

THE RIGHT MAN SYNDROME: SKEPTICISM AND ALTERNATIVE MEDICINE

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Did a voice come "crying in the wilderness" now, what would it cry? In this wilderness, not of "monkeys" but of critics, would it not cry: Create and do not criticize? Goethe's idea of a devil ... was: the spirit of criticism without earnestness, which is always negative, never creates—which neither hates what is bad nor loves what is good—criticism without results.

—Florence Nightingale¹

FOREWORDP

Skepticism is an honored tradition in science. Without it, science limps. Before proceeding, therefore, I wish to express my gratitude to the genuine skeptics in the scientific-medical community who have offered constructive criticism of the field of complementary and alternative medicine (CAM). We at *Alternative Therapies* are grateful for your observations and invite you to continue contributing them.

Nothing that follows should be construed as a rejection of the contributions of authentic skepticism to this developing field.

A clash of doctrines is not a disaster, it is an opportunity.

—Attributed to Alfred North Whitehead

The Right Man syndrome² is a personality and behavioral pattern described by science fiction writer AE Van Vogt and later popularized by the British writer Colin Wilson. The term describes an individual, almost always male, who has a dynamic yet fragile personality and possesses a manic need to feel that his actions are perfectly justified and correct at all times.

The need always to "be right" assumes supreme importance in the Right Man's life (note 1). "To challenge any aspect of a Right Man's worldview," says writer Bruce Wright, "is, to him, an insufferable attack on his self-esteem, to be met with whatever vitriol might be required to still the threat."^{2(p242)} Wright believes that some of the so-called skeptical organizations in the United States, whose membership includes individuals who incessantly attack CAM, "have demonstrated this quality in abundance" and "seem motivated primarily by a simple joy in their own unassailable rightness."^{2(p42)}

The Right Man perceives himself as a member of an elite

group of defenders of reason, besieged on every hand by hoards of irrational barbarians. He and his fellow crusaders consider themselves the lonely holdouts for the civilizing qualities associated with the intellect in a world largely gone mad.

In keeping with the value they accord the intellect, Right Men almost always imply that they have scientifically investigated the issues they crusade against, such as CAM, and have found them wanting. This conceals the fact that many are not scientists at all, and even those who *are* almost never do original research in the fields they condemn. As Wright^{2(p42)} puts it, Right Men "do not actually dirty their hands with investigation."

Jessica Utts,³ a research methodologist in the Division of Statistics at the University of California–Davis, responding to the unrelenting protests of skeptics against the field of parapsychology, stated, "I have never seen a skeptic attempt to perform an experiment with enough trials to even come close to insuring success."³ In spite of this, many "skeptics" of CAM represent themselves as tireless investigators who simply cannot document any effect whatever of CAM-related therapies. Their favored strategy, however, is not research, but armchair debunkery funnelled through the media—after being drenched, that is, with an overheated, frothy rhetoric that elevates exaggeration and innuendo over the dispassionate weighing of fact, as we shall see.

Most of us involved in the field of CAM believe that the way to resolve disputes about the efficacy of various alternative therapies is to design studies that are scientifically precise, and to let the data speak for themselves. Although this approach is given lip service by Right Men, it simply is not followed when they confront medical practices they consider "alternative." Of course, Right Men would never admit to this. They ostensibly *want* to see scientific studies conducted in these fields, and have *sought* for them, but have found that credible evidence does not exist—indicating, they claim, that CAM is a colossal hoax. By and large, this attitude is nothing more than cheap intellectual swagger.

Even when they confront scientific evidence supporting CAM, Right Men often "move the goalposts" of accepted scientific procedure to discredit the therapy in question. No matter how strong the evidence proves to be, more is demanded, so that the evidence is never adequate—the receding goalpost, the ever-lengthening playing field. Consider the scientific principle of peer review, of which this journal, *Alternative Therapies*, is a strong proponent. Our peer review panel is composed largely of scholars with prestigious

academic affiliations. Most of them are recognized authorities not just in CAM but in orthodox medicine, nursing, and other fields. If these experts pass favorably on a particular CAM research study, that's not good enough for Right Men. "Those [CAM] claims may be reviewed by *their* peers, but they sure don't look like *our* peers," said one "skeptical" journal editor recently (*San Francisco Chronicle*, January 6, 1998). According to this perspective, good peer review must conform to preexisting positions staked out by the Right Men. These tactics create a mockery of scientific protocol. The habit of changing the rules in midstream is one reason discussions with Right Men usually go nowhere.

