ALTERNATIVE MEDICINE: The Healers, the Hopeful, and the Dingbats

By ACSH Staff — September 19, 2002

A shorter article derived from this "e-monograph" appears in the September/October 2003 issue of Skeptical Inquirer, with the title "Energy, Homeopathy, and Hypnosis in Santa Fe."

Todd Seavey is Director of Publications at the American Council on Science and Health (ACSH.org) and Editor of HealthFactsAndFears.com. His research for this project took place under the auspices of a Phillips Foundation journalism fellowship. The opinions expressed are entirely his own.

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Introduction: A SYMPATHETIC LOOK AT VOODOO (SERIOUSLY)

In most Western countries, including the U.S., about half the population uses some form of alternative medicine, and the popularity of such practices continues to grow. Whether methods such as homeopathy (used by a majority of the population in Europe and a growing number of Americans), acupuncture, and aromatherapy cause real physical changes and combat disease or merely foster a more pleasant mood in their eager practitioners, leading to subjective reports of diminished symptoms (the so-called placebo effect) is a question best settled by objective, double-blind clinical trials. So far, the evidence for alternative medicine’s genuine, physical efficacy is scarce.
To understand why such practices might have a powerful mood-altering effect, though, I decided to immerse myself for a time in the world of alternative medicine aficionados, getting a feel for how they think and what pleases, fascinates, or inspires them. If further study confirms that alternative medicine is mainly just the placebo effect (or, as alternative medicine fans might more charitably put it, "minor mind-body effects"), it is at the very least worth getting a better understanding of what rituals or incantations please people and why so many people prefer those rituals to visiting a conventional doctor's office.

First, A Word About Voodoo

It's worth noting that few alternative medicine practices are entirely new. Like any tradition, these practices are the end product of a long, historical sorting process that has weeded out the least popular methods and retained the ones people like for one reason or another. Of course, this doesn't prove the practices have any physical effect; they may be popular for psychological reasons. For purposes of comparison, take the case of voodoo real voodoo, not just any old bunk and quackery. I do not make the comparison to voodoo lightly or as an insult but because there are real lessons to be learned from the parallels. Indulge me a moment.

Barbara Reid, co-founder of the Preservation Hall jazz performance space in New Orleans, was interested in many of that city's rich traditions besides music, and in 1963 she wrote an unpublished book manuscript called *Voodoo Primer*, shown to me by her daughter, Kelley Edmiston.

Reid showed a real appreciation for the complexity of tradition in her sympathetic treatment of voodoo. Most Americans associate voodoo mainly with horror movie scenes about placing curses on people by sticking pins in dolls. Divorcing such rituals from their larger context and calling it "voodoo" is a bit like saying that Catholicism is merely a method for rescuing individuals from demonic possession.

Or, as Reid succinctly put it:

> The overwhelming task of taking three thousand years and condensing it into a palatable pill for quick, easy consumption is almost impossible. Curses on the B-movies for making it necessary to even try. Voodoo is not melodrama...

Still, it is obvious that part of voodoo's fascination for believers and unbelievers alike is the claim that it holds the key to ancient, magical wisdom that has eluded science. Reid's explanation of voodoo's spooky reputation amongst modern Americans sounds both conservative and oddly reminiscent of New Age writings about the supposed shortcomings of modern science:

> Herein lies one of the key reasons for fear of voodoo. Pride in ancestors, ancestor worship, and identification with one's ancestors has become unknown to the whites, but [voodoo adherents] in their rituals proceed with confidence. There is
less rejection of patterns that have been proven out to their satisfaction over the ages.

The medical profession with its cautious statistical wisdom is more and more coming to see that possibly some of the materials used by the witch doctors over the centuries might have some valid reason for not falling out of use. Apparently they have reached the conclusion that there has to be a reason for so many people to believe that the methods and items used by the witch doctors work, and the good healers are finding in increasing numbers that the unexplainable frequently does work.

By the "unexplainable," Reid refers to the many potions and folk remedies in voodoo’s palette, and, in fairness to those potion-obsessed Hollywood horror writers, there are many. Writes Reid:

There are drugs not for just the little annoyances of every day, like post-nasal drip, but for all the momentous events in life: drugs for love potions, mind expansion, impotence, control of one's enemies, and drugs for appeasing or inciting the great gods.

Reid appreciated the variety of important ritual functions that potions can serve. She should, therefore, have been all the more cautious about believing that any of the voodoo potions have real, direct physical effects. Tempting as it might be especially for a traditionalist to take the wisdom of the ancients literally, rituals may endure for reasons that have little to do with their official, stated purposes. A rain dance, for instance, may be a great psychological comfort to people who are desperately hoping for a good growing season. Since that psychological need may endure for centuries, the dance may endure as well, even if no rain dance ever has or ever will cause precipitation. Likewise, many voodoo potions, curses, rituals, etc. may endure not because they deploy real supernatural energies but because they provide artful psychological comfort at important transitional times in life: funerals, births, fights with annoying neighbors, and so forth. We can appreciate the endurance of these traditions without necessarily believing that voodoo priests really talk to the dead.

The Uneasy Relationship Between Tradition and Science

Reid definitely understood that in many areas of life, today's rituals are but vestiges of old traditions. Besides voodoo, for instance, Reid's manuscript discusses the "second line" (the conga line-like procession of musicians and dancers that forms spontaneously at many big New Orleans events) and explains that this ritual was popularized a century ago by mutual-aid societies, private insurance pools for the poor whose membership often turned out at funerals for which they had helped pay, forming a second line in the process. Such organizations eroded as the welfare state
took over their roles, but the second line survives, explains Reid. She had a fairly good understanding of tradition and how it filters down to the present, whether as potions or dances.

New Orleans is an unusual mix-and-match agglomeration of traditions, even by American standards, and voodoo is itself very eclectic. Voodoo, unlike many religions, has endured for so long by freely adopting new beliefs and new imagery from the cultures around it. Voodoo gods are even depicted wearing hip-looking shades, and some have favorite brands of cigarettes. A Darth Vader action figure was a prominent part of a faithfully-reconstructed voodoo altar displayed at Chicago’s Field Musuem a few years ago. That makes perfect sense if you assume voodoo-adherents aren’t afraid to adopt newly-minted symbolism. It makes even more sense if you recall from the Star Wars films just how powerful Vader’s mojo was. His mastery of the "dark side" enabled him to telekinetically hurl objects at his enemies and to choke people without touching them. Vader may be the most emphatic personification of evil the human mind has invented since Satan, and it's not surprising people dream of harnessing similar powers in real life. Unfortunately, this eagerness to adopt anything that holds out the promise of newfound power is at odds with the sort of skeptical filtering mechanism that leads to good science. As we'll see, alternative medicine often partakes of an overeager assimilation impulse not so different from that of voodoo.

