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From Healing Herbs to Deadly Drugs: Western Medicine's War Against the Natural World

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Most people in the western world conceive of "alternative healing" as a deviation from the norm. Modern western medicine, by contrast, is typically viewed as the culmination of a long, steady march toward progress and truth. Through a collective lapse of memory, our culture seems to have forgotten that modern western medicine is a relatively recent phenomenon and that most of what is now called "alternative healing" has been practiced for thousands of years throughout the world. Ironically, the true "alternative" is modern western medicine which represents the greatest deviation in healing the world has ever known.¹

At the heart of this deviation lies a dramatic transformation in our society's attitude toward the natural world. Along with this change there has been a drastic alteration in our conception of animals and of their role in helping humans to attain health. Perhaps, nowhere can this change be more clearly illustrated than in the changeover from one of the most ancient forms of healing to one of the most common forms of medicine today-namely, the shift from the use of healing herbs to the use of deadly drugs.

Herbal healing is considered by many to be the earliest form of healing.² It has been practiced by lay women healers for thousands of years and still remains the chief form of healing in most parts of the world. Women, in fact, have been the primary healers throughout history. According to World Health Organization figures, they still provide 95 percent of the world's health care needs.³ Their practices have grown out of a rich tradition of holistic healing. Sadly, this tradition has been destroyed throughout much of the western world. Women "healers" now typically fill the ranks of the nursing profession where they play a role subordinate to the (male-dominated) "scientifically" trained medical elite. One of their chief functions is the dispensing of chemicals and drugs that only doctors are permitted to prescribe. Drugs-not herbs-have become the major treatment for the sick. And women have become the major consumers (and victims) of such drugs.⁴

In order to comprehend the transition from herbs to drugs and the transfer of power from women to men that accompanied it, we must understand the worldviews out of which both forms of healing evolved.⁵ Herbal healing derives from a holistic worldview most fully expressed in matriarchal societies of the prehistoric world. These cultures regarded all parts of nature as interconnected aspects of a nurturing whole-the sacred Mother Earth. "Matter" (which derives from the same root word as "mother") was seen as a living being with a life force of her own. To use poultices, roots, and herbs was to trust in her healing energy and her vital force.

Women and nature were revered in these cultures and were seen as closely allied. Plants and animals were often depicted in close association with goddesses or seen as goddesses themselves. In every part of the world, a goddess was, at one time, invoked in time of sickness.⁶ Alternately, she has taken the form of a plant, a snake, a cow, a lion, a female guardian spirit, and later on, the Virgin Mary. In numerous cultures, from the American Indians to the ancient Hebrews and the Greeks, the snake has been associated with deities of healing.⁷ In the Judeo-Christian tradition, we see how far we have come from this earlier conception. Both a woman and an animal- Eve and the snake- are viewed as the source of all evil in the world.

The holistic philosophy of the early matriarchal cultures was reflected in a holistic attitude toward illness and health. The common premise of all holistic healing is the notion that the whole person, not simply their symptoms or their "disease," must be treated. Illness is not conceived as a single disease with a specific "cure" but, rather, as an expression of disharmony with the natural world. Both the inner "environment" of the body and the outer environment of the surrounding world are seen as an integrated whole.

The holistic tradition out of which herbal healing evolved honored not only the power of the body to heal, but that of the mind (or spirit) as well. Prayer, chants, incantations and other forms of ritual frequently accompanied both the preparation and the ingestion of herbs. Often, such ceremonies were seen as essential components of an herb's divine power, without which the healing process could not occur.

Healing was associated, in the early matriarchal cultures, with the life-giving capacities of women. The two main goddesses of healing, Hygea and Panacea, were also the names of the Great Goddess's milk-giving breasts.⁸ Our own word "nurse" carries this age-old association with women's life-giving, nurturing powers.

For most of human history, lay women healers have seen nature as their ally. Working with the substances of the earth and the body's own healing energy, they have sought to fortify health, not attack disease. Lay women healers have prepared ointments, poultices, herbal teas and baths to relieve pain and to help restore the body to health. They have provided contraceptive measures, performed abortions, and eased the pain of labor. They have washed sores, set bones, massaged painful joints, and performed rituals and prayers. For many women, knowledge of herbal preparations has been as common as is the knowledge of cooking today.⁹

Just as herbal healing rests upon a holistic world view, modern drug-oriented medicine derives from dualistic ideas. Whereas the holistic perspective honors the healing energy of the body and of the earth, modern western medicine is founded upon a distrust of nature and nature's power to heal. The history of western medicine is that of a long protracted struggle to conquer and subdue the vital force of nature; it is the attempt to render her inert. Significantly, in patriarchal cosmologies, it is the *logos* or the *nous* (the "word" or the "mind") which gives birth to the world, not nature or the Goddess herself, as was formerly believed. Increasingly, the vital force of life, including the power to heal, is no longer seen to rest in "mere matter," (the body or the Earth), but rather in the "rational," "scientific" (male) mind.