GRUMPY OLD MEN

I could no more ram religious conviction into an atheist than I could ram a joke into the Scotchman. The only hope of "converting" the latter is that through contact with merry-minded companions he may begin to realise that he is missing something in life which is worth attaining. Probably in the recesses of his solemn mind there exists inhibited the seed of humour, awaiting an awakening....

—Sir Arthur Eddington⁴

Before I examine the specific charges of Right Men toward CAM, it is worth observing one of their most striking features: their truculent, irascible attitude. They generally seem impervious to humor and appear perpetually out of sorts. If there is a gene for jocularity, they are missing it. They remind me of a comment by the aphorist GC Lichtenberg⁵ (1742–1799): "He swallowed a lot of wisdom, but it seemed as if all of it had gone down the wrong way."

"It is a test of a good religion whether you can make a joke about it," GK Chesterton⁶ once said. I believe this criterion should also apply to skeptics and skepticism: if lightheartedness is lacking, criticism can take on a raw, contemptuous, destructive edge. Because Right Men are not given to humor by nature, however, to them issues tend to be dead serious. That is one reason why disagreements with them are often bitter (note 2).

When faced with the incessant whining, complaining, moaning, and bellowing of Right Men toward CAM, I have often wanted to suggest that they follow contemporary street wisdom: Take a deep breath, lighten up, chill out. Or as writer and ecologist Edward Abbey⁷ once put it: "My advice is: Be a part-time fanatic. Saving the world is only a hobby. Get out there and enjoy the world, your girlfriend, your boyfriend, husband, or wife. Climb mountains, run rivers, enjoy life, do whatever you want to do while you can, before it's too late."

RIGHT-MAN RHETORIC: THE QUACK-BUSTERS

*This grown-up man, with pluck and luck,
Is hoping to outwit a duck.*

—Ogden Nash⁸

As an example of the humorless hyperbole of Right Men, consider the accusations of Dr Victor Herbert, director of the

Nutrition Research Center at Veterans Affairs Medical Center in Bronx, NY. "In Dr Herbert's opinion," writes Wayne Hearn⁹ in *American Medical News*, "the [Office of Alternative Medicine's] creation bestowed unwarranted credibility on alternative medicine. 'The [OAM] was set up to promote fraud, period,' [Herbert] said, contending that Congress was hoodwinked by influence peddlers within the alternative medicine community."

This is a serious charge; the deliberate perpetration of healthcare fraud is a crime punishable by law. In any case, Herbert's comment is a telling insight into the way many Right Men employ "skepticism." Their vehemence toward CAM seduces them into making judgments that are both sweeping and universal. *All of CAM is condemnable; there is not a shred of value or a germ of truth in the entire field.* In other words, there are not just a few charlatans in the CAM movement: *all CAM practitioners are frauds, period—nothing conceded, nothing granted.* CAM practitioners are not even well-meaning, bumbling idiots; rather, they are "influence peddlers" joined in a malicious conspiracy to hoodwink politicians and subvert the noble aims of orthodox medicine.

According to Hearn,¹⁰ Herbert is one of the "four horsemen" of the "anti-quackery brigade" of the National Council Against Health Care Fraud. This 1200-member group compiles and exchanges data on allegedly false and unproven health claims. The other three who serve with Herbert on the council's board are Stephen J Barrett, MD, William Jarvis, PhD, and John Renner, MD. As Herbert's comments indicate, OAM-bashing is one of this group's favorite pursuits.¹⁰

These individuals proudly refer to themselves as "quack-busters." Here is another example of their attitude toward the OAM: "The four [Drs Herbert, Barrett, Jarvis, and Renner] ... have viewed with alarm the activities of OAM, which Dr Jarvis contends 'has been the biggest boon to quackery in history. Here you have one of the premier medical and science research institutions in the world, the National Institutes of Health, appearing to give legitimacy to all this.'"¹⁰

ANCIENT TACTICS

Facts do not cease to exist just because they are ignored.

