up with the precocious challenges of our technological advances without losing all sense of value and meaning in our individual and collective lives.

An inner "technology," of which meditation in its most generic sense and most basic form (mindfulness) is the cardinal element, has the capacity to elevate our consciousness up to and beyond the challenges posed by our technological advances and harness them, as well as the power of the mind, for the greater good and harmony of all people and the planet. This capacity is built into a universal grammar of human psychology, I believe, just as our capacity for speech is built into our brain structure through a universal grammar/language instinct. Just as with language development, exposure and some training are needed in order to develop this capacity to its fullest extent. What is involved is basically a deep familiarity and intimacy with activity and reactivity of one's own mind, and some competency in navigating through our mind moments and emotions with equanimity, clarity, and commitment.

From my work in the field over the past 15 years, I see that more and more people are taking up or coming back to the practice of meditation and making it an integral part of their daily lives in a non-mechanical way. As they do this, and as they communicate about it more freely, they tend to develop a deepening understanding of its potential uses and transformative value, grounded in their own direct experience. Personal values, as well as behaviors, tend to change subtly or not so subtly each in uniquely personal but not describable ways. I see this inner process as an expanding view of what it means to be fully human, a planetary adult, both as an individual and embedded within a collectively shared, conscious, and continually interacting network (society or sangha).

In what follows, I paint an optimistic, if somewhat radical, scenario of the transformative possibilities for our era. I like to think that we are facing and are already unwittingly engaged in a very real opportunity for seeding a second Italian/European-like Renaissance in the United States at least, if not worldwide. I believe that we at least need to attempt to formulate a large vision of the possible and then work toward it incrementally; we should be careful, however, not to delude ourselves about potential problems with ambition or power, or about the potential resistance to any efforts to further a contemplative orientation in our society and its institutions.

A collective, continuously evolving vision of what we think we are doing and why, will serve us well as a resource of deepening clarity and motivation. Then, by paying careful attention to the details and making sure that our efforts reflect the wisdom and compassion which the topic of the
contemplative mind represents, we will be building the inner counterparts of the telephone/transistor/computer. I believe that the rest will, in some profound way, take care of itself.

Potential for a Second Renaissance

As I see it, a profound social/cultural revolution, or what I prefer to think of as a second Renaissance, is possible, at least in first and second world countries, if not globally. It is driven by strong currents of desire for greater meaning and fulfillment, health and well-being, leisure and comfort and the expectation of relative longevity that the past several centuries of technological progress in first-world countries has generated. The power of this strong inward longing in our society for well-being, meaning, and connectedness should not be underestimated.

The Italian Renaissance emerged out of a thousand years of relative cultural and social "darkness," fueled by a renewed appreciation for the sacred and a strong desire to integrate it into the domain of the human through new forms of art and architecture. And, of course, it was fueled by a scientific method based on confidence that careful direct observation and measurement could help elucidate the mystery of the work of God, as well as by explorations to discover new worlds (for plunder, trade, subjugation and religious imperialism). On the artistic and architectural side, it was driven in large measure by the creative impulse and genius of individuals, such as DaVinci and Michelangelo, whose work was well-funded by a small number of wealthy and enlightened patrons.

One might argue that conditions are ripe, at least in the US, for the beginning of a new and more enlightened and broad-based Renaissance - one which may well last for more than a few hundred years, and whose emergence may be far more rapid than its predecessor of 500 years ago, given the time acceleration of our day, driven by our speed-of-light technology and communications. The question for us now is how to further the emergence of such a profound and complex cultural transformation, which in some ways is already unfolding.

We will also need to ask, since the contemplative and the sacred have always been undercurrents of life in our society, why it is that such an emergence has not happened before. We will need to think about and anticipate what the present and future obstacles to such an undertaking might be. These are large historical questions that no one person can answer completely. However, refining our thinking about them through dialog which honors the work of scholarship, but goes beyond the scholarly, will be essential to the development of new models for social learning and social action along contemplative lines.

