Touched by the Goddess

Deane Juhan thinks and writes with an incomparable fusion of poetry, passion, hands-on experience, and scientific precision. Now, in Touched by the Goddess, an appropriate partner for *Iob's Body*, he turns his prolific brilliance to his favorite subjects, arguably the most important issues of our times. The results inspire and enlighten. Deane's writings contribute profoundly to our evolution as a species, and to the medicine of the future that is now upon us. Major pieces of this evolution and of this new medicine emerge from Deane Juhan's thoughtful and heartful exploration of the living substance in those who are fortunate to experience his skilled touch. Here you will find abundant 'food for thought' for everyone, from the medical researcher to the poet or philosopher. For those who use their hands to nourish their fellow beings, Deane's writings continue to be a source of priceless and practical insights into the miracles of life and healing in all of their dimensions.

JAMES OSCHMAN, Ph.D. author of Energy Medicine: The Scientific Basis

Deane Juhan, one of the most brilliant bodyworkers of our time, has written a fascinating new book which argues that bodywork is a social and spiritual force whose benefits extend well beyond relaxation and rehabilitation. I recommend it to all bodywork practitioners, their clients, and anyone who really wants to be inspired about the seemingly endless potential of new paradigm healing.

CANDACE B. PERT, Ph.D.

author of Molecules of Emotion: The Science behind Mind-body Medicine

THE PHYSICAL,
PSYCHOLOGICAL, &
SPIRITUAL POWERS OF

Bodywork

Touched

by the

Goddess

Deane Juhan

Barrytown
Station Hill

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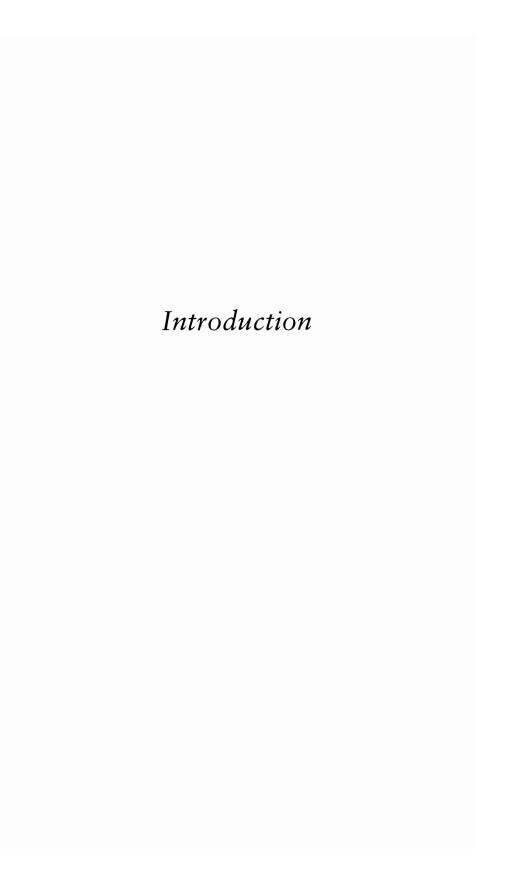
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Beyond Alternative Health Care Healing a Culture Out of Touch

Ever since I became a bodyworker in 1974 I have been riveted by the healing power of touch. After initially experiencing it as a pleasurable way of relaxing and relieving stress, I soon began to realize that it was far more than that. Investigating what was clinically known about the impact of touch on our organism's development led me to write Job's Body: A Handbook for Bodywork, an extensive study of our many physiological responses to touch.

During the last few years my sense of the power of touch has undergone another dramatic expansion. Its potency can be applied not only to physiological and psychological problems, but to interpersonal and social ones as well. My expanded sensibilities about these dimensions of healing touch have in turn led me to speculate what positive effects on the muddled relationships, ineffective social institutions, confused cultural values, and competitive spiritual aspirations we witness around us every day.

This collection of essays now in your hands is an extension of this inquiry. They first appeared in *Massage Magazine* during 1994 and 1995. Upon rereading them, I have been struck by the enduring—even heightened—relevance of many of their themes and speculations. Our world is certainly no less troubled, and our culture no less confused about issues critical to our peaceful and productive coexistence. I put them forward with the hope that in some small way they may encourage the revival in our collective lives of the sensually rich, personally gratifying, and therapeutically potent world of educated touch.