—Attributed to Aldous Huxley

Right Men such as the quack-busters dismiss evidence that is contrary to their beliefs, or they simply ignore it as if it does not exist. There is nothing new in all this. Jule Eisenbud,¹¹ a psychoanalyst who has investigated the resistance to anomalous ideas in the field of parapsychology, notes that since ancient times people have been troubled by events or ideas that don't conform to their preconceptions, and they have evolved stereotypical responses to deal with them. He notes: "The solution to this problem has essentially not changed in historical times. This was, first, to insist, as did the great Roman orator Cicero, that there was no problem, that the anomalous things alleged to

happen did not happen. Second, if the first solution was found weak or otherwise wanting, to simply disregard the problem.”¹¹

RIGHT MEN AND FANATICISM

Contradiction should awaken attention, not passion.
—Thomas Fuller (1654–1734)¹²

Why is resistance to CAM often so fanatical? The main reasons may be rooted in the unconscious mind. Psychologists suggest that extreme behaviors often erupt as a result of the experience of “cognitive dissonance,” which is the psychological tension that wells up from the unconscious when we try to maintain a belief in two ideas that are fundamentally incompatible. One way of reducing this tension is through a cathartic attack on one of the “messages”—or by trying to “kill the messenger” who delivered it.

Psychologist Lawrence LeShan¹³ agrees. He states that a secure sense of self is rooted in a stable worldview, a belief in an orderly physical world governed by uniform laws. When some people confront anomalies—homeopathy, for example—their worldview and thus their ego are threatened. This can lead to an irrational, phobic reaction—“My God! What if homeopathy actually works!”—or to what psychologist Harvey J Irwin^{14(p309)} calls an “obsessional neurosis” against the anomaly.

The unconscious origin of these responses helps explain why debates with Right Men cannot be resolved by data. If researchers produced a thousand well-designed, double-blind, controlled clinical trials on herbal remedies, homeopathy, intercessory prayer, or therapeutic touch, would the Right Men be silenced? Not likely, because the Right Man syndrome is rooted in the unconscious, which cares little for reason. This doesn’t mean, of course, that we should abandon scientific investigation, but that we should not be naive about its power to convert the Right Men.

CAM, PARAPSYCHOLOGY, AND RIGHT MEN

[W]e do the sense-making. Let something appeal to us and we will make sense out of it. Let something offend us, disturb us, threaten us and we’ll see that it doesn’t make sense ... even if ... we have to contrive an entire upside-down ontology, a probability theory that works by magic and various other departures from straightforward logic.

—Jule Eisenbud¹⁵

Anomalies exist not just in CAM but throughout science. A field that is particularly rich with them, almost by definition, is parapsychology. That is why Right Men frequently lump CAM with parapsychology when they go on the offensive, hoping to establish guilt by association. (Sometimes they throw in Bigfoot, UFOs, and astrology just to round things out.) In fact, it is impossible to understand the feverish attacks of Right Men against CAM without examining their response to parapsychology.

Psychologist Charles T Tart, the parapsychology researcher and international authority on altered states of consciousness who was recently appointed the first holder of the Bigelow Chair of Consciousness Studies at the University of Nevada–Las Vegas,¹⁶ has for years studied the resistance to research in parapsychology. He has been particularly interested in why journals reject manuscripts that deal with this area. He states that one of the most prestigious scientific journals in the world had two major ways of rejecting parapsychology papers that will be familiar to CAM researchers who have had papers rejected for similar reasons:

[I]f it was a paper that presented empirical *data* showing some parapsychological effect, the reason given for rejection was that since there was no proper theoretical understanding of this, there was no point in publishing it, because the data didn’t make sense. On the other hand, if the paper was *theoretical*, it was rejected on the grounds that there were no empirical data to support this kind of theorizing. And if worst came to worst, [this particular journal’s] editors could always find an agriculture professor in Iowa who of course knew nothing about the field but would say the paper was unsuitable and justify its rejection. It’s a sad but revealing story. It shows the illogical, irrational side of the scientific establishment. I strongly believe in the ideals of science. But science is done by real people who are as hung up as you and I, and have real problems when they come face to face with the paranormal.¹⁷

Or, as we shall see, when they come face to face with CAM.

HIDDEN BENEFITS

Have you learn’d lessons only of those who admired you, and were tender with you? Have you not learn’d great lessons from those who reject you, and brace themselves against you?