Two of the most important notions that contributed to the demise of the former worldview can be found in the philosophy of Francis Bacon and that of Rene Descartes. According to Bacon, nature could be viewed as a mysterious virgin whose secrets needed to be penetrated by the tools of science. Baconian science sought to discover "still laid up in the womb of nature many secrets of excellent use" that no man had reached before. The point was no longer just to know nature but to conquer and subdue her with the power of the "rational" (masculine) mind.

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The Cartesian world view carried the conquest of nature to its logical extreme-i.e., to the point of death. Nature, which was viewed as female, was relegated to an inferior and inactive realm, apart from "rational man." In contrast to the "vitalists," who believed there was an irreducible, vital aspect to all life, Descartes maintained that nature conformed to mechanical (chemical) laws. According to this view, nature was a machine, devoid of both rationality and soul. Animals, who were also machines, could experience no pain. Their cries of anguish upon being dissected were mere mechanical response.

The twin notions of conquering nature and of viewing nature as a machine have become the life-blood of modern western medicine. According to the modern, scientific viewpoint, disease reflects a failure in the body machinery. When disease strikes, it is the body's machinery that must be repaired. Whether the repair takes the form of surgery, a drug, or the replacement of "defective" body parts, such adjustments must be performed by those thought to have the necessary technology, expertise, and skill. The doctor and the doctor's tools alone can mend the failed machine.

Since the modern medical body is conceived as a machine, it is also thought to conform to Newtonian laws of cause and effect. Disease and ill health are thus seen to have a single, external "cause"- usually viruses, bacteria and other microorganisms. In order to restore health to the body, the offending agent need only be identified and rooted out. Typically, these enemy organisms are fought with chemical weapons forced from nature on another battlefield- the modern research laboratory.

This reductionistic view of the healing process has become so entrenched that it is difficult for many people to conceive of healing in any other way. And, yet, the concept of "one disease-one cure" (and one drug) is equally alien to the holistic view.¹⁰ In the holistic tradition, only a single disease exists- namely, an imbalance or a lack of harmony with nature, whether within oneself or with the rest of the natural world.

Today, drugs have become the primary weapon employed by western medicine in its war against disease. Rather than trust in the healing power of nature- i.e., poultices, plants, and the body's own healing energy- western medicine prefers to respond to the "affront" of disease with an assault of its own. Just as Bacon sought to "storm the bastions" of nature with the tools of science, modern western medicine has declared a war of its own. It is a war waged against the body and all of the natural world. Unable to trust in the healing power of nature, western medicine prefers to "penetrate nature" in order to produce "cures" of its own. Plants are no longer valued in and of themselves. Rather, the most powerful properties of plants must be isolated, extracted and then synthesized into chemicals and drugs. Nature is seen as a resource which is useful only when transformed by men's rational mind.

The human body has become the central battlefield in western medicine's war against disease. Thus, two of the weapons used in the "war" against cancer are nitrogen mustard and radiation, both weapons used during the last world wars. The terminology of warfare permeates the modern, medical world. Thus, we hear of the "war on cancer" declared by presidential decree in 1971. We hear, too, of "bombarding" cells with an arsenal of drugs and of "magic bullets" that "target" cancerous sites. Conversely, we often hear of our alleged enemies described as cancerous growths or other forms of disease. Most of all, we hear that the war *will* be won, provided, of course, that biomedical research scientists are given sufficient funds.

It should come as no surprise, however, that the "war on cancer" (and other diseases) has produced more victims than cures.¹¹ Indeed, the warfare mentality of western medicine has made medical casualties a routine part of our world. In the United States, prescription drugs have become a major cause of iatrogenic (doctor-induced) disease, causing more deaths each year

than accidents on the road.¹² "According to the FDA, 1.5 million Americans had to be hospitalized in 1978 as a consequence of taking drugs (which were supposed to 'cure' them of something or other). And some thirty percent of all hospitalized people get further damaged by the therapy that is imposed on them. The number of people killed in the U.S. by the intake of drugs has been estimated at some 140,000 each year."¹³ Drug therapy has become so routine that 60 percent of American doctors prescribe antibiotics for the common cold.¹⁴ Unfortunately, many drug "side effects" only appear after years of use, making it impossible to anticipate what such effects will be.