I should note that New Orleans voodoo also owes its current form to a blending of African religions with Catholicism, since it was easier for blacks to gain tolerance for their religious practices if they equated African deities with analogous Catholic saints. Reid's manuscript notes that there is occasionally talk of removing saint statues from Catholic churches in New Orleans when, as occasionally happens, church officials realize that there is no record in church history at least, not Catholic Church history of those particular saints existing.

It's not surprising that New Orleans, voodoo, New Age mysticism, and alternative medicine have all gained some measure of popularity. They're all very inclusive. Anything seems possible, or at least worth trying. On the downside, a practice with perennial psychological appeal may get absorbed into the agglomeration of traditions that is voodoo or alternative medicine and get taken along for the ride, as it were, without ever being thoroughly examined on its own merits. Science has accomplished all that it has and has proven to be a more accurate guide to truth than any other form of knowledge humanity has devised in large part because it opposes this take-it-all-in approach. Science breaks things down into their component parts to see what works and what doesn’t, what ought to be retained and what must be discarded.

Tradition, at its best, also works (gradually, over centuries) to keep what works and discard what doesn't which is far more valuable than simply deciding on individual whim what to believe but tradition is far more prone than science to forming bundles of beliefs, practices that we receive as a package deal (especially in synthetic, composite traditions such as voodoo or alternative medicine) but which may be a hodgepodge of the useful and the merely ornamental.

If someone tells you that in his city, headaches are healed by having the sufferer walk to the top of a mountain, spread his arms in an appeal to the sky gods, take two aspirin, perform a dance, and descend back into the city, a healthy respect for tradition may incline us to say there is something valuable here worth preserving and make us cautious about putting an end to such rituals but
scientific analysis will probably lead us to the aspirin as the cause of the pain relief, liberating future generations from having to make all those treks up the mountain.

Again, traditions may contain value but survive for reasons that their practitioners have not correctly identified. Some things that appear to have physical effects may have only psychological ones or be merely "along for the ride," part of the ritual package.

**Science Does Have Something To Say About It**

Science is the best tool humanity has devised for carefully testing claims about the physical world, and, yes, it sometimes embarrasses the more naive brand of traditionalist by showing that the world doesn't work quite the way the ancient texts say it does. In contrast to the common refrain that "there are some things science can't explain," entomologist and sociobiologist E.O. Wilson, in the book *Consilience*, argues that humanity can still learn a great deal from allowing the hard sciences to intersect with the social sciences, fine arts, and even religion, wary though non-scientists often are of letting science ruin the magic and mystery of things.

In one chapter of *Consilience*, Wilson beautifully describes how we can scientifically analyze the drug-induced, hallucinatory trance of a tribal medicine man, noting how ancient, instinctual human fears that make evolutionary sense such as an aversion to poisonous animals might influence our most deeply-held beliefs, and noting how the drugs used in the ritual effect the brain, without ignoring the cultural context of the event. If we are thorough, we should come to a greater understanding of human psychology and the workings of mythic archetypes (such as snake-demons, which are common in religious dreams) than we would have if we had (a) blindly trusted traditional explanations for the medicine man's visions, (b) looked only at the physical details of the event, as if science had "explained away" any interesting psychological/mythic elements, or (c) attempted some phony compromise by arbitrarily limiting the range of phenomena over which science is allowed to comment ("some things are scientific, but this is beyond science, etc."). It's more fruitful to analyze both the physical causes and the deep psychological resonances of the event.

Presumably, we all live in one universe, and if that is so, then in the end there is one (admittedly large and complex) set of truths about it that all fit together without any real contradictions. Many of the literal physical claims of religion and myth and tradition will be found to be false. Let us admit that from the outset. On the other hand, religion and myth may still carry with them valuable insights that we might never have stumbled upon through more rationalistic, quantificational methods. We can admit that, too, without making the more audacious and unproven claim that we should place all our trust in emotion, mystical intuition, or religious revelations. The fact that myth may teach us something about psychology is not a license to dismiss scientific evidence, nor perhaps more importantly a license to pick and choose which bits of scientific evidence to believe, based on how well those bits comport with a mystical vision of reality.

It is true that when people abandon scientific rationality, they may be kept on a relatively safe path by tradition. When they abandon both science and tradition when the impulse toward eclecticism degenerates into a state of almost pure gullibility in which any novel idea is accepted people often
end up falling victim to superstitions more absurd than anything that mainstream religion or ancient myths have to offer. The shallow pseudo-tradition of alternative medicine may be such a case: the rhetoric of ancient, time-tested wisdom over a grab bag of the latest bad ideas. In the sense, it might be fair to say that alternative medicine is actually worse than voodoo, which can at least point to centuries of continued "success." To complicate matters, some of alternative medicine's bad ideas cure-alls and invigorating potions are so commonplace and have been trapping the gullible for so many centuries, they begin to look like respectable traditions themselves ("People have been taking this to cure baldness for nine hundred years..."). The complex challenge, then, is to ferret out the aspects of these superstitions that make them perennial favorites and distinguish between physical efficacy and psychological appeal, in the hopes that we can salvage the good parts (whether physical or psychological) and discard the bad, as science and tradition alike require.

Unfortunately, the New Age and other mystical movements associated with alternative medicine often see the past not as an ongoing record of trial and error but as a candy store full of catchy notions, rituals, and remedies to be sampled indiscriminately as though nothing could go wrong and as though nothing ever has. As we'll see, results vary.

Part One: THE MAINSTREAM/ALTERNATIVE STRUGGLE

What about the billions who have been treated by, for example, traditional Chinese medicine and lived fairly decent lives, some ask? (Note: I'll be using "traditional" to mean ancient or folk medicine in this e-monograph and "mainstream" to refer to the science-based medicine that most of us associate with major hospitals and familiar medical journals.) Surely, proponents will say, traditional Chinese medicine, practiced by so many people for so long, is not a random crazyquilt in the way that voodoo or the New Age is.

At first glance, it might seem that the sustained popularity of a system is sufficient vindication of it, but a closer look reveals some disturbing details. For instance, the poisons mercury sulfide and arsenic (under the names cinnabar and realgar) are parts of the traditional Chinese pharmacopoeia. The Chinese medicine called ma huang, which was the inspiration for the controversial product Herbal Ecstasy [sic], contains ephedra, which has been linked to hundreds of deaths in the U.S. alone. There seem to be as many bogus Chinese aphrodisiacs as there are animals to be killed and plants to be uprooted, from harmless licorice to poisonous strychnine.