Bodywork of many kinds now occupies a firm niche in the arena of alternative and complimentary health care. Individuals in the United States spend more money out-of-pocket on

the alternative therapies as a whole than is spent on traditional medical treatment, and there is a growing recognition of the fact that the successful application of many of these sorts of alternative treatments significantly predate "traditional" medicine. Every year new discoveries and techniques are added to this large body of revived knowledge, and indeed the alternative field is currently the fastest expanding sector of our health care system.

This means that there are steadily growing numbers of people among us who are experiencing the palliative and educational effects of bodywork on a more regular basis. In my own professional community and among my own students and clients I have watched the emergence of wonderful latent personal qualities, a deepening (or even a birth) of tolerance and respect between individuals, moments of tremendous interpersonal insight together, and the kind of collective cohesion that encourages safety, mutual trust and support, constructive risk taking, honesty in expression and authenticity in action.

All of these developments are quite above and beyond any specific physical or emotional healing that is taking place in my sessions and classes, and they are increasingly focusing my interest. If these kinds of interpersonal effects operate on the small scale of sessions and classes, then their transference to larger and larger arenas may be entirely possible. And this would be a very good thing indeed.

What might be the cumulative effects of more and more individuals literally more "in touch" with their bodies, their lives and each other? What would a society look like, feel like, where a general suppression of nurturing contact was not the price to be paid for avoiding abuse, where it was understood that an adequate amount of touch is necessary to the health—and even the survival—of children, elders, sick people, lonely people, troubled people, people at large? What might it feel like on buses or sidewalks, in gatherings large and small, where people were more skilled in quiet boundary

negotiations, tolerant deference to the rhythms and style of others, supportive touches, helpful touches, consoling touches, and a mutual common concern that transcends their families and personal relationships? What pains and pitfalls of courtship and marriage might be avoided altogether if partners knew how to touch each other in genuinely supportive and gratifying ways? How might the rewards of parenting and the experiences of childhood be enhanced by parents who understand that the physical, emotional and intellectual robustness of all children rests as decisively upon their receiving enough nourishing touch as it does upon any other input or training? In short, what kind of a social world might evolve if nourishing, pleasuring, gratifying touch were both safe and readily available, and where the deep human needs addressed by that touch were more valued and more consistently met?

Touch as Food

The central galvanizing discovery for me when I was reading the clinical literature that led to Job's Body was the startling fact that no infant mammal can survive without enough tactile input. Zoo keepers and farmers have long been aware of this, and have conscientiously supplied that input if the mother could not. But there was very little awareness of such a thing in the general population, and the principle was certainly not applied in any systematic way to infant care and child-rearing in our culture.

It was not until extraordinarily high mortality rates of infants in orphanages (around 98%!) in the nineteenth century were investigated that the decisive role of touch for infant survival was recognized. These children were fed and sheltered, but handled minimally by overworked and understaffed institutions. When an inspired researcher added enough staff in one orphanage so that periods of affectionate fondling and interacting could be added to each infant's regimen, that mortality rate plummeted to normal averages and the children thrived. Later laboratory studies that isolated infant mammals confirmed that they all died of similar causes: eruptions of bladders or bowels. If the mother's tongue, or some caretaker's swab, did not stroke the new infant's skin, the infants were powerless to void these organs. In a word, they require tactile jumpstarting. Without the tactile stimulation, the autonomic reflexes are not initiated and established; without receiving sensation, the infants' nervous systems could not locate and operate crucial muscles.

Further surveys of human subjects revealed a whole continuum of deformities and maladaptations that hinge upon the amount of touch children received throughout their growth and development. Those that have received enough to survive their infancy, but no more, develop a spectrum of deformities called "deprivation dwarfism": stunted growth, misshapen skulls, distorted rib cages, crooked limbs, along with severe cognitive and emotional difficulties. The absence of enough touching actually subverts the successful expression of their genes. It is significant that these impairments mimic those of severe malnutrition during childhood. Touch for children is clearly a crucial form of nourishment, as important as food, water, or oxygen.

If a little more touch is available during growth, these severe physical distortions are prevented, but serious cognitive and emotional difficulties persist. More touch than that and these psychological symptoms manifest less and less severely, finally not manifesting at all for individuals who have had all the touching they required for their healthy development.