Up to this time, the question of how to live consciously (or religiously, in the old terminology) has been an arcane, scholarly debate. The challenge, I
believe, is to make it real within the conduct of our own lives through personal engagement and experimentation. It will also be important not to hide our personal involvement, but to let our efforts become known and resonate in larger circles of the society on all levels. In order to do this, our vocabulary, our thinking, and our efforts must transcend religion as we know it, with its historically parochial and sometimes evangelical and messianic interests, ideologies and hierarchies, so as to be a truly universal expression of the direct experience of the noumenous, the sacred, the Tao, God, the divine, Nature, silence, in all aspects of life and not conflict with our healthy affirmation of the need to keep Church and State separate, given what both Church and State represent.

Moreover, strange as it may sound, such a movement needs to avoid the human impulse to let this come about through the emergence of one particular person, who takes on the role of avatar, savior, messiah, charismatic leader, spokesperson, tempting as this is for many people. This has been the historical pathway by which the mega-emergences of the path of the sacred have manifested, through the major world religions and various cults. But the framing of a single person as the encapsulation of our understanding takes it out of the domain of direct experience and inevitably introduces a dualism and a lack of personal responsibility and engagement which create more problems than they solve. The same is true for the predominance of a single idea, ideal, belief system, or view of truth, or an us/them, enlightened/unenlightened, meditator/non-meditator mentality.

What Do We Mean by "The Contemplative Mind?" and How Might it Be Furthered in Society?

What do we mean by "contemplation" or "meditation"? For most purposes, the two terms are interchangeable: They refer to methods of disciplining the mind by focusing on a specific object of thought or by completely letting go of all thoughts and emotions, and just simply watching or witnessing whatever arises in consciousness. Such practice usually results in a growing awareness of non-attachment to the contents of our mind, with an increasing ability to exercise choice in how we use our mind. In practical terms, this usually brings about a greater sense of self-mastery, well-being, equanimity and reduced stress.

One might argue that the human mind itself has not been fundamentally affected by any of the technological breakthroughs of the past. It still functions at a relatively unsophisticated level of self-knowledge, awareness, and motivation, following a kind of lawfulness or universal grammar described by the Buddha and Buddhist psychology, the Upanishads and the Bhagavad Gita, and Jewish, Christian, Muslim, and Taoist teachings. Transformational change in terms of awareness and nonself-oriented, ecological motivation is possible, according to these teachings, but takes a certain kind of inner work, which involves training and, in some ways, taming the mind through the systematic cultivation of awareness and compassion. Generically, these teachings and their methods of training the mind are known as consciousness
disciplines.

There comes a direct, personal recognition of interconnectedness as the fundamental ground of being. This has a direct effect on how one sees oneself and how one relates to the rest of the world. Meditation practice is at the core of this orientation toward reality and its direct experience. So, to further the expression of the contemplative mind in society and an appreciation for the sacred, we must nourish the growth and dissemination of non-dual meditation in society in a context that is American, universal, nonsectarian, scientific, mainstream, and fun (in the sense of interesting, and as a compelling adventure or life quest).

It is important to point out that there should and can be no fixed form for this to happen. Meditative pathways, teachers, and programs cannot be cloned, although effective models might be adapted and modified, as has been the case in medical and educational settings with mindfulness-based stress reduction (see below). Appropriate forms and vehicles need to develop out of the personal contemplative experiences, meditation practices, and visions for what might be possible of the individuals who undertake to bring the contemplative dimension into mainstream life in society. These forms will have to interface in appropriate ways with the social terrain and be sensitive to professional, institutional, generational, and ethnic cultures and their values.