Fortunately, traditional pharmacopoeias are not a complete shot in the dark. As researchers have found, remedies tended to evolve over time along with the cultures that used them, medicine men discarding substances that clearly didn't work and lauding ones that did. At the risk of sounding condescending, even chimpanzees have what might be seen as proto-medicine, preferring certain plants when ill or distressed and that may be an indication of how old the healing art probably is in our own species and how closely linked to nature that art originally was. The ongoing refinement of a traditional pharmacopoeia can be seen in America amongst Cajun healers, as shown in the documentary Good For What Ails You by Glen Pitre, the director of the similarly-themed action film Belizaire the Cajun back in 1985.

Still, there's great potential for traditional healers to overlook the kinds of long-term side effects that only show up in protracted epidemiological studies. Isn't it possible that
billions of Chinese have lived in spite of Chinese medicine rather than with the help of Chinese medicine, maybe even had their lives shortened a bit by it? In a worst-case scenario, might traditional and alternative medicine even be seen as a quiet holocaust, claiming some victims directly and claiming others indirectly, by displacing more-scientific methods?

If that's so, perhaps we should be very worried about the interesting times that lie ahead, when media personalities such as Larry King can be heard in radio ads pitching a combination of ginseng and the natural anti-depressant St. John's wort (the former is to keep King physically balanced, the latter to keep him emotionally balanced, according to the ad). The ad is representative of two parallel trends that may well bolster each other: Chinese herbal medicine and cosmetic mood alteration. Of course, everything from coffee to Prozac alters our moods and brain chemistry, but not since the early twentieth century have products been explicitly touted as doing so in ads aimed at healthy people. Chinese and herbal medicine will probably see a boost in popularity as Westerners become increasingly accustomed to seeking an array of subtle, mostly-psychological effects from products rather than a few obvious physical effects. Ten years from now, for good or ill, the average, healthy American may be as elaborately medicated as the elderly and the insane are today.

**Alternative Medicine: An Oppressed Minority?**

The defenders of alternative medicine have a powerful response to concern about Americans' growing habit of alternative self-medication: Americans are already on plenty of mainstream drugs, some with unpleasant side effects of their own. Adverse reactions to perfectly conventional medical drugs may even be the fourth-leading cause of death in America, according to a report in the *Journal of the American Medical Association*. Alternative medicine may not always be effective, the argument goes, but neither is conventional medicine, and the latter can be much more expensive and physically disruptive. More troubling is the fact that conventional medicine has not historically won out over alternative medicine merely through the weight of tradition, the allure of innovation, or the power of the marketplace. Rather, conventional medicine was quick to ally itself with law and ban its opponents in the nineteenth century. In books such as Paul Starr's *The Social Transformation of American Medicine*, homeopathy sympathizers tell the disturbing story of mainstream or "allopathic" medicine's eagerness to become the establishment, with allopathic officials often badgering hospitals and colleges that were partly-homeopathic and partly-allopathic into choosing sides.

As recently as the mid-twentieth century, the popular though unorthodox method of psychotherapy known as Reichian therapy (which resembles a combination of psychoanalysis, meditation, and massage) was nearly driven out of existence by a government crackdown, led in part by skeptical writer Martin Gardner. In the twentieth century, Gardner probably did more than anyone else to expose intellectual error and fraud, but the question of where intellectual error which presumably is not punishable by law shades over into fraud is tricky. Wilhelm Reich, founder of Reichian therapy, had many strange beliefs, not least of which was that the entire universe is suffused with "orgone energy" which can be accessed by relaxing the body and can even be gathered in machines called orgone collectors, which Reich believed could be used to control the weather. Loopy, yes, but
criminal? Apparently so thanks to harsh exposes by writers such as Gardner and many of Reich's books and orgone collectors were confiscated by health inspectors.

Like most skeptics, I'm probably guilty from time to time of taking the attitude that someone's status as a maverick or his lack of board certification is sufficient proof that he's a quack. He usually is, but this attitude can sometimes just lead to circular reasoning (someone is illegitimate because he isn't considered legitimate). To enshrine this attitude in law can be dangerous.

Many adherents of alternative medicine do not see the government as their real enemy, though. It's the legally-sanctioned American Medical Association monopoly and the pharmaceutical company establishment that really annoy them. Defenders of homeopathy claim that the pharmaceutical companies are deliberately ignoring the immune system-bolstering benefits of things like Chinese medicine in order to keep selling the latest pharmaceutical-industry concoctions to a populace that has a host of symptoms to be treated but no understanding of true health maintenance. Harris Coulter argues in his book about the homeopathy-allopathy schism, *Divided Legacy*, that it is today's pharmaceutical companies, not alternative medicine techniques, that have real historical roots in the snake oils and bogus patent remedies of the last century. He claims that homeopathy actually worked better than allopathy against certain problems, such as cholera epidemics, but that the allopaths and patent remedy makers joined forces to put their rivals, the homeopaths, out of business through the force of law.

The real tragedy in that story, the alternative partisans contend, is that we moved away from looking at a person's total health toward treating one problem at a time, moved from treating health maintenance as an all-encompassing art to treating it as something akin to clock repair, in keeping with the analytical, mechanistic trend of the age. The eventual retaliatory response to this perceived flaw in medicine was the current vogue for "holistic" approaches instead of the conventional one-symptom-one-drug tactic. Some devotees of traditional Chinese medicine and long-term homeopathic treatment would distinguish themselves from users of folk remedies and New Age gimmicks, claiming that the latter have more in common with flawed conventional medicine: a belief in silver bullets that treat one symptom in isolation without regard to total well-being. The growing alliance between health food stores and the homeopathic/traditional medicine devotees is understandable. In many ways, the homeopathic/traditional approach has more in common with nutrition an ongoing, multifaceted effort to maintain health than with a visit to the doctor. To its enemies, allopathy often appears brutal and piecemeal.

**Return of the Repressed**

Surely now is the time when all those nineteenth-century homeopaths, quacks or not, are getting their revenge. Far from being hounded out of existence, alternative therapies are now getting help from the federal government's National Center for Complementary and Alternative Medicine and from state legislatures, in the form of mandated reimbursement from insurance companies for chiropractic, acupuncture, and other "complementary" medicine.

When I talked to Frank Cuny, director of California Citizens for Health, a pro-alternative health political activist group, I expected him to say that fending off the FDA or the AMA was his main concern, but alternative medicine isn't playing defense right now. "Today, we have three issues:
One is the attempt by the Department of Agriculture to put in 'organic' standards that are really phony and would make the word organic almost meaningless...it would mean that they could use toxic waste products as fertilizer, shoot cattle up with antibiotics and call it organic." He was also petitioning in favor of a bill that would "require the insurance companies to pay for conventional and complementary treatment." Cuny also organized a request to the California legislature to lower insurance premiums for doctors who advise midwives.