Meanwhile, the medical assault on our bodies is compounded by a chemical attack on another front- i.e., by the pesticides, additives and other chemicals and drugs that routinely pollute our water, food, and air. This massive chemical attack is wreaking untold damage on the "ecology" of our bodies and thus on our only genuine "defense" against disease- our body's natural immunological response.¹⁵

Faith in the medical profession has emerged largely unharmed by the prevalence of drug toxicity and drug abuse. On the contrary, most people now accord doctors the same reverence once reserved for priests delivering their sacraments to those who would be saved. And, yet, the veneration that today's doctors have come to expect as their due was only won through a long protracted struggle against all forms of healing that have not conformed to their own. The history of this battle takes us back many years.

Western medicine traces its scientific origins to the Hippocratic medicine of ancient Greece. Although this body of writing largely embraced sound holistic principles, it also contained the seeds of the dualistic mentality that later came to prevail. The theoretical conception of illness found in the notion of the four humors eventually led to the mechanistic notion of regulating disease and to the idea of forcibly driving (or draining) illness out. In Hippocratic medicine, the patient's symptoms were aggravated to the point of a healing crisis. Purgings, bleedings, induced vomitings and other "heroic" feats were some of the methods employed in this task. The notion of "aiding" nature had already led to the practice (by male physicians) of giving her a "helpful" shove. Meanwhile, witches and faith healers were branded by Hippocrates as charlatans and quacks.

It was not until the thirteenth century, however, that the attack on lay women healers became institutionalized. It was at this time that laws were passed requiring physicians to obtain licenses and medical training. Since universities were almost universally closed to women, lay women healers were, in effect, barred from the legal practice of medicine. There was, however, little in medical training or practice that we would recognize as "science." Medical students confined most of their studies to astrology, religion, and philosophy and read more of Plato, Aristotle, and Christian theology than medical theory. The heroic medicine espoused by the Hippocratic tradition had become the favored form of treatment for the sick. However, the purgatives used were no longer derived from plants alone but were also extracted from the far more toxic mineral world. The administration of mercury, lead and arsenic (along with blood-letting) had become routine practices. For centuries, physicians were too preoccupied with the correctness of their medical theories to notice that their treatments often caused more harm than good.¹⁶

Although it was the white, upper-class, male medical profession that, under the guise of science, ultimately wrested control from lay women healers, it was the church that initiated the first major blow. An estimated nine million people (mostly women) were executed or burned as witches between 1479 and 1735.¹⁷ Interestingly, one of the titles for witches was "herberia," meaning "one who gathers herbs."¹⁸ Often, the crime such

women were accused of was literally their ability to heal. This attack by the church was, at once, directed against the Goddess-worshipping religion which embodied a reverence for all of the natural world and against the peasantry which lived by this tradition and passed its knowledge on.

In order to comprehend why healing should be considered a crime, it is necessary to understand the church's attitude toward women and all of the natural world. According to the church, the vital, healing force of nature resided not within the earth, but rather, within a male, sky God. Disease, illness, and even labor pains, were all expressions of God's will. Only church-approved individuals (mostly men with university training and the priests with whom they were obliged to consult) could work within "God's plan."

While the church was wielding its attack against lay women, the field of science was slowly developing ideas that would ultimately pose a far more serious challenge. The fields of physiology and chemistry, which evolved in part out of the herbal tradition, were subtly supplanting this tradition by subsuming it into a "science." The herbal tradition was not, however, fully usurped by science until many years later. Herbalism continued to be practiced throughout the countryside by lay women healers. Even up until the 1800s, most people consulted herbalists when sick. Drug preparations consisted primarily of "crude plants- i.e., ground up leaves, flowers and roots, or teas, extracts and tinctures of them. Medicine and botany were still intimately allied."¹⁹ By the middle of the nineteenth century, at least in the United States and Europe, 80 percent of medicines used were still derived from plants. Today, less than 30 percent of the drugs used are plant-based.²⁰

Only with the rise of the large pharmaceutical industries in the late nineteenth century and with the increased faith in science did the "regular" physicians successfully defeat the herbal, homeopathic, and other holistic traditions. The would-be medical profession saw in the rising pharmaceutical industry an opportunity to bolster its flagging reputation through an increased association with technology and science. To their good fortune, the pharmaceutical industry saw in the "regular" physicians an ideal vehicle for marketing their new drugs. The pharmaceutical industries, thus, began an all-out campaign (which has been continued to this day) to convince the "regulars" to prescribe their drugs. At the same time, the medical profession began an equally virulent drive to discredit the holistic practitioners (i.e., the "irregulars") for failing to fulfill the requirements of a "science." Thus, the fateful marriage between western medicine and science was sealed and the future course of western medicine was set.