These kinds of conditions and results have been demonstrated repeatedly with a wide variety of laboratory animals. One of the most arresting extended experiments was one conducted by Harry Harlow, dubbed "Harlow's Monkeys." Infant monkeys were isolated from their mothers and given two kinds of surrogate mother: A cold wire-frame figure that dispensed milk from a baby bottle, and one that had been covered with soft terry cloth and warmed with an interior light

bulb but with no milk source. Harlow's theoretical assumption was that the warm cuddly mother figure would prove to be more attractive more of the time than the cold hard one with the food. What he did not anticipate was the overwhelming strength of that preference.

The infant monkeys would spend far more time with the cuddly figure, typically going to the wire one only as long as necessary to feed, and then hopping back into the other's soft warm lap. Some of them would even under-nourish themselves for the sake of their preference for the pleasuring and the sense of security unavailable from the wire food source.

Furthermore, monkeys that were given only the wire-bottle figure all exhibited extreme psychological problems and pathological behaviors as they grew. They huddled in a corner of their cage, mute and motionless for long stretches between hurried feeding episodes. They did not learn tasks well, or even interact with their handlers normally. They did not socialize with other monkeys if given the opportunity. If a strange object was placed in their cage their response was not curiosity, not even cautious curiosity, but either frightened hysterical withdrawal or exaggerated defensive postures that were sustained until the strange object was removed.

It would be hard to imagine a more dramatic demonstration of these young primates' instinctual need for tactile nourishment and support for their healthy development. And there can be no doubt that their responses reinforce the notion that all mammals, ourselves very much included, absolutely require these conditions in order to thrive.

Touch as Language

All these observations, and many more that have reinforced the robustness of the theory, are testaments to the necessity of touch for normal physiological and psychological development. What I have been fascinated with more lately are the implications of this information for human relations of all kinds, from our subjective relationship with our own bodies, to interpersonal relationships, larger social units and finally the culture as a whole.

Many of the chronic physiological problems and maladaptive behaviors evidenced by the stressed lab animals are very reminiscent of behaviors commonly observable in homes, schools, workplaces and communities. Children who are undernourished in this particular way tend to either withdraw into isolation or become unruly in an attempt to secure attention. This in turn generates social interactions that are far from optimal and that negatively condition these lives in an ever-increasing number of ways.

Such children tend to go on to become adults who have a muted capacity for self-awareness, self-regulation, personal intimacy, and generally adaptive responses to the naturally changing conditions of their lives. This is what I mean when I say "out of touch," and it leads to dangerous situations in which individuals are more vulnerable to chronic degenerative illness, chronic stress, depression, impaired performance the growing list of developmental illnesses and dysfunctions that are becoming more and more prevalent in our society. And it further leads to social interactions that are continually haunted and disrupted by some measure of the psychological distress displayed by Harlow's monkeys and that increasingly become motivated by the ache and the rage of deep needs unmet. It is a common observation in primate studies that apes who groom one another the most often are the ones that are the least likely to express hostility to one another. Is it unreasonable to speculate that the kind of damage caused by insufficient friendly physical contact may well underlie much of the violence in our culture that so far has eluded explanation or remedy?

One component of the positive effect of touch appears to be the stimulation of normal autonomic and skeletomuscular reflexes, the sensory "jump start." But another dimension of what makes the lucky infants thrive seems to be educational—information is being received about a great many important things through the medium of touch. Indeed, the scope of the information that is exchanged through touching is so vast and so detailed that we have to speak of *the language of touch*.

Physical contact, and the flow of interpersonal impressions that arise from it, generate a whole world of non-verbal, preverbal information and intelligence. Furthermore, this silent language is far older than the spoken or written word, and is shared in common across cultural and spoken language barriers the world over. And it communicates impressions that often have no immediate counterpart in verbal language. Frequently, in fact, the intention or personality of another person that I perceive directly through touch is at odds with their words and facial expressions. William Faulkner stated it powerfully:

Because there is something in the touch of flesh with flesh which abrogates, cuts sharp and straight across the devious intricate channels of decorous ordering, which enemies as well as lovers know because it makes them both—touch and touch of that which is the citadel of the central I-am's private own: not spirit, soul; the liquorish and ungirdled mind is anyone's to take in any darkened hallway of this earthly tenement. But let flesh touch with flesh, and watch the fall of all the eggshell shibboleth of caste and color too.