All of this influential politicking is a far cry from fleeing the Inquisition. In fact, as in the case of the controversial organic foods standards, alternative health proponents are sometimes the ones calling for stricter regulation. No matter how much one might sympathize with this story of the outcasts carving themselves a place in the establishment, though, and no matter how many accurate criticisms the outcasts make about mainstream methods, and no matter how sordid the history of medical certification and licensing might be, it must never be forgotten that the truth or falsehood of a specific claim whether it's the claim that ginseng boosts energy or the claim that Shirley MacLaine is from Atlantis must be weighed according to the evidence in that individual case.

There are several institutional barriers to properly weighing the claims of the alternative medicine practitioners, though. They typically do not publish in recognized, peer-reviewed journals. They often make claims that are too vague to test in any meaningful way, so that it is difficult to say what counts as a "successful" treatment. And they often treat a clientele seeking solutions to very vaguely-defined problems, such as "low energy" or "feeling out of balance," the sorts of things the rest of us might call ennui or a need for a good nap.

**Homeopathy as a Case in Point**

Psychiatrist Stephen Barrett is harsh in his condemnation of alternative medicine. He lists alternative methods prominently on his [Quackwatch](http://www.quackwatch.com) website, which provides links to articles he has written with titles such as "Homeopathy: the Ultimate Fake." Barrett told me that homeopathy, perhaps the single most popular alternative medicine technique, is based upon the use of such thin dilutions of chemicals that there is no way known to current science that it could possibly effect human beings at all, let alone have discernible health effects. Anyone acquainted with physics must therefore demand a great deal of clinical evidence before accepting the claims of homeopathy. As a review in *Lancet*, critical of homeopathy, summarized it: "When Hahneman, two hundred years ago, advocated this technique," his theory was that "to strengthen the 'vital force' one needed to stimulate [resistance to disease] by similar symptoms...the 'identical' drugs have to be administered at very low concentration and be 'dynamised' by rapid shaking." Modern homeopaths, says Barrett, claim that a "magnetic resonance" of the original chemical remains and boosts the immune system in a fashion analogous to vaccination.

All these detailed physical assertions are, in the end, based on little more than anecdotal evidence that people "feel better" after regular visits to their homeopaths, which may be the result of the substantial attention homeopaths pay to befriending and psychologically counseling their patients. The homeopaths themselves can hardly be trusted to apply strict scientific scrutiny in evaluating the efficacy of their practice. One of the more intelligent homeopaths I've spoken to said that in mainstream medical trials about a third of patients who are administered placebos describe
themselves as feeling better. Since, she says, about half of her patients even ones with infectious diseases feel better after treatment, she thinks she must therefore be doing something more than administering placebos. It’s nice to see the alternative medicine practitioners speaking the language of placebo effects and control groups, and the fact that such thinking is making inroads in the alternative medical community may bode well for the future, but her belief that there is a broadly-applicable, numerical “placebo ceiling” beyond which the power of suggestion does not reach is false. Some treatments produce small placebo effects and others produce large ones, and only testing a specific method with a control and an experimental group can tell us how large the placebo effect is in a given case. When she says that the positive reports of her patients prove her potions are working, she may be inadvertently overselling the power of her mixtures and underestimating the effectiveness of her bedside manner.

But, then, as we shall see, interest in alternative medicine rarely springs from a desire to examine the facts carefully, despite the competitive claim to have as much legitimacy as mainstream, scientific medicine. More often, the attraction to alternative medicine springs from a sort of mystical impulse.

Part Three: MY VISIT TO A NEW AGE HEALTH EXPO

When I began the research for this e-monograph, armed with my traditionalist arguments for listening attentively to folk wisdom, I was as ready as a rationalist ever could be to listen to the heuristics and logistics of the mystics. In much the same way as I loosened up and grudgingly conceded at some point late in college life that occasional drunkenness does not undermine one’s status as a rationalist-when-sober, I figured I could dip into the holistic/alternative health perspective without permanently damaging my understanding of science. I'd start with the outlandish and work my way toward the mainstream, seeking a balance between fuzzy folk wisdom and the most up-to-date, solid scientific data. I was ready, in other words, to attend a New Age expo in San Francisco, the closest thing one can find in America to a world untouched by the cold light of scientific reasoning that has so changed the world in recent centuries.

When All This Stuff Went Mainstream

I should admit up front that I had watched the growth of the New Age in the mid-1980s with some degree of fear. At the same time that I was getting a handle on physics and chemistry in high school (and marveling at such high-tech developments as artificial hearts and MRI machines), the popular culture seemed poised to demolish the intellectual underpinnings of all science, unleashing a wave of medieval and even prehistoric superstitions. Everything science had accomplished the billions of lives saved by modern medicine, the billions more lives made easier by technology all looked so poorly defended when faced with the sudden rise of a movement wrapped in a thin veil of Eastern religion and stamped with the all-purpose, anything-goes mantra of movement leader Shirley MacLaine: We each make our own reality. What quicker excuse could there be for discarding objective standards of evidence? If Shirley MacLaine says, on the basis of dreams and hunches, that she’s a reincarnated spirit from ancient Atlantis, well, that’s the truth of the moment, and anyone who doubts her is a party-pooper. The same presumably goes for any other claim, no matter how absurd. We each make our own reality.
Luckily, Western civilization survived that episode, which peaked with the series of New Age festivals known as the Harmonic Convergence on August 16, 1987 (on the tenth anniversary of Elvis Presley's death, though no one has ever suggested a connection, as far as I know). The occult content of bookstores' New Age sections gradually shifted after that toward more down-to-Earth volumes on self-help and nutrition. Though one heard echoes of the New Age in everything from the rhetoric of vegetarianism to the dialogue on the TV show *The X-Files*, serious New Age devotees have largely become a self-contained fringe group, while the general population takes even the most popular and enduring New Age claims such as widespread alien abductions with a large dose of irony these days, if not always outright skepticism. Unfortunately, in becoming more mainstream, some of the nonsensical claims were retooled to sound more plausible and found their way into diet and medical advice that the layman might more readily trust.

**Willing Suspension of Disbelief**

Still, sometimes a fringe group possesses a fragment of the truth that others have forgotten, much as a senile war veteran may be the only man in town who remembers how to activate the air raid siren. With that in mind, I attended the Whole Life Expo at San Francisco's Concourse Exhibition Center, seeking nuggets of ancient truth, trying not to be too judgmental.