This work would be well served by establishing a small number of national centers for the in-depth training of a new breed of inventive and creative meditation teachers: for the most part, people who are already professionals in a particular area, hold other jobs, and who wish to introduce the meditative/contemplative dimension into their work and into their places of work. An understanding of the role of orthogonal consciousness and orthogonal institutions in this process is essential. Of course, the deeper their grounding and commitment to mindfulness practice before they undergo such specialized training, the better. Such centers will also conduct research and offer programs of various kinds, depending on their contexts and missions. Individuals who have received adequate training in such centers, and others who appear spontaneously, will establish second generation (F2) foci from which programs, scholarship, and diverse applications of the contemplative perspective to the lives of real people will emanate and spread further. These F2 centers need to be located for the most part within existing mainstream institutions such as universities, hospitals, clinics, medical schools, retirement and nursing homes (a very large and growing, receptive and in-need portion of our population), primary and secondary schools, college campuses, work environments, (particularly large corporations and factories), prisons, shelters, and churches of denominations that are receptive to this message. These foci will be "seeded" through spontaneous and chaotic pathways, and this process will take care of itself in important ways, I believe, if the proper conditions are met.

For one, we might note that there are many natural resources already in
existence in our society and its institutions which can be built on and which already have an orientation which shares elements, if not total orientation and motivation, with a contemplative perspective. Examples would be any programs that emphasize the value of relaxation and of the mind/body connection, such as the natural child birth movement, physical education and health programs in the schools, the parenting movement, the death and dying movement (including hospice work), sports at all levels (including world class amateur and professional athletes), corporate stress reduction programs, Alcoholics Anonymous and other spiritually-based 12-step self-help programs, and, in the medical arena, cardiac rehab, occupational rehab, physical therapy, and university health services, to name a few. Schools of nursing and schools of social work already have an orientation to a large degree as well, and constitute a very rich environment for further development and mainstreaming of contemplative practices.

"Holistic education centers," such as Omega, Interface, The Open Center, Esalen, Hollyhock, The Learning Alliance, The Learning Annex, and new ones perhaps not yet formed, will serve as complementary but as yet less mainstream venues and vehicles for the contemplative vision and its practices to spread, in arts and music as well as in other areas. They are already playing a key role in this regard in the society, as are more traditional and tradition-specific meditation centers nationwide, such as Zen Centers, Vipassana Centers, Tibetan Buddhist Centers, yoga centers, ashrams, and classes, Christian retreat centers and adult education centers.

The above catalytic efforts will need to be developed in tandem with well-conceived and well-funded research programs to evaluate various forms, approaches, environments, and short and long-term outcomes of such efforts with specific populations of people. Funding will come primarily from private foundations and individuals who are committed to furthering the vision by supporting centers, projects, and related research.

The media can play a critical role in the dissemination of meditative practices and the understanding and acceptance of them. Different kinds of contemplative programming, such as live, real-time, interactive (phone-in) meditation practice sessions/classes on network television (including PBS) and cable, and the development of CD Roms designed to deepen meditation practice, an understanding of contemplation, and the meaning and role of the sacred in real life are feasible, marketable (if form and substance are appropriate), and timely. Both electronic and print journalism, such as Healing and the Mind, The Heart of Healing, the work of Dan Goleman and of others can, has, and will play an extremely important role in changing the overall level of discourse and interest about meditation and the value of contemplation in modern life.

Having debated versions of a big vision of what we mean by "The
Contemplative Mind in Society" and what we think we are doing, we should also espouse the small-is- beautiful ethic, and work within a manageable operation framework, letting the catalytic aspects of the work take care of themselves, with judicious introduction of the paddle into the current at key moments. All efforts should aim at embodying the principles we espouse in our personal and professional lives and implementing the "Tao of Work" within our efforts.

The Cultural Impact of Meditation

It is interesting to note that meditation is a cornerstone, if not the entire foundation, for Buddhism in all its forms, Christianity (Christ's 40 days alone in the wilderness), and Judaism. It is also a fundamental ingredient in the Ornish Program, The Commonweal Cancer program, and our work in the UMass Stress Reduction Clinic. Even Spiegel's breast cancer replication study (and the original) has an element of it under a different name.

From a cultural/artistic perspective, mediation, primarily in its Buddhist formulation, underlies the work of the beat generation of poets and its on-going, broad based aftermath in America. Gary Snyder heads his own Zen Center, Allen Ginsburg is a Tibetan Buddhist and Jack Kerouac wrote a book on the life of the Buddha and was profoundly influenced by Buddha Dharma (see Beneath a Single Moon, Buddhism in Contemporary American Poetry, Shambhala, 1991). Alan Watts played an important role in the emergence and translation of Eastern understanding in the West.