(Absalom, Absalom)

There is something in the experience of touch that is not merely sensory, but that is potentially revelatory as well.

To the degree that we have learned to do so, we all instinctually communicate with this language of touch in a wide variety of ways. Something as simple as a handshake reveals much about the character and the current mood of both participants, which is one of the principle reasons that it

has endured as an initial gesture of meeting and greeting. And there are hands held affectionately, loving caresses, punishing slaps, pats on the back or on the back of the hand, calming stokes, threatening jabs, reassuring squeezes, hugs of hello, hugs of good-bye, and on and on.

These kinds of examples are what might be called the vocabulary of interpersonal contact, the commonly shared meanings of specific conventions of touching. But just as in written language, this collection of conventional meanings is only the beginning of the possible depths of communication and mutual learning. The more we make contact with individuals, the more we realize that the manner in which they make these gestures generates a completely different stream of information about each of them, and about ourselves in relation to them. Beyond a vocabulary, there is a tonal dimension to touching, a direct embodiment and reception of qualities that are continually lurking beneath the skin, unspoken. Cumulative physical contacts with people builds for us a growing impression of who and what they are that goes far beyond what we learn from their words. Indeed, we cannot really "take someone at their word" before we have established enough nonverbal impressions concerning their intentions and authenticity. This is what used to be called "getting vibes."

Perhaps the richest source of touching for many people is their relationships with animals, either as farmers, trainers or pet owners. An elaborate communication evolves with animals just as it does between humans, and complex relationships are formed with no common language but touch to inform them. This context of interacting with animals points to a special dimension of this preverbal language. The communicative power of touch cuts across more than "the barriers of caste and color too." It is trans-species, and it connects many different kinds of animals to one another in ways that are recognizably similar from one species to another. And it also connects us to many other kinds of creatures in elaborate and mutually meaningful ways. No relationship can develop

until there is mutual knowledge about each other, and our relationships with the mute animals speaks volumes to the power of this alternate way of speaking.

Now, our culture to a large degree has come to regard "language," and even "intelligence," as the ability to manipulate various kinds of signs and symbols—words, numbers, formulas, images, and so on—and to accurately interpret them. This is primarily what education in our society focuses on, and so it is the only intelligence that "counts." But to the degree that we focus exclusively on the information developed by the written and spoken forms of human language—which are marvelous and indeed a domain of intelligence that is ours alone we ignore to our impoverishment whole realms of information, negotiation strategies and adaptive solutions that are the lingua franca of the rest of the animal kingdom.

Nature is not dominated by ruthless competition, "red in tooth and claw," so much as it is bustling with exchanges, ritualized threats and reconciliations, boundary negotiations, the evolving of hierarchies of social relations within groups and between groups, and a wealth of other interactions that keeps every niche in a more or less stable and relatively safe cooperative state. Posture, gesture, and physical contact make up a great deal of the vocabulary, grammar, and public record of these encounters and arrangements.

We have been educated in ways that ignore the collective wisdom of these "merely instinctual" behaviors. There are serious biologists who still maintain that no "lower" life form is endowed with intelligence at all. This definition of intelligence and meaningful purpose as exclusively human traits has serious negative consequences, quite apart from the unpleasant egotistical posturing that it fosters. It limits our focus to the only kind of intelligence that is exclusively human, and so cuts us off from any direct contact with the many other forms of intelligence that have evolved in all creatures since the beginning of biology.

To be sure, the intellect is a wonderful thing in many respects, and a well-trained one is more powerful than one that is not. Illiteracy is the cause of severe limitations. But growing numbers of learning theorists are recognizing that intelligence comes in many forms, that learning takes place in many ways and that there are a corresponding number of illiteracies. For instance, Antonio Damasio is a neurologist who has developed the concept of an "emotional IQ"—how acutely we are able to consciously experience our feelings, understand what they are trying to tell us, and respond to them effectively. It turns out that the successful management of our emotional states has a great deal to do with learning, recall, and performance of all kinds, that and this involves a completely different sort of "intelligence." Therefore our emotional reactions are not something that needs to be left at the door if we are to enter into a scientific understanding of things. They are themselves part of the data of biological processes that need to be accounted for.