Outside the Expo, visitors were greeted by the inevitable Andean pipe band and sometimes by born-again Christians condemning the Expo as the work of Satan. Inside, many of the visitors looked like a tacky cross between Yanni and the late magician Doug Henning, as befits a barely-modernized version of a medieval fair, I suppose. A poster advertising sandals asked the apt question "Why Birkenstock?" Many of the booths featured herbal and homeopathic remedies, generally of vague origin and aimed at alleviating vague symptoms, such as low "life energy."

While I waited for a lecture on psychic powers to begin, I was repeatedly confronted with the fact that for all their invocations of ancient Egypt and India, the people at these conventions are largely making this stuff up as they go along. "I want to see where your aura is," one woman in the audience near me announced to a tie-dye-wearing man next to her, as if some wry observation he had just uttered made it seem likely that he had an extra-special aura. The woman took out metal dowsing rods and began moving them toward the man repeatedly, letting them swing outward as she got closer to him. I believe her conclusion was that his aura is quite large.

This didn't bode well for my chances of gaining useful medical wisdom.

**A Plea for Keeping an Open Mind**

After my first day at the Expo, which not coincidentally was also Earth Day, I spoke to a student from nearby University of California at Berkeley who had a higher tolerance for the local supernaturalists than I do. Elizabeth Smith was an X-ray, CatScan, and MRI technician before returning to school as an undergrad to study bioethics, and she claims she was always a firm believer in mainstream science and medicine until she developed back pains and found that mainstream doctors were recommending such radical surgical solutions as removal of both her breasts. "They actually did some experiments on me that I didn't even have to pay for. I was so gullible because of the way I was socialized to think. They [mainstream doctors] were gods."

Various surgical attempts to alleviate her pain had left her numb from the waist down. Eventually,
though, she tried acupuncture out of sheer desperation.

"I had been very skeptical because I was trained medically, I knew the body, I had worked with hundreds of patients in the ER, lots of work in the medical establishment, but I didn't know what else to do." She went to see a Chinese acupuncturist. "I let him do some acupuncture on me and I got the feeling back in that chunk of my body, which astounded me. All these doctors hadn't helped me at all. That's when I started to become more open to the possibility that there is something beyond Western medicine." Since then, she said, she has become a vegetarian and has explored a variety of New Age-type beliefs, ranging from magnetic healing to psychic powers, all with a deliberately unskeptical attitude, in hopes that this would make her more open to new experiences.

For example, after doing some work with forensics teams, she became convinced that people can sense the presence of death in the form of waves of cold energy radiating from crime scenes. There are no doubt simpler explanations, of course, ranging from mere imagination to intuitions based on the position of broken objects or the presence of subtle bad smells at the site of the crime. But whether skepticism would have led her either to the dead bodies of crime victims or to the end of her back pains is an open question. Full-fledged gullibility may even have utilitarian value in some situations, risky as that sounds.

At the urging of Smith, I vowed to keep an open mind when I returned to the next day of the Expo. The New Agers might stumble upon some lost truth yet.

A Second Wind and the Breath of Life

During my second day at the Expo, the most down-to-Earth lecture seemed likely to be one by Richard Hatch, the actor who played Lt. Apollo on the 1970s science fiction TV series Battlestar Galactica (itself a metaphor for the Book of Mormon and the Biblical story of the lost tribes of Israel, by the way). A fiftyish Hatch has now devoted himself to lecturing about how to use breathing techniques to relieve stress. That seemed less likely to fly in the face of science than most of the crystal-wielding, potion-pushing booths filling the Expo, so I decided to give Hatch a listen.

"The key is energy! All of life is energy!" said Hatch, as he began our breathing workshop. "Your lifeforce comes from an unlimited source...If I think unlimited, I'm functioning in an unlimited way!" Hatch claims he is exercising both his body and mind at all times, despite what he admits is a large paunch. To help us exercise mind and body, he led us through a series of simple exercises, including eyeball exercises ("Look up! To the right! Now to the left!"). As our eyeballs moved back and forth, back and forth, I couldn't help thinking of the roving red eyes of the robotic Cylon warriors who always menaced Hatch's character on Battlestar Galactica, but I tried to remain focused. Between observations about the importance of overcoming tension and overcoming defeatist attitudes (New Agers' biggest concerns, it seems), Hatch urged us to "Breathe! Breathe!" With exercises like this, he assured us, we could slow the aging process (one of Californians' biggest concerns, it seems).

I left the workshop a bit sleepy but still made a mental note to avoid adding unnecessary stress to my life, so the lecture was a qualified success. In Hatch's talk, as in many New Age texts and lectures, certain already-vague concepts such as love, energy, light, force, life, and "a higher power" all start sliding together and becoming synonyms. That vague
belief in some sort of "energy" that can do just about anything may be the inevitable result of the New Age's patchwork quality, the end product of all the diverse religions and mythologies the movement borrows from. In its own way, the New Age, just as much as the science it so often criticizes, has stripped away all the cultural context that once accompanied the techniques and remedies it sells bits of yoga and meditation from the East, communion with animals from Native Americans, elixirs from Latin America, prophetic visions styled after Christianity.

How can it be that with so many products purportedly rooted in ancient practices, there were so few history books for sale, so few references in the texts being sold to anything more than a mythic past? It was common for product descriptions to note, by way of underscoring the products' exotic/traditional origins, that they were from "Asia," without even noting a specific country or religious sect.

In the end, it's all one big, touchy-feely mush, where aliens, spirits, angels, citizens of Atlantis, ghosts, witches, and dolphins are perfectly interchangeable, as are Tibetan wisemen, Balkan peasants, ancient Greeks, or Chilean Indians. What difference does it make, as long as it's exotic and uplifting? (I even noticed a Star Wars bedspread, like the one I had as a child, decorating the wall of one of the Expo rooms, reminding me of the Darth Vader action figure that graced the voodoo altar I had seen at the Chicago Field Museum.) What remains when diverse cultures are run through the New Age blender is the warm, fuzzy longing for something nicer than everyday existence. The smartest New Age purveyors are probably the ones like Hatch who skip the aliens, herbs, and ancient civilizations and go straight to the warm fuzziness.

No Real Interest in Supporting Evidence

Of course, most of the people at the Expo would object to the claim that they're selling an attitude or an aesthetic instead of information about how the physical world works. A man selling needle-free acupuncture units silver rods that produced enough electricity to make my arm muscles contract involuntarily seemed a bit annoyed when I asked if the crystals inside the rods were mainly for looks. "No, absolutely not, because you can't see the crystal, so why would it be aesthetic? The crystal is a conduit!" With a wide range of products gummi-like Phytobears, rainforest herbs, oils from Bora Bora, bioelectric pillows, curiously-named "love flutes," ear candles, quasi-health conscious herbal cigarettes, and even an out-of-place company demonstrating a practical and highly absorbent "mop for the new millennium" it would be wrong to lump the whole Expo in the same basket, but it is clear there is more eagerness to believe than to learn at these events.