—Walt Whitman¹⁸

There is a benefit to criticism of this sort, no matter how unfair it may be. Researchers in parapsychology, by attempting to answer such objections, have gradually increased the quality of their experiments over the years. “And the result,” Tart^{17(p40)} says, “has been that *the methodological quality of experiments in formal parapsychology by and large is much better than in any other area of science*. There’s been so much criticism of parapsychology for so long that the methodology has become really tight and there’s simply no *rational* way to dismiss that rigorous kind of evidence.”

Exaggeration? British biologist Rupert Sheldrake¹⁹ examined 1423 papers from different fields of experimental science published in world-famous journals between October 1996 and February 1997. His goal was to establish the prevalence of the use of blind methodologies in experimental research in these fields. In the physical sciences, no blind experiments were found among the 237 papers reviewed. In the biological

sciences, there were 7 blind experiments out of 914 (0.8%). In the medical sciences 6 of 102 studies (5.9%) used such methods, and in psychology and animal behavior 7 out of 143 experiments (4.9%) used such methods. By far the highest proportion of studies employing blind methods—23 of 27 studies (85.2%)—was found in parapsychology.

“Most hard scientists take it for granted that blind techniques are unnecessary in their own field,” says Sheldrake.²⁰ He continues, echoing Tart’s sentiments: “One chemist summed up his attitude to blind methods by saying science was hard enough as it is, without making it worse by not knowing what you’re working on.... Parapsychologists, on the other hand, have been constantly subjected to intense scrutiny by sceptics, and this has made them more rigorous.” The same benefit *could* accrue to CAM—a benefit the Right Men never intended.

‘SCARY, BUT TRUE’

Which brings us to the darker side of the equation. [CSICOP’S] skepticism is not always balanced. There is a fair amount of guilt by association and ad hominem argumentation.... If you believe in certain crazy things, the implication is that you probably believe in other crazy things ... because you have lost your power of reason and your appreciation for scientific method.... [T]he general tone ... is extraordinarily cavalier and condescending.

—Mark B Woodhouse²¹

As I mentioned earlier, guilt by association—lumping CAM with Bigfoot—is one of the favorite tactics of the Right Men. Here’s how it works.

One of the leading foes of CAM is the Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP). Journalist Dennis Stacy²² reports that, in a recent fund-raising letter sent to their membership, CSICOP cited a letter they received from a 14-year-old girl from Kentucky, in which she asked for “info on reports, abductions and just facts about aliens.” As a child she believed she was an alien. Her family reinforced this belief by telling her that she had been placed in their home by the government, who paid them to keep her. Her sister still claims that she, the 14 year old, is “part of some big government experiment to see if aliens can be like humans.” Further on in the fund-raising letter, after the threat to American culture and innocent children has been developed in lurid detail, we find that aliens have been lumped in with dowsing, as well as with—of all things—nonlocal, intercessory prayer:

Scary, but true: CSICOP may be one of the last bulwarks against a future where children will grow up believing that they’re alien transplants—that prayers sick people don’t even know about can heal them—or that folks wielding forked sticks can find water underground. To keep up the battle for rationality, I must ask you to make your most generous gift to CSICOP today.

A large database supports the efficacy of intercessory prayer.²³ Placing it smack in the middle of alien transplants, abductions, and dowsing is telling. It reveals that the real target of Right Men is not merely CAM, but something more general: what they consider to be magical thinking, superstition, fantasy, and unreason. As a consequence, they usually don’t single out specific areas for careful, reasoned debate, but deal in generalities and a blanket denial of data. In their attacks, they employ not a scalpel but a blunderbuss.

Whenever fanatics try to stamp out heresy, whether secular or religious, they tend to rely on equal opportunity persecution. This pattern has proved consistent for millennia. In this respect, today’s Right Men are hardly unique. In spite of their opposition to religion, they have a lot in common with religious fanatics throughout history.

In the 13th century, when heretics cropped up everywhere in Europe and were contaminating the purity of Christian doctrine, Innocent III ordered a bloody crusade against them. The problem was how to tell the devout from the heretics. According to a popular legend, the problem was solved by Arnaud, the papal legate, who told the crusaders: “Kill everyone—God will recognize his own.” The crusaders did their best to follow instructions, and proceeded with wholesale butchery.²⁴

I suspect that this scenario is familiar to researchers examining the effects of prayer and religious devotion on health—especially when they discover that they’ve been crucified alongside exotic phenomena with which they have nothing in common.