Meditation in Action:

The UMass Experience and Where it Might Be Going

The establishment of the Stress Reduction Clinic at the UMass Medical Center in 1979 was a conscious attempt to introduce the essence of Buddhist mindfulness meditation practice and hatha yoga to patients with chronic medical problems in a university medical center within the mainstream of medicine and healthcare. We chose to position it as a part of "clinical behavioral medicine" and to structure it as a clinic in the form of a course designed to train patients in mindfulness and its applications in everyday life, including coping with stress, pain, and chronic illness. However, its basic mission was orthogonal from the start, in that we saw it as operating within an entirely different paradigm and consciousness from the larger institution within which it was embedded. From the outside, it looks like a clinic, bills like a clinic, operates like a clinic, but once inside, one gradually discovers that it is "rotated in consciousness" and operates out of very different principles and values from the overall mission of the institution (perhaps truer to the fundamental mission of the institution). For instance, its paradigm includes a model for the sacred quality of the encounter between a person as patient and his/her physician and health care team. Thus arises the principle that all patients referred to the clinic are encountered as full human beings and are
listened to and spoken to from the heart by the interviewer. In other words, the encounter itself is held in mindfulness and part of the work of the staff is to make their work part of their meditation practice and their meditation practice part of their work.

Some of what we have learned in the past 15 years:

· Large numbers of people with a wide range of chronic medical problems, diseases, and pain conditions are willing to undergo relatively intensive, experiential training in mindfulness meditation and its applications in daily life and practice meditation regularly over the short and long run. Over 7,000 people have completed our eight week clinic at UMMC, with approximately 85% referred by their physicians. Doctors are willing to send patients to such programs and are by and large very satisfied with the results.

· Poor, inner city, minority individuals under severe psycho-social/economic stress are also willing to undergo such training and respond enthusiastically to it when the program is present and supported in common-sense ways (i.e., free of charge, with on-site day care and free transportation when necessary). The program can be successfully delivered entirely in Spanish to non-English speaking Latinos.

· Hospitals and medical centers are ready to accept the meditation/contemplative model when it is presented as "mindfulness-based stress reduction." In the case of our medical center, we have extensive and vital research, clinical, and teaching collaborations with many different departments. Such interfaces further a gradual but inexorable shift in the overall culture of the institution and its mission in terms of both accepting and incorporating aspects of mindfulness into the practice of medicine and health care. It is now important for such models to establish themselves in hospitals and medical centers throughout the country.

· Bill Moyers helped enormously in the dissemination of our approach nationwide.

· TV captured the feeling heart of the work, and people apparently resonated with it in large numbers. Full Catastrophe Living (1990) and Wherever You Go, There You Are (1994)(Jon Kabat-Zinn) also functioned and continue to function catalytically to expand and deepen people’s understanding and acceptance of the relevance and importance of formal and informal mindfulness meditation practice. They also support people who wish to undertake mindfulness as a daily discipline, and people are doing this in large and growing numbers without the aid of formal institution-based programs to get launched.

· Health professionals in large numbers feel a degree of emptiness or limitation in their work and are turning towards mindfulness as the missing ingredient. As with lay people, they are coming to it through the media, through books, and
through word of mouth.

- People are now coming in large numbers (200 at a time, plus long waiting lists) to our professional training programs through the Omega Institute and are going back to their institutions and setting up similar clinics in hospitals and medical centers, as well as bringing the principles and practice of mindfulness into their own clinical work with patients and clients.