The Case for Touch IQ

We have recognized these two domains of intellect and emotions in a crude way, and one that has been none too helpful to our society. Throughout most of our history we have assigned the intellect primarily to men and the world of feelings to women. These "specialties" have largely been culturally determined and enforced, with the effect that neither gender understands or thinks all that highly of the other.

"Men are from Mars, women are from Venus."

Touch can function as a bridge across this gulf of misunderstanding and mistrust. The sensations that are produced generate information, while the specific qualities of those sensations are evocative of feelings. Touch partakes of both domains, or perhaps more accurately, it sets in motion a larger, inclusive domain in which thoughts and feelings are equal players in a healthy and balanced organism. Many beliefs, conventions, and mores in our culture contrive to keep us out of touch with our bodies and our feelings in the immediate and literal sense of the word. Our creative imaginations have served us powerfully, and more and more we are pulled up into the cognitive and rational world which that imagination inhabits. More and more we learn to dwell in a "virtual reality" that has less and less to do with the actual biological needs of the organism that produces it. And worse, we become so immersed in that virtual reality that we often fail to anticipate—or even to notice after the fact—the dire consequences that many of the products of that inventive imagination turn out to have upon ourselves, those around us, and the environment as a whole. With many of the issues I am addressing here, we are not as much in a state of ignorance or denial as in a state of utter distraction.

This muddle is becoming increasingly menacing, and I have come to believe that these very issues are at the heart of the matter in our dislocated and troubled world. When we are not in touch with our genuine individual and collective needs, when we do not inhabit our sensory experiences intimately enough to accurately assess those needs, and when there are few contexts in which they can be fully met, then anxiety, isolation and dysfunctional behavior become more prevalent and problematical. And the problems that arise as a result are certainly not effectively addressed by the damage control that pharmacology or surgery provide.

The histories of the industrial, scientific and technical revolutions demonstrate that our inventive intellects are just as apt to create more efficient destructiveness as anything else—unless the heart is as consciously cultivated as the intellect, unless feeling is as valued as thinking, and unless we are in intimate contact with consequences.

We cannot hope that an industrialist will ever understand what he is doing to the Ohio River until he comes to understand what he is doing to his own blood stream. It is my conviction that bodywork—the conscious development of touch

IQ—can help bring much to bear in the sorting out of these dangerous insensitivities and damaging gaps in our awareness of ourselves and the world. Just as we required touch in infancy to survive, we require it throughout our lives in order to continually improve, or even to simply maintain, the quality of that survival and to continue to adapt to changing circumstances that constantly challenge our previous solutions and habits. We require it to be in full possession of ourselves and our lives.

Bodywork has come of age over the last century or so primarily as an adjunct to health care and rehabilitation. Quite naturally in this context, much emphasis has been placed on "fixing" things. And in fact a great many problems have been "fixed" with bodywork, problems that were not responsive to mainstream medical treatment. And of course I am thrilled every time a client reports a chronic pain alleviated, a healing process accelerated, a limitation resolved. This is the physiology of touch and the biomechanics of the organism, the things that absorbed me in the writing of *Job's Body*, and genuine contributions that hands-on therapies have to offer to the healing arts.

But it has come to be far more than that for me. Bodywork puts us directly in touch with biological intelligence at work in a living creature, and places us in the midst of their processes of learning and adaptive change with our focus heightened. It exposes us to all of the forms of intelligence that sustain all creatures. And from these vantage points emerges a whole new appreciation of how the critter works in all its dimensions.

And even beyond that, it plunges both participants into a world of mutually shared and verifiable subjective experience, and helps more than anything I know to recover those inner sensibilities that have been so damaged and crippled by the tyranny of the "objective" in virtually all of our learning experiences. And as these mutual subjective realities become

clearer and stronger, and are shared by more and more people, a whole new sense of self, a much bigger sense of self and interconnectedness begins to emerge. A sense of common purpose and mutual need arrives, that practical yet mystical union E. M. Forster was referring to with his motto, "Only connect."

For all its uniqueness and power, our intellect is simply not enough to maintain our health and sustain our survival. The world of sensations and feelings is not there to be either neurotically suppressed or hedonistically titillated and indulged. This world springs to life within us to teach us, to guide us, it announces changes that have happened or that need to happen in order to let us know when all is well and to help us anticipate what is next. And even beyond putting us in touch with our authentic feelings, compassionate touch has the power to form deep bonds based upon mutual need and mutual gratification. It is a resource that has been grievously devalued by our culture, and its absence may well be largely responsible for the many kinds of pain and limitation that manifest themselves on so many levels of our coexistence.