Because CSICOP figures so prominently in the opposition to CAM, it behooves those interested in this field to learn more about this organization. The most thorough examination of CSICOP I know of—a debunking of the debunkers—is that of George P Hansen.²⁵ In the abstract introducing his paper, “CSICOP and the Skeptics: An Overview,” Hansen states:

The Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP) has become the most publicly visible institution engaged in the debate on the paranormal. Initially CSICOP was primarily a scholarly body, but soon after its beginning it adopted a popular approach that fostered a more broadly based social movement. It actively promoted the formation of local societies with similar aims. Both CSICOP and the local groups have some distinguishing features. Prestigious scholars are affiliated with these organizations, a disproportionate number of magicians are involved, the groups are dominated by men, and many members hold religious views that are antagonistic to the paranormal. Despite the name of the organization, actual research is a very low priority of the Committee. In fact, CSICOP instituted a policy against doing research itself. CSICOP’s highest priority has been to influence the media. Its rhetoric and activities are designed to appeal to a broad audience rather than to scientists who investigate unusual or controversial phenomena. Recently, the

Committee broadened its focus to include areas outside the paranormal.

VAMPIRES, TOE TICKLERS, AND DOTTY SENATORS

If Jesus Christ were to come today, people would not even crucify him. They would ask him to dinner, and hear what he had to say, and make fun of it.

—Thomas Carlyle²⁶

Some Right Men invoke a mythology in their attacks on CAM that is almost funny. Consider, for example, “Sucking With Vampires: The Medicine of Unreason.” This article, by Gerald Weissmann²⁷ of the Department of Medicine, New York University Medical Center, appears in a 1996 issue of the *Annals of the New York Academy of Sciences*. The title comes from James Russell Lowell’s *Witchcraft*: “Credulity ... manifests itself ... as ... the daughter of fancy or terror ... it sucks with the vampire, gorges with the ghoul and commits uncleanness with the embodied Principle of Evil, giving up the fair realm of innocent belief to a murky throng from the slums and stews of the debauched brain.”²⁸

Weissmann has several targets, one of whom is Bill Moyers and his PBS television series *Healing and the Mind*. Having linked Moyers with the “New Age of Unreason,” Weissmann goes after popular author Marianne Williamson, whom he faults for having counseled “the deeply troubled spirits” of Elizabeth Taylor, Oprah Winfrey, Judy Collins, and Mike Nichols. Then Weissmann is off to New Age author JZ Knight, who claims to channel a 35,000-year-old warrior named Ramtha, and who achieved notice by counseling actress Shirley MacLaine.

You may wonder why this got published in the *Annals of the New York Academy of Sciences*, and what it has to do with medicine. (Don’t worry if you can’t figure it out; the reasoning *is* subtle.) The reason is that this tortuous trail leads up to the greatest vampire of all: the NIH’s Office of Alternative Medicine. Weissmann describes how the NIH, “spurred on by proponents of homeopathy, meditation and spiritualism in the Congress,” convened a conference made up of a “coven” (witches again!) of experts in the fields of Ayurvedic, naturopathic, Chinese herbal, and homeopathic medicine. These developments are particularly damaging because “young doctors are sweating over research grants that remain unfunded because an alliance of homeopaths and New Age toe ticklers seems to have gotten hold of a dotty Senator or two.”

Weissmann now makes a leap that is breathtaking—the linkage of alternative healing with Nazism! He states: “One of Moyers’ healers reminds us that the word healing relates to making things whole. Yes, it does, but my OED informs me that its ultimate origin is Old Teutonic, and in German the salutation is *Heil*, as in *Sieg Heil!*” In support, Weissmann cites a 1994 book called *Cleansing the Fatherland: Nazi Medicine and Racial Hygiene*,²⁹ which describes “the preference of early Nazi health policy for holistic medicine and natural healing over decadent, Jewish [read: scientific] medicine....”²⁷

In case you’re having trouble following this tortured logic, allow me to simplify. Weissmann believes that those of us who are attracted to holistic medicine “suck with vampires,” “gorge with the ghoul,” traffic with “the embodied Principle of Evil,” are addicted to magical thinking