- The following is a partial list of places that have established clinics on the UMass model, offering mindfulness-based stress reduction, at the present time:

Abbott Northwestern Hospital (Minneapolis, MN), Arizona University Health Sciences Center (Tucson), Barnard College Health Service, Bedford VA Hospital (MA), Brigham & Women’s Hospital (Boston), Cambridge University Applied Psychology Unit (Cambridge, UK), Cancer Support Community (San Francisco, CA), The Clarke Institute (Toronto), Cook County Hospital (Chicago), El Camino Hospital (Mountain View, CA), Hackensack Medical Center (Hackensack, NJ), Hill Park Clinic (Petaluma, CA), Holy Name Hospital (Teaneck, NJ), Kaiser Permanente (several locations + clinical trial of efficacy), LDS Hospital (Salt Lake City), Newton-Wellesley (MA), Pittsburgh Rehabilitation Institute, San Francisco General Hospital, Santa Cruz Medical Clinic (CA), Sequoia Hospital (Redwood City, CA), St. Mary's Hospital (San Francisco), SUNY Syracuse Medical Center (NY), Texas Tech University Health Sciences Center, University College of North Wales (UK), Yale University Health Service and Inner City Programs.

Many of these programs are headed by physicians who trained with us. Some are actually subspecialists in cardiology or pulmonology with a deep interest and personal commitment to meditation practice. Most are in internal medicine and primary care. Others are nurses, social workers, and clinical psychologists. Many other programs and classes in mindfulness-based stress reduction are in existence outside of hospitals, in private clinics and through private practices nationwide. Some physicians in private practice have taken to putting some of their own patients into groups and teaching such programs themselves as an expanded element of what it means to practice medicine, recapturing the old Latin meaning of doctor as teacher. Research is built into many of these clinical programs. In Utah, it has already resulted in a successful doctoral thesis, and in Newton-Wellesley, in a published paper on fibromyalgia pain and mindfulness-based stress reduction.

- It is possible to succeed in introducing mindfulness-based stress reduction within a state corrections system, both for inmates and corrections personnel,
from superintendents to corrections officers. Short and long-term outcome studies, including effects on addictive behaviors, impulse control, hostility and violence, and recidivism are currently underway.

· Medical students are receptive to training in mindfulness-based stress reduction. We have had a program for first and second year medical students in place for eight years.

· It is possible for an elementary school teacher to introduce mindfulness-based stress reduction within a public school system as has been done in Mormon, Utah and have it be accepted, integrated, supported and adopted by other teachers and parents to an extraordinary degree. Her experience will become the basis for offering a whole new class of training programs for elementary and secondary school teachers.

· Perhaps most importantly, we are learning to work together as a team and to embody the principles and practices of mindfulness in all aspects of our work and in our interfaces with the medical center and the medical community. We call this "the Tao of work" and are intent upon letting our efforts flow more and more from such an orientation and upon redefining our general understanding of the place and function of work in our lives. This includes appreciating and tapping the unique inner resources of each individual team member, keeping work life in balance with other pursuits including family and contemplative practices, letting the work become one's meditation practice and vice versa, helping each other see and work on our rough edges and blind spots, and working with whatever comes up mindfully and compassionately, including hiring people, and, when necessary and unavoidable, asking them to leave.

Future Plans

· To establish a Center for Mindfulness in Medicine, Health Care, and Society at U Mass to serve as the new vehicle for furthering the dissemination of mindfulness in mainstream channels in medicine and medical education, health care, and education.

· To raise adequate funding to support a basic infrastructure for the center.

· To develop a communication and support network among all professionals delivering mindfulness-based stress reduction nationwide and worldwide, including a newsletter and e-mail network. This network would provide information and support for all people working in this new field, and would be a vehicle for drawing in new people and disseminating mindfulness-based stress reduction still further as the network expands.

· To continue and expand our professional training programs and to develop a textbook for professionals interested in setting up mindfulness-based stress reduction programs.
· To stabilize the inner city project and to conduct a national search for a person of color to run it.

· To pursue ongoing and planned research projects.

Present projects include:

Stage 1 breast cancer study U.S. Army

Psoriasis (mind and health) study Fetzer Institute

Prison project outcome study Mass. Department of Corrections

Cost-effectiveness of Central Mass. HMO

Stress Reduction Clinic

Planned projects include:

Psychophysiological effects of mindfulness meditation

With the MacArthur Network

Further studies of inner city clinic, concerning effects on domestic violence and job acquisition/mobility

Tao of Work study In collaboration with Bob Karasek
Jon Kabat-Zinn