When ersatz traditions failed to excite customers, the sellers invoked celebrities. A booth selling "aura photographs" featured sample pictures taken of Debbie Harry, Larry Wilcox (the actor on CHiPs who wasn't Erik Estrada), Andy Richter from Late Night with Conan O'Brien, Erin Grey from Buck Rogers, Sally Kirkland, LeVar Burton, Dennis Weaver, and, of course, Richard Hatch, all surrounded by glowy halos.

The sellers and lecturers many perhaps unconsciously have learned to use the ignorance of their customers as a tool of subtle persuasion, and they could frequently be heard using phrases like
"you won't understand this all at first" and "I know I'm throwing a lot of technical information at you right now" on the rare occasions when their listeners worried that the information didn't quite add up. As every good salesman knows, you should start off a sales pitch by getting the customer to say "yes" a few times yes to anything, such as the question: "Don't you get tired sometimes?" Many of these people, including the sellers, pay lip service to the ideal of being discriminating, cautious consumers. And just because someone tries, say, fingernail analysis as a means of diagnosing whether his blood is flowing properly doesn't mean he'll believe absolutely anything. But it's hard to imagine what the weeding-out mechanism is at work at an expo like this if not just aesthetic reactions. In one way or another, most of the participants say: If it makes you happy, why not believe?

Even amongst non-believers, people often say "Where's the harm?" when confronted with dubious supernatural beliefs. The generally cushy nature of modern living seems to have had the side effect of convincing people that recreational gullibility isn't as dangerous as it used to be, which is a profound change in the way we sort and retain information. Sometimes these days hardcore skeptics seem alone in their stubborn belief that it matters whether a claim is true or false. Are skeptics over-argumentative, possessed by an abnormal devotion to Truth, throwbacks to the days of Greek philosophy, out of touch with our more open-minded era? It seems obvious to me that false beliefs can still kill, maim, confuse, frighten, and defraud. But when so many people regard palm reading as little more than a whimsical alternative to bowling, it's sometimes hard to convince them that truth is more important than perception. It's hard to convince people of that even with the Expo hawking potentially-lethal books with titles such as *The Cure for All Cancers*.

A Reminder That Reality and Perception Differ

Still, life brings occasional reminders that separating fact and fantasy is the key to navigating a sometimes dangerous universe and can make the difference between life and death.

As I left the Expo one night, I couldn't help noticing a very small sign, probably one that very few people had noticed, that read: "Please be advised...At approximately 7pm, there will be a test of the building's fire/life safety system. In order to simulate a realistic fire, the testing requires that a non-toxic theatrical smoke be used. This smoke will be admitted in the atrium and will travel throughout the building. Please be advised that this is only a test and is not cause for alarm. Thank you for your cooperation." Tempting as it was to remain and see how people's perceptions of the situation (and its implications for their "personal realities") unfolded when the smoke started spreading, I decided to hit the road.
Afterwards, I reflected that it might be the superficiality, the lack of commitment on the part of the Expo shoppers and sellers that led to their nuttiness, to their one-from-column-A, one-from-column-B approach to truth. It's the commercialized, shopping-mall approach to alternative medicine, some argue, that unfairly tarnishes the reputations of the serious, committed adherents of such practices. A more sustained, studious approach to these arcane disciplines, according to this argument, might turn up some genuine folk wisdom, traditions worthy of carrying on rather than quick-fix pills and amulets. To test that hypothesis, I decided to visit a place where a surprising number of people have dedicated their lives and highly-specialized careers to studying alternative health practices: Santa Fe, New Mexico.

Part Four: ENERGY, HOMEOPATHY, AND HYPNOSIS IN SANTA FE

Santa Fe is the sort of place where every other store is selling some sacred Hopi artifact, and even the barbershops have vaguely New Agey names, such as Planet Hair. The woman who runs the hotel I stayed in told me she's an acupuncturist herself. When I first visited the plaza at the center of Santa Fe years ago, I walked right into the middle of a music festival dedicated to the earth goddess Gaia. A large woman with a wreath on her head, backed by a group of folk musicians, encouraged the watching crowd to plant their feet firmly on the ground, then feel the energy of "the master crystal of Gaia" at the center of the Earth flowing through them and up into the stars as they reached up to embrace the "wonder that is you." I was amazed how many people played along, but I figured I could remain safely uninvolved in the crowd. That is, until she asked everyone to hold hands, and every last person some of them surely just tourists passing through the plaza after dinner appeared ready to do so. I beat a hasty retreat.

My research trip to Santa Fe for this e-monograph would require greater bravery than I had shown on that earlier trip, though. This time I was determined to give the alternative thinkers a thorough hearing. Santa Fe seemed like a good place for it. Located on a high plain in near-desert conditions, Santa Fe is the site of the oldest church in the U.S. (indeed, it is older than the U.S. and was built by the Spanish). Having recently celebrated its four-hundredth anniversary, the small church sits right next to the oldest house in the U.S. Both are reminders that America is older than its Enlightenment-era rebirth in 1776. Santa Fe is a mecca for Earth-lovers and people seeking inner peace, away from the modern world, such as the women going through some sort of tai chi-like ritual near my hotel each morning. Ironically, Santa Fe is also close to the Los Alamos nuclear testing site. More than a few tourists have probably taken a left turn at Albuquerque, after visiting the formidable bombers and missiles at the National Atomic Museum, and only hours later visited a peace-loving shaman in Santa Fe.

Energy Medicine and Learning from the Psychic Surgeons

Lorin Parrish, director for fourteen years of the New Mexico Academy of Healing Arts, told me that her academy has used "a variety of European methods." She says they have included "things like radionics out of England, color therapy, sound therapy, a lot of things that now are known as vibrational medicine." Most of these therapies revolve around flashing lights or making sounds at patients who have vague ills such as fatigue, then asking them if they feel better. Sometimes, of course, they do. The techniques are particularly popular in poorer European nations such as Russia, where conventional medical treatment is harder to come by. Interestingly, many of these
methods do not predate modern medicine but are in fact by-products of the early days of modern medicine, when technology's success rate seemed high enough to make any new-fangled technique involving a machine worth a try: electricity, vibrating belts, radium, what harm could they do?