I

The Goddess of Bodywork

A rapid and exciting crystallization is occurring within the bodywork profession. The number of those seeking training and certification is growing exponentially. Alternative health care modalities are beginning to attract the interest of research facilities and government funding agencies. These are heady days indeed for those who have been working for decades in relative obscurity.

But this crystallization is not without its attendant anxieties. All such processes are fragile and uncertain in their initial stages, and as previously invisible elements precipitate into enduring structures, some decidedly undesirable characteristics may solidify into permanent shapes as well. Some state and local law-makers are making genuine attempts to responsibly recognize, select, and include therapeutic massage and other alternative modalities in their licensing and regulatory guidelines; others are simply sweeping all "touchy-feely" approaches into the legal dust-bins of prostitution or unethical counseling practices. Some physicians see the \$23 billion annually spent out-of-pocket in this country alone for alternative health care treatment as a positive indicator of future health care trends; others see it as a competitive threat that must be stamped out to "protect" the public from "unproven" and presumably fraudulent practices.

And the burgeoning bodywork community is itself in some disarray with regard to national collective issues. Many would prefer to remain in obscurity rather than confront the issues created by publicity, legislative interests, national standards, regulatory controls, and all the rest of it. Small massage schools and professional organizations fear the unspoken competitive agenda and potential clout of larger, more politically active ones.

Collectively we are only at the most rudimentary stages of a dialogue that would produce a solid conceptual framework and a vocabulary that will allow us to define our common principles and individual differences in a clear and systematic way. In fact, practitioners and teachers in many modalities strongly resist such definition and clarity because they feel that "scientific" analysis of this kind inherently undermines the crucial intuitive and non-verbal foundations of bodywork. Nor is the kind of record-keeping that generates scientifically meaningful data common practice among bodyworkers.

Modern medicine, with its emphasis on clinical research, pharmacology, surgery, and technology, has come to dominate health care because its successes have been dramatic, easy to see, and simple to understand in lay terms. Its practitioners have common goals, common vocabulary, and common procedures for both research and application. They work, for the most part, with a common purpose, one which they have all learned to define in similar and consistent terms. They are all animated by a common *archetype*, and they gather their efforts under a common icon—the serpent and the staff.

The serpent and the staff belonged to Asclepius, the Greek god of medicine, and his purview has changed little over the centuries. He is the *combatant of disease*, and his genius lies in the use of objective analysis to identify diseases, differentiate them from one another, and seek a specific cure for each specific condition. In his view these diseases are autonomous agents caused primarily by germs, viruses, toxins, or genetic flaws, and his method of attack is the categorization of causes, organs affected, nature of the disturbance, observable symptoms and carefully defined therapies to which they respond. His role, embodied by the physician, is to *intervene* between the patients and their diseases, with the view that once the disease is vanquished the patient will again be restored to normal health. He is the defender of the periphery, the aggressor against threatening incursions, a biological policeman. And of course, he is male, and has a special authority based upon special knowledge and expertise. He is a powerful and compelling deity, with many magnificent temples, dedicated priests and priestesses, and countless beneficiaries.

But Asclepius traditionally had a female counterpart—a colleague, a daughter, or in later versions a wife—who actively represented the *other* side of human developmental and physiological concerns. She was Hygieia, the *goddess of health*. Our oblations to her, and even our understanding of her scope and power, have been in a long decline. Naturally, we run to Asclepius when we are seriously injured or ill, and we give thankful homage when we are cured of our symptoms. But we have forgotten that health is something more than the absence of active disease. It is not a neutral, impersonal, self-sustaining state of static balance; it is a continual process of growth, learning, change, adaptation, compensation, and improvement. Unlike a cure, health has no clearly defined goal; it is open-ended, eternally unfinished, constantly challenged by changing conditions, always creating new levels of optimum performance and pleasure.