The rise to prominence of the "regular" physicians went hand in hand with the rise of an elite, white class of men. In the United States, the attempt to legitimize this class of physicians was brought about through the complete restructuring of medical schools. The famous 1910 Flexner report, commissioned by the Carnegie Corporation, resulted in the closing of scores of medical schools for failing to meet the new "scientific" criteria. The new guidelines were based upon the mechanistic and mathematical ideas that had begun to dominate the field of science in Europe. Course requirements were to include a thorough immersion in anatomy, chemistry, pathology, and physics. Approved schools were also to provide full-time research faculty as well as a solid, technological base- the modern research laboratory. Many of the schools that were closed for failing to meet these criteria had been havens for women and blacks. The "regulars" thus successfully attained their current status as an elite profession, fully "legitimized" by the mystique of science.

Today's medical schools are living monuments to the victory of "science" over the earlier holistic worldview. Students now emerge from medical school with myriad courses in chemistry and physics but not a

single course in the art of healing herbs. At most, the medical school graduate will have received one course in nutrition. He or she will enter the medical world with the faith of a true believer in the power of "science" (and drugs) to "cure."

The medical profession achieved ascendance over the holistic tradition largely because it was able to convince the public that their new drugs were the major factors in the elimination of infectious disease. The medical profession was, in fact, born of the germ/drug theory of disease on which it continues to thrive to this day. Although strong evidence suggests that most of the major infectious diseases declined most rapidly *before* the discovery of the much-touted vaccination programs and that there was no obvious change after the drugs were introduced,²¹ the medical profession continues to proudly proclaim this "conquest" as its own. Careful studies, however, point to the decisive influence of environmental factors- improved nutrition and cleaner water and air.²² Many of these improvements in health standards were the product of the Popular Health Movement of the 1830s and 1840s which was spearheaded by women.

Western medicine obstinately continues to deny the importance of environmental and lifestyle factors in the causation of disease. Even though it has been estimated that 80 percent or more of all cancers are attributable to environmental factors,²³ medical research continues to pour billions of dollars into finding magic (chemical) cures for this and other diseases. Approximately seventy thousand chemicals are presently in everyday use throughout the world with five hundred to one thousand new ones added to the list each year.²⁴ Our food is poisoned with pesticides and drugs and industries routinely pollute our water and our air. Research has also shown that meat-eating is a major cause of disease, not only due to the myriad chemicals and hormones that factory farm animals are forced to ingest, but also due to the high levels of protein, bacteria, cholesterol and fat that are found in meat.²⁵ And yet, the medical profession spends only a fraction of the health dollar on research into the prevention of disease.

One of the reasons for this skewed sense of priorities is that prevention is simply not a very dramatic thing to do. Western medicine is founded upon the notion of the heroic conquest of nature. To credit the environment or lifestyle with importance is letting nature steal the show. To concede that plants, exercise, food, and clean air may have more to do with healing than western medicine's arsenal of drugs is to remove the very foundation upon which western medicine is based.

Thus, industries continue to pollute our environment with toxic chemicals and drugs while medical scientists continue to refine increasingly potent drugs to "cure" us of the illnesses that our poisoned environment has produced; pharmaceutical industries bombard both our inner and outer "environment" with the equally toxic chemicals and drugs.

Western medicine's preference for the development and marketing of dangerous drugs over the earlier use of healing herbs is a direct product of its mechanistic beliefs. Rather than use the entire plant, western medicine prefers to isolate the plant's most active ingredients in order to develop a more potent force. However, in general, isolated and "refined" drugs are much more toxic than are the substances from which they are derived. (It is no coincidence that the word "pharmaceutical" derives from an ancient Greek word meaning "poison.") It appears that the combined properties of plants serve complementary functions providing safeguards that are missing when particular ingredients are refined and extracted from the whole plant. It would seem that the attempt to divide nature is a risky affair. To cite just one example: The foxglove leaf was used safely for thousands of years as an aid for those with heart problems. The drug "digitalis" was later isolated and refined and is now a standardized drug for heart disease. The problem, however, is that digitalis, unlike the foxglove leaf, is a deadly drug whose dosage needs to be carefully monitored. In its attempt to isolate the most powerful ingredient of the foxglove leaf, Western medicine replaced the earlier healing herb with a poisonous drug.²⁶

Nowhere has the warfare model of modern western medicine had more tragic consequences than in its treatment of nonhuman animals. Nonhuman animals have become one of the major victims in western medicine's war against the natural world. They are the basic fodder used by the medical war machine.