The Academy of Healing Arts has moved increasingly toward teaching old Asian massage and acupressure methods, though. "Very rarely do the clients say 'I feel nothing'...If someone’s really blocked physically, I think they're going to have a harder time feeling the energetic flow," said Parrish. Certainly, one can acknowledge the relaxing power of massage without buying into the whole accompanying theory of "energy meridians" running throughout the body. Sometimes, though, no amount of generous metaphorical interpretation can make these methods "true." For instance, Parrish said that her inspiration to delve into these treatments was another practice, one that most people would consider far more dubious than massage.

"When I was seventeen, I studied in the Philippines with healers. Seeing them reach into the body, remove kidney stones...one minute you see blood and the next minute you see someone healthy. It was pretty stunning." She sounded perfectly sincere about her faith in the so-called psychic surgeons of the Philippines and offered no negative comments about them, even saying that she never worried they were fakes. Yet, when I asked her whether, as skeptics say, the psychic surgeons are merely using sleight of hand to make it appear that they are removing tumors without making incisions, she said: "I am sure that the majority of people working on that kind of level are frauds. I'm convinced of that. [However,] I do think...I met some healers...working from a place that was very shamanic, very ancient." What Parrish does not say is that faith in such psychic surgeons kept actor Peter Sellers, for example, from seeking mainstream medical care until it was too late to prevent his death. No doubt countless less famous victims have perished at the hands of the psychic surgeons.

Parrish's case raises the question of whether a practice that stands the test of time necessarily does so because there's something valuable in it which is what someone sympathetic to tradition, indeed sympathetic to the human mind in general, would hope or merely because the practices are great cons that keep on working year after year. No matter how many generations of people lose money in shell games or three-card monty, the games still get played on the streets of big cities everywhere. Is it really because the players are "getting something out of it," generation after generation, or is it just that the losers untold millions of them have less incentive to pass on the hard lesson they've learned than each new generation of dealers has to perpetuate the con?

**Homeopathic Or Merely Empathic? Remedies**

The question becomes more complicated if it's unclear whether the desired effect of a given practice is emotional or physical. "A great deal of the practice of homeopathy is dealing with emotional and mental symptoms," acknowledged Dr. Kenneth Stoller, a pediatrician who came to Santa Fe in hopes of starting up a homeopathic institute but later decided that California might be more receptive (after I met him, he moved to Los Angeles to start an interdisciplinary health team there). Stoller is a true believer in homeopathy's curative powers but told me that it is a mistake to judge homeopathy by its physical effects alone or to dismiss mental effects as secondary. That
strict Cartesian division between mind and body is the great mistake of Western rationalism, Stoller said, and many other alternative health aficionados agree with him.

"Let's say somebody has a skin rash," he explained. "In regular medicine, you go to a dermatologist and they'll tell you to rub steroids on it." Some forms of homeopathy will also recommend a simple topical cure, but "the next layer down would be to take a remedy that would not only deal with the symptom of the rash but would be compatible with that individual's emotional and mental picture, and then the remedy you pick for the rash would have a much better chance of working on that person." Stoller believes that it's only now dawning on Western medicine that it was a mistake to divorce the mind from the healing process. He said that traditional Chinese medicine has acknowledged the mind-body connection for thousands of years and that, ironically, it was the Communists' Cultural Revolution of the 60s and 70s that steered China's doctors toward American-style, more materialistic medicine.

Stoller has also taken an interest in early-modern medical devices and has secured patents on devices of his own that look like props from the movie *Metropolis*. All of them are based on the alternative-health belief that the body's electrical fields are closely linked to its well-being. One device measures minor electrical imbalances in the body, another detects electrical fields at a distance, and the most intriguing is intended to tell a woman when she's ovulating based on fluctuations in the electrical impulses at her fingertips. Arrayed in Stoller's living room, the patent plaques that bear his designs have a certain DaVinci-esque feel to them. A somewhat pessimistic man, Stoller told me he's not holding his breath waiting for financial backing to mass produce the devices.

He lived on a mountainous ridge on the outskirts of Santa Fe back when I visited him, and around sunset I watched him step onto an outcropping of rock near his house and play the bagpipes, as he told me he did regularly, his howling dogs accompanying him. He also owns an accordion built by traditional accordion maker Jean Roger, a New Orleans denizen I'd heard about during my time in that city. After the piping, it seemed like an appropriate time for me to depart...but he had one more item to share with me: the transcripts of his sessions with self-described channelers. He believes that prophetic information from these other-dimensional spirits may have prevented an accident in the water system in California and that the spirits show a keen understanding of environmental issues, issues which Stoller said are inextricably linked to human health issues. I listened patiently and then departed.

**Reality Matters Less When You're Hypnotized**

If alternative medicine is sensible and practical and gets real results, why do its practitioners seem to be the sort of people who fancy they're communicating with aliens? And doesn't that sort of thing put a crimp in their credibility when they seek financial backers to mass produce their medical devices?

The wisest answer to these questions that I heard while in Santa Fe may have been provided by Tim Simmerman, director of the Hypnotherapy Academy of America, a Santa Fe organization that specializes in therapeutic hypnosis. "Faith is an inner expectation that what I'm believing will become real," Simmerman told me. He dismissed the mind-matter distinction altogether, suggesting that for many in the alternative medicine community,
there is no sharp dividing line between material reality and the imagination. The fact/fantasy distinction just doesn’t matter much to them.

Simmerman said he and his wife, who also works at the Academy, share a philosophy similar in some ways to Christian Science, which posits that faith can alter the physical universe, but Simmerman and his wife believe individual desire and reasonable expectations must be added to faith in order to get results. He said that hypnotherapy could be one of the greatest aids to faith and willpower ever devised but that for far too long it was subsumed under conventional psychiatric practices. “In order for psychologists to reach the same kind of credibility that Western, allopathic medicine was reaching, they had to match the medical model. So, early psychologists had to take out something,” namely, the spiritual element, “which was really quite a shame Carl Jung attempted to keep it in in some ways but it went secular. We had to think of the body as just a body and the mind as a brain...early psychology had to stay in a Western model: Newtonian, more Cartesian...Spirit was too much of a wildcard, they had to take it out.”

The Academy uses firewalking, amongst other techniques, to teach people the transforming power of positive thinking. Expecting to hit a sore spot, I asked him what he thought of the argument made by skeptical physicists: that anyone with sufficiently moist feet who moves quickly enough can cross over the average bed of firewalk coals easily, without the slightest psychic preparation. Without missing a beat, Simmerman said, “If you can [watch] two hours of training in helping you to do something that is perceived to be impossible and then take that as a life-long metaphor, it serves its purpose. One of the phrases I love from a book by Tony Robbins is *What would you do if you knew you couldn’t fail?* and I put that on a 3x5 card and put it on my mirror and it reminds me: What kind of self-imposed limitations do I allow to restrict my satisfaction in life?” Physics doesn’t alter the sense of self-overcoming the firewalk participants feel. There may be no great victory over physics occurring, but there is a very real victory over fear.