These blessings of Hygieia, while they are a birthright, do not fall into our passive laps. They have to be sought. The workings of the goddess have their own laws, their own disciplines, their own necessary ingredients, and their own consequences—all related to but quite different from those of Asclepius. The lifelong cultivation of health does not require aggressive intervention of special expertise of a higher authority; it requires the learning of simple but powerful principles, the nurturing of productive habits, the searching for new solutions to new problems before they become pathologies, and—above all—the active and intelligent engagement of the individual in the shaping of a vibrant and productive life. She is not the authority but rather the teacher, not the policeman but the social worker, not the plumber or redecorator, but the housekeeper and the consistent and timely payer of the organic bills. These are the concerns of Hygieia, and our homage to her is simply attending to them.

During our period of modern history when advances in surgery, drugs, and technology have been dramatic and life-saving, the active cultivation of Hygieia has fallen into neglect, while the strengths and appeal of Asclepius have captured the attention and public funding. And Hygiegia's disappearance as an active, vibrant element in our thinking and behaving is directly reflected in the conceptual and logistical gaps in many of our institutions—not just those obviously related to health care. Hygieia is the one who reminds us that pathology is a relationship—as biographical as it is biological—and not merely an intrusion of an autonomous germ. Hers is not a fixed and defined world of dualistic polarities (body/mind, health/disease, living/dying) but rather one of unification, inclusion, and dynamic interaction over time. Her concern is not with the agents of disease per se, but rather with the conditions we have created within and around ourselves which invite them. Hers is an educational and diplomatic, not a military mission.

As unfamiliar as they are to many these days, these principles are scarcely novel. Even Louis Pasteur, one of the fathers of modern pharmaceutical medicine, understood that the proliferation of the most virulent germ requires a supportive environment for its growth, and that "drugs cannot be effective in the long run until steps have been taken to correct the physiological and social conditions originally responsible for the disease." Disease is not something that can be ultimately separated and expunged from nature, because it is itself a natural process. Hygieia's strategy is not to vanquish the enemy—which often tears up a good deal of the native countryside as well as destroying the invaders—but rather to develop a biological context that effectively resists invasion in the first place, and that has strong initial lines of natural defense in the event of exposure.

The principles of Hygieia have been in silent and extraordinarily effective operation, even in the midst of the current ascendancy of Asclepius. In fact, a good many positive overall developments that are usually credited to surgery, drugs,

and technology have actually been the result of the quiet, invisible, and largely unnoticed work of Hygieia.

For instance, it has long been assumed that the dramatic drop in infant death rates and rise in life expectancy were largely due to the advent of germ theory and the clinical discovery of specific magic bullets to combat specific kinds of infection. But a closer look at the historical data reveals that both infant death and extended life expectancy began to make their dramatic shifts several generations before germ theory was established. The root causes were improvements in public sanitation practices, the reduction of early forms of industrial pollution, farming and food storage techniques that made fresh and untainted foods available to the public at large, the development of cotton textiles for inexpensive, washable undergarments, and other such advances made long before anyone recognized the existence or understood the mechanisms of the bacteria and the toxins that naturally thrived in unclean surroundings. These sorts of un-Hygienic conditions continue to be the primary culprits in impoverished and uneducated populations, even in the presence of antibiotics and vaccinations.

And, in the context of the current controversies about alternative forms of health care, it is well to remember that even after the clinical discovery of germ theory physicians were for a generation almost universally opposed to its more obvious practical applications. Simple sterilization of medicines, instruments, robes, bedding, floors, walls, doorknobs, and so on seemed to be an altogether too troublesome measure to take. And the suggestion that surgeons and physicians take great pains to disinfect themselves before treatment was met with the most umbrage of all—the very idea that they, the experts on disease and cure, could themselves be responsible for illness and death due to their own ignorance and negligence was simply not an idea capable of being seriously entertained. This Hygieia was clearly just another old wive's tale.

What can in truth be said about modern medicine—and this is not small cause for celebration and honor—is that it has been

extremely successful in controlling the kinds of diseases that humans have in common with all other mammals; the diseases, that is, which are associated with germs, toxins, genetics, and trauma. Against the diseases that are specifically human—those that are developmental, degenerative, chronic, psychosomatic, functional—the record is not so impressive; indeed is downright dismal. The killers that dominate our mortality statistics these days have nothing to do with germs or traumas. They are heart and cardiovascular conditions, immune system weaknesses and malfunctions, metabolic imbalances, connective tissue pathologies, cancers, peptic ulcers, and other acquired and habituated distortions of homeostasis and other natural processes.