Sadly, most of the current medical dollar is spent on zoological research which studies not how to help humans get well but, rather, how to make healthy animals sick. Day in and day out, animals are cut, burned, poisoned, starved, shocked, gassed, and frozen- all in the name of science.

In many of the earliest cultures, animals were viewed as the guardians of nature's secrets. Today, laboratory animals are literally pierced by the tools of science in hopes they will yield their secrets to the modern rational mind.

Throughout patriarchal cultures, animals have been sacrificed to the gods in the hopes of attaining fertility, abundance and renewed life. Today, we are told that the god of Progress requires the same sacrifice of animal life. Significantly, researchers do not "kill" animals in laboratories; the word "sacrifice" is still employed. Behind the sacrifice of animals at the altar of science lies the ancient and tragic belief that somehow, if animals are killed, human beings will be allowed to live.

Although animals had been "sacrificed," dissected, and experimented upon for thousands of years, it was only with the advent of the mechanistic worldview that such experimentation became an integral part of medical science. Since, according to the Cartesian worldview, animals were mere machines and could feel no pain, the ethical issues involved in animal experimentation were easily excised.

Thus, feeling, caring, and intuition were successfully banned from the laboratory with the advent of the mechanistic age. The true scientific spirit was decreed to follow the dictates of reason, not the feelings of the heart. Western medicine thus set out to conquer not only external nature but inner nature as well. Biomedical research on animals continues to follow this ideal. As today's medical student cuts into a laboratory animal, he simultaneously cuts himself off from his feelings of connection with other forms of life. He "conquers" all feelings of love and compassion with the power of the "rational" mind.

Whereas the church justified the abuse of animals (and women) by the claim that they were lacking in souls, today's biomedical research scientists attempt to justify laboratory experimentation by the contention that nonhuman animals are lacking in "rationality." Once again, "reason" is touted as the quality that elevates humans above the natural world. Why "reason" should be viewed as the most important trait that a being can possess is never "reasonably" explained.

The human capacity to "reason" is, indeed, unique, as a glance at the thinking of animal research scientists shows. Thus, while researchers attempt to justify animal experimentation by the claim that animals are *different* from human beings, they also seek to justify it scientifically by "reasoning" that animals are *similar* to human beings. But, although animals *are* similar to humans in the important aspects of life- i.e., they feel joy, sadness, loneliness, and fear- their physiologies differ significantly from our own. Each species has a unique constitution and develops diseases and responds to drugs in very different ways. Thus, "penicillin kills guinea pigs. But the same guinea pigs can safely eat strychnine, one of the deadliest poisons for humans- but not for monkeys"; opium is "harmless to dogs and chickens"; "morphine, which calms and anesthetizes humans, causes maniacal excitement in cats and mice"; thalidomide, though tested extensively and "proven" safe in several species, later caused birth defects in the ten thousand children born to pregnant mothers who took this drug.²⁷

The stressful, artificial conditions in which laboratory animals are forced to live make generalization to the real life situation of humans an even greater leap of faith. Humans do not live in cages or germ-free environments; nor are their diseases induced by artificial means. A cancer or illness that grows organically follows a very different course from one that has been artificially induced.

The same faulty reasoning plagues not only medical research but product testing on animals as well. A large portion of animal experimentation cannot even claim to have lofty goals, consisting instead in the routine testing of consumer products including chemicals and drugs. None of these tests could be further removed from the actual conditions of the real world.

Of course, the ultimate experiment for every new drug occurs when it is ingested by human beings. A vicious cycle exists in which dangerous drugs are marketed because they "prove" safe in tests on animals; when such drugs then go on to produce illnesses and disease, animals are, once again, made the victims in science's search for elusive cures.

One of the major reasons that companies insist on using animal experimentation is the convenient legal alibi that animal research provides. When drug companies want to market a drug, they argue for the similarity between human and nonhuman animals. Conversely, when adverse reactions occur, they are quick to reply that animal studies cannot be applied with complete accuracy to human beings. The manufacturers of thalidomide were, in fact, acquitted on the grounds that research on animals could not reliably predict how a drug would affect human beings.²⁸

When legal restraints are lifted, drug manufacturers show where their true priorities lie. Many chemicals and drugs that have been banned in the United States are actively promoted in Third World countries, where drug manufacturers can more easily ignore their disastrous results.²⁹

Another reason for the continued existence of animal research and the drug industry is the profit motive. One of the perceived drawbacks of herbs is that they cannot be patented. Manufactured drugs, by contrast, produce billions of dollars every year. Likewise, animal experimentation is a multi-billion-dollar business providing enormous profits for the researchers, universities, breeders of animals, manufacturers of animal equipment, and pharmaceutical companies.