**In the End, Is New Mexico Merely a State of Mind?**

Simmerman even had kind words for arch-skeptic Benjamin Franklin, who argued that the vaunted healing powers of early hypnotist Anton Mesmer amounted to nothing more than the power of suggestion. Exactly right, said Simmerman, and we should be all the more grateful to Monsieur Mesmer for reminding us of the power of the mind. “Hypnosis is probably the oldest healing modality known to mankind,” said Simmerman. “You can go back to ancient Greek or ancient Egyptian sleep temples, where a priest or priestess would take someone mentally or physically ill, put them in a ‘sleep’ like a hypnotic trance and perform healing rites.” Pain is always in some sense subjective, and meaningful rites can be powerful and effective things. “Jung said he’d never seen a client get better without a change in faith.”

Patients who expect to feel better are more likely to do so, even when faced with continued physical ailments the placebo effect. Improving one’s mental outlook without altering physical symptoms may sound like a failure by some standards, but obviously it will be deemed a partial success by many patients. "The placebo effect can result in a fifty percent cure," as Simmerman put it, "and yet when we say 'placebo effect,' we pooh-pooh it!"

Simmerman makes an interesting point: Ironically, the mystics who claim that the mind can heal
and their arch-enemies, the skeptics who claim that many apparent healings are all in the mind, are saying almost the same thing. And there, I thought, might be some common ground on which to resolve the historic struggle between mainstream and alternative medicine.

Epi(b)logue: HARNESSING THE MIND OR LOSING OUR MINDS?

Not everyone pooh-poohs mind-body effects. At places like Harvard University's Mind/Brain/Behavior Institute and the University of California at San Francisco's Center for Integrated Medicine, they're taking seriously the idea that attitude affects health and they're studying ways to incorporate that fundamental alternative medicine insight into mainstream medicine. Even the aptly-titled *Skeptic* magazine published a piece by a mainstream doctor who has adopted acupuncture and now urges his fellow scientists to study how it works (the National Institutes for Health recently endorsed some forms of acupuncture as well, though the line between physical effects on nerves and ritualized relaxation is still murky). Acupuncture may not involve chakras or energy meridians and, suggests *Skeptic*, it may not even require needles but done correctly it works in some sense, and skeptics should take care not to throw the therapeutic baby out with the mystical bathwater. Even treatments that have no physical effects can have powerful psychological effects.

Here we seem to be on the verge of alternative medicine's greatest hope for vindication (if most of its physical claims seem groundless): the possibility that even in its wackiest rituals, alternative medicine has preserved or rediscovered artful patterns of behavior that genuinely make people feel happier, more at ease with their world. Don't most coherent worldviews, particularly religion, function partly because they provide rituals that reduce anxiety, making people feel that their world fits together seamlessly and cozily holisticly, if you will? The question then becomes not simply "Does alternative medicine work?" but "Are the possible psychological benefits from technically-false alternative medical claims great enough to outweigh the physical and financial risks that may arise from them?" That lowers the hurdle for alternative medicine considerably but it's not yet a clear-cut victory.

The Artist Will Be with You in a Moment

Human beings have learned over the millennia to avoid consuming certain substances and to seek out others. Indeed, we have evolved to do that, since humans who hated fresh vegetables but loved the taste of, say, dung or arsenic were presumably weeded out of the gene pool quickly. Like the chimps mentioned earlier who rub certain soothing or germ-fighting leaves on wounds, humans may well have had some sort of proto-medicine long before we had most of the trappings of civilization. Maybe it shouldn't surprise us, then, that so many people seem to have deeply-ingrained, gut-level instincts about what "healing" should look like. Human civilization and human biology developed for tens of thousands of years without the benefits of modern medicine, and during all that time, much of what passed for medicine was either pure placebo effect or else the result of an ages-long trial-and-error process. Healing through relaxation (perhaps walking alongside a pleasantly babbling brook) or by summoning the courage to eat some weird plant and see what happened were pretty much our only options for a long, long time, so such habits are probably deeply ingrained.

If many people are turning away from conventional medicine because it is often cold, impersonal, and lacking in psychological nuance, the answer to their cravings may be to
bring back some of the ritual and art that were discarded when the scientific method supplanted traditional healing. However, we should do so without loosening the standards of scientific evidence. If some people feel better when their doctors talk about dolphins and global harmony, perhaps it's time for mainstream doctors to start talking more about dolphins and global harmony (at least with some patients I'll always prefer white rooms and basic, unimpassioned questions like “Does it hurt when I do this?”). And we might all do well to keep in mind the alternative medicine crowd's complaints about the side effects of mainstream drugs and surgery when we're choosing between conventional treatments or, say, meditation for minor pain relief. There may be some way to combine the forgotten benefits of ritual, symbolism, and relaxing meditation with the analytical standards of modern medicine without turning our hospitals into pagan temples or juvenile magic shows, though it'll take time and thought and the partisans of paganism and magic are well-organized.

The January 1998 issue of Scientific American may have been a foretaste of a synthesis of science and ritual. In an article called simply "The Placebo Effect," Dr. Walter Brown noted that in some cases the placebo effect actually works better than conventional treatment, against ailments such as angina and, in some cases, high blood pressure. Given that, he suggests, perhaps doctors should be prescribing more placebos. He goes further, though, and outlines ways in which doctors can make patients feel better by putting them more at ease, thus increasing their expectation of relief, the key to activating the placebo effect. He describes the therapeutic value of displaying diplomas and other reassuring symbols of the doctor's competence (though he stops short of likening them to the witchdoctor's masks and wands). Above all, he advises listening sympathetically to patients' complaints, even when their pains and mood swings do not lead to an obvious physical diagnosis.

As a skeptic, I would have downplayed the significance of such theatrics a few years ago. Tell me what's wrong and give me a pill I'm a man of science. But if this excursion through the alternative medicine hinterlands has taught me nothing else, it's that the half-understood, murky workings of the mind cannot be ignored, even when they complicate analysis. If traditional healers and even the occasional crackpot mystic have learned something about keeping people happy, we have an obligation to incorporate that knowledge into our own even if the merger is a messy one (if we can do so without hindering scientific standards or impeding scientific research).

My tolerance for the bizarre has its limits, though. I was planning to visit London after I finished the research for this e-monograph. Before I departed for England, a friend of mine from over there who didn't know what I'd been researching for the past few months and knew nothing about the bumpy flight from New Orleans on which I chatted with a mystic asked if I'd bring a few volumes of "channeled writings" from America over on the plane for her. I declined.