"They are related," in the words of Irvin M. Korr, osteopathic researcher and theorist, "to the anatomic rearrangements associated with verticality and to man's incomplete structural and functional adaptation to the erect stance. The demands of gravity present man with peculiarly difficult biologic 'problems' which are only now beginning to receive systematic investigation. Primarily biomechanical in origin, they are problems in circulation, in distribution of fluids, in drainage of organs, tissues, and cavities, in the mechanical aspects of visceral function, in gestation and parturition, in the secondary effects on cellular function and metabolism and, most particularly, in the massive motor system of the body through which we act on our environment and express our very lives."

These are not problems that can be solved once and for all by any sort of intervention or procedure. They are ongoing developments whose elements and relationships change as we continually create changing circumstances in our growing, maturing, and aging processes. They can be successfully addressed only by self-assessment and self-regulation, active engagement and self-responsibility, the conscious intention to improve internal patterns and functions, and the development of a subjective sensibility that continually guides us towards more favorable operating conditions for the kaleidoscope of biological processes interactive within us. When we are learning these

things, and when we are applying their lessons to our own vitality, intelligence, and activity, we are under the effective tutelage of Hygieia, drinking the milk of her nature just as she nourishes the serpent of Asclepius.

It is surely no accident that bodywork as a profession is struggling to come of age and enter the mainstream of American health care at the same time that our current health care system is facing crisis, upheaval, and the need for substantial change. Much has been said, and a great deal of politics played, around the idea of "health care reform." But it is still a shame that even their efforts so far have been concentrated upon tinkering with the economics and logistics of what is currently available within the present system, as though rising costs, unnecessary tests, sloppy management, and redundant paperwork were the only—or even the major—factors preventing the average individual to enjoying improved health and performance.

Our profession has far more profound insights to offer, far more resources to mobilize, and far more cost-effective measures to bring to bear on the chronic and degenerative developmental problems. But the making of this contribution is wholly up to us. We cannot expect government agencies or the AMA to pound our doors in search of solutions that we have not clearly articulated, nor can we expect a public to bring consumer pressure to bear upon alternatives that they neither understand nor trust.

This is why the bodywork profession needs, in one form or another, to resuscitate and re-inhabit Hygieia's archetype, her guidance, her leadership. Common goals, common principles, common vocabulary and a shared sense of values and purpose are the things that lend unity, duration, and force to any collective human enterprise, and it is the special function of apt symbols and personifications to gather apparent differences together into synergistic activity. We now suffer from identification with quite another sort of archetype, that of the "intuitive"—even mystical—shaman-like practitioner, a cherished underdog status, the secret sweetness of esoteric truths and invisible, supernatural forces.

The profession will be much better served in the marketplace of ideas and action if we can remember that we are not engaged in an enterprise that is in any way "unscientific" or opposed to simple and demonstrable axioms. Nothing could create more confusion about our means or be more counterproductive to our ends than to engage in a debate about the values of science versus non-science. Hygieia is, properly speaking, simply the *other side* of medical science, the side which is primarily concerned with examining and redirecting the behavior of the host in the dis-eased relationship.

The fact that it is high time—past time—to resuscitate Hygieia has not completely escaped the notice of potential and powerful allies within the existing establishment. Not long after stepping down from his experience as Physician General, Everett C. Koop concluded that only marginal improvements in life expectancy and life quality were attainable given the current status quo. But if, he went on to say, Americans could somehow simply stop smoking tobacco, drink alcohol in moderation, eat more fresh produce and less fat, and exercise adequately, our national health costs could easily be cut in *half* within a decade.

The clinicians of Asclepius can tell us exactly what it is that is infecting and maiming us. And they can recite the physiology and biochemistry of what would happen if we were to take Dr. Koop's advice. What they appear to be powerless to do is to actually change the public' behavior.

This change does not require convincing scientific studies or dire warnings from voices of authority. What we need are increased sensory awareness for better self-examination, the opportunity to actually feel what it might be like to function better and feel better, and the active awakening of a sense of self-responsibility for the outcome of our actions. Continual self-engagement with my organism and its surroundings, and motivation to voluntarily adopt positive changes are the keys here. And these are precisely the contributions of Hygieia, nurturer of the serpent.