Since western medicine has left behind the tradition of healing herbs in preference for the development of toxic drugs, precise measurements and testing have taken on an importance that does not exist with herbs. Since, for the most part, herbs have a more gentle effect, there is no need for stringent testing. Herbs have, in fact, been tested for thousands of years, with the knowledge gained from such "tests" handed down through a rich folk tradition. Homeopathy, a close ally of herbal healing, provides an example of how different the concept of testing is within the holistic tradition. According to homeopathy, the best tests for the effect of a remedy are the ones that physicians perform on themselves.

Western medicine shows a preference for only those drugs that produce dramatic and visible effects. Due to its mechanistic and heroic orientation, it seeks a quick technological "fix" to restore the appearance of health. Even such emotional problems as grief, anxiety, and depression are now thought to have quick chemical "cures." This contrasts sharply with the basic principles of holistic healing in which the attempt is to improve health in a more profound and lasting way. Thus, in herbal healing, the best herbs are considered not those that produce an immediate, dramatic effect, but rather those that improve health gradually over a period of time.

Modern western medicine has sought to salvage disease from the untamed conditions of the natural world. Within the "controlled" setting of their laboratories, researchers have sought to replicate disease and to manufacture cures. But while medical scientists have been looking for "miracle" cures in their laboratories (apart from the natural world), the healing power of nature has continued to manifest itself throughout our lives. When we cut ourselves and our blood clots and our wound later heals with no outside help, we have seen its power at work. This regenerative life-force pervades every cell of our bodies. All of the various holistic or "alternative" practices attempt to affirm and work with this healing force. Different cultures have called it by a number of names. There is the *Prana*

of India, the *Chi* of China and the *Ki* of Japan. The very word *physis*, from which our word "physician" derives, refers to both "Nature" and to this "vital force."

Although many of us have lost our connection to this healing power, it is one that nonhuman animals still retain. Animals *do*, ironically, have something to teach us, but it is not a knowledge that can be wrenched from their bodies behind laboratory walls. Many nonhuman animals know instinctively what to do when ill. For example, a "wild turkey during the rainy season force-feeds her young with leaves of the spice bush; a dog with a digestive problem chews upon the witch grass to produce vomiting; a bear feeds upon the fruit of rockberry with relish while fern roots become his healing agent; the wolf, bitten by a venomous snake, seeks out and chews snakeroot."³⁰ "Cats and dogs purge themselves with certain grasses and lie in wet mud (a source of natural 'antibiotic') in case of snake or insect bites or other irritations."³¹ Wild animals will also naturally seek solitude and relaxation when ill.

Another example of "animal medicine" was discovered by a researcher in Africa. On certain days, he observed a group of chimpanzees traveling long distances in search of a shrub called *Aspilia pluriseta*. After carefully selecting particular leaves, the chimpanzees roll the leaves around one by one in their mouths, eventually swallowing them with a grimace. *Aspilia pluriseta* has since been found to contain a highly reactive red oil (thiarubin A) that is known to kill *Candida albicans* or *Staphylococcus albus*. In a nearby tribe it was found that the same species of leaf was consumed by humans to treat surface wounds, such as cuts and burns, and for stomach aches. People used the same three species used by the chimpanzees, but a species not used by chimpanzees was also not used by humans.³²

Did these people learn their medicine through their observation of animals in the wild? Very possibly this is the case. A number of commentators believe, in fact, that many of the earliest herbal remedies used by humans were based on such observations of animals in the wild. The American Indians, who watched bears closely in order to learn what they would eat both for food and for medicine, are a case in point.

But how do animals distinguish plants and roots that are helpful from those that cause harm? Perhaps the best answer we can offer is that they are guided by instinct or natural knowing. Humans also have such instincts although we prefer to call them intuitions when referring to ourselves. In all probability, these instincts or intuitions guided humans as well as animals in their earliest forms of healing.³³

Edward Bach, after whom "Bach Flower Essences" are named, provides a modern-day example of this phenomenon. Bach believed in using intuition as a guide to discovering the right plant medicine. These instincts or intuitions are our connection to the natural world and to the life energy that helps us to maintain health. In contrast to western, patriarchal medicine which aspires to be a science, such intuitive modes of healing resemble far more an art.

Unfortunately, most of this art has been lost to the modern world. Most of us have lost not only the actual knowledge of ancient healing practices but also the instincts and intuitions that formerly guided us toward health. We typically eat foods that are devoid of nutritional value and that contain numerous chemicals and additives that are harmful to our health. Similarly, we often fail to heed the subtle warnings that tell us to beware of dangerous pharmaceutical drugs.

Although western medicine's war against the body and against nature shows little sign of abating, significant signs of hope are also to be found. One source of hope can be seen in the growth of the animal liberation movement over the last ten years. Animal researchers compare the members of this growing movement to the Luddites who vainly smashed their machines in an attempt to forestall the modern, technological age. However, it is the very conception of animals as machines that the animal liberation movement seeks to destroy. The animal liberation movement,

therefore, does pose one of the greatest challenges to the modern, technological age and to the mechanistic conception of life.

Other signs of promise can be found in the growth of the holistic health healing movement. This movement is encouraging not only because of the number of "alternative" health care practitioners who are emerging and the number of people who are now turning to such practitioners for their health care needs, but also because of the knowledge of holistic health care that has reached the public at large. More and more people are incorporating meditation, herbal supplements, yoga and other holistic practices into their daily lives; for the true role of a health care practitioner is not that of a mechanistic "curer" of disease, but rather that of a teacher who can guide us in working with the powers of the natural world.³⁴

The wisdom of living in harmony with nature was possessed by our ancestors and is a heritage we would do well to reclaim. This wisdom embodies the principle of nonviolence so alien to modern western medicine in its war against the natural world. Holistic healing is a vital way in which we can honor this wisdom. By helping to integrate body, mind, instinct, and intuition, holistic healing enables us to live in harmony and ecological balance with all of the natural world. Along with the ecofeminist, environmental, and animal liberation movements, of which it is an integral part, holistic healing provides a formidable challenge to the violence perpetrated upon nature by the patriarchal mind. It is an antiwar protest of its own, helping to bring forth a world of peace and nonviolence for all living beings.

Endnotes

¹ For convenience, I have used the term "western medicine" to refer to the practice of "allopathy" which has become the orthodoxy of the medical world today. However, as I hope to show, western medicine is also heir to a rich tradition of holistic healing which it has yet to honor.

² Barbara Griggs, *Green Pharmacy: A History of Herbal Medicine*, Viking Press, New York, 1982, p. 6.

³ Quoted in Monica Sjoo and Barbara Mor, *The Great Cosmic Mother: Rediscovering the Religion of the Earth*, Harper and Row, San Francisco, 1987, p. 35.

⁴ Women constitute a disproportionately large share of the consumer drug market, particularly for mood-modifying and hormonally based drugs. (Kathleen McDonnell, ed., *Adverse Effects: Women and the Pharmaceutical Industry*, Women's Educational Press, Toronto, 1986, pp. 4-6).

⁵ For an in-depth history of women healers, see Dr. Kate Campbell Hurd-Mead, *A History of Women in Medicine from the Earliest Times to the Beginning of the Nineteenth Century*, The Haddam Press, Haddam, CT, 1938. Also see Barbara Ehrenreich and Deirdre English, *Witches, Midwives and Nurses: A History of Women Healers*, The Feminist Press, Old Westbury, NY, 1973, and Barbara Ehrenreich and Deirdre English, *For Her Own Good: 150 Years of Experts' Advice to Women*, Anchor Books, Garden City, NY, 1978.

⁶ Campbell Hurd-Mean, op.cit., p. 5.

⁷ Ibid.

⁸ Barbara Walker, *The Woman's Encyclopedia of Myths and Secrets*, Harper & Row, San Francisco, 1983, p. 420.

⁹ Griggs, op.cit., p. 89.

¹⁰ For an in-depth critique of western medicine's notion of specific aetiology, see Bernard Dixon, *Beyond the Magic Bullet*, Harper & Row, New York, 1978.

¹¹ A recent comprehensive assessment of cancer research in the *New England Journal of Medicine* conceded that "we are losing the war on cancer." (John C. Bailes, III, and Elaine M. Smith, "Progress Against Cancer?," p. 314 (May 8, 1986: 1231).

¹² E. W. Martin, Opening Statement, DIA/AMA/FDA/PMA Joint Symposium, "Drug information for patients," *Drug Information Journal*, II, Special Supplement, January 1977, 2S-3S.

¹³ Hans Reusch, *The Naked Empress*, Civis Publications, Milano, Italy, 1982, p. 12.

¹⁴ P. Stolley, et al., "Drug Prescribing and Use in an American Community," *Ann Int Med*, 76:537, 1972.

¹⁵ Evidence for the damage to our immune systems from this medical assault can be found in the unusual rate of increase of immune system related diseases as well as in the appearance of

many new strains of drug-resistant bacteria. Thus, although penicillin originally was virtually always successful in treating gonorrhea, there are now strains of gonorrheal bacteria that are resistant to penicillin throughout the world and 90 percent of staphylococci infections no longer respond to it. (H. Smith, *Antibiotics in Clinical Practice*, Pitman Medical, London, 1977; Marc Lappe, *When Antibiotics Fail*, North Atlantic Books, Berkeley, 1986, p. xii).

¹⁶ For an in-depth critique of how western medicine's reliance upon rationalist doctrine, accompanied by an antagonistic attitude toward disease, has impeded the development of a lay-based empirical tradition in which nature (not the doctor) is seen as the true healer, see Harris L. Coulter, *Divided Legacy: Vol I: The Patterns Emerge: Hippocrates to Paracelsus; Vol. II: Progress and Regress: I.B. van Helmont to Claude Bernard; Vol. III: Science and Ethics in American Medicine, 1800-1914*, Wehawken Book Co., Washington, DC, 1973-77.

¹⁷ William Woods, *A Casebook on Witchcraft*, G.P. Putnam & Sons, New York, 1974, p. 26.

¹⁸ Walker, op.cit., p. 1076.

¹⁹ Andrew Weil, *Health and Healing*, Houghton Mifflin Co., Boston, 1988, p. 97.

²⁰ Richard Grossman, *The Other Medicines*, Doubleday and Co., New York, 1985, pp. 86-87.

²¹ See J. McKinlay and S. McKinlay, "The questionable contribution of medical measures to the decline of mortality in the United States in the twentieth century," *Milbank Memorial Fund Quarterly*, 1977, pp. 405-28. For research on England and Wales, see T. McKeown, *The Role of Medicine: Dream, Mirage, or Nemesis?* Oxford Press, Oxford, 1976.

²² Ibid.

²³ John H. Knowles, M.D., "The Responsibility of the Individual," in *Doing Better and Feeling Worse: Health in the United States*, John H. Knowles, M.D., ed., Norton and Co., New York, 1977, p. 63.

²⁴ U. S. International Trade Commission, *Synthetic Organic Chemicals: United States Production and Sales, 1985*, U.S. Government Printing Office, Washington, DC, 1986; The Number of Chemicals in Use from "The Quest for Chemical Safety," International Register of Potentially Toxic Chemicals Bulletin, May 1985; Number added annually from Michael Shodell, "Risky Business," *Science*, 1985, October 1985.

²⁵ According to a report in "Diet and Stress in Vascular Disease," *Journal of the American Medical Association*, "A vegetarian diet can prevent 97 percent of our coronary occlusions." (Vol. 176, No. 9, June 3, 1961, p. 806). For more on the health hazards of meat-eating (as well as its other adverse effects), see John Robbins, *Diet for a New America*, Stillpoint Publishing, Walpole, New Hampshire, 1987; and Barbara Parham, *What's Wrong with Eating Meat*, Ananda Marga Publication, Denver, CO, 1979.

²⁶ William A. R. Thomson, M.D., *Herbs That Heal*, Charles Scribner's Sons, New York, 1976, pp. 23-26.

²⁷ Hans Reusch, *Slaughter of the Innocent*, Civitas Publications, New York, 1983, pp. 8-10.

²⁸ Ibid., p. 361.

²⁹ Mike Muller, *The Health of Nations: An Investigation of the Pharmaceutical Industry's Exploitation of the Third World for Profit*, Faber and Faber, London, 1982.

³⁰ Ben Charles Harris, *The Compleat Herbal*, Larchmont Books, New York, 1972, p. 23.

³¹ Ibid., p. 10.

³² Richard Wrangham, "Ape Medicine?" *Anthroquest*, No. 33, Winter 1985.

³³ Griggs, p. 6.

³⁴ According to ancient Chinese doctrine, sages did not treat those who were sick; they instructed those who were well, and they were paid for such advice. If the patient became sick, it was considered partly the doctor's fault and payments ceased. (Huang Ti, Nei Ching Su Wen, *The Yellow Emperor's Classic of Internal Medicine*, trans. Veith, I., Williams and Wilkins, Baltimore, 1949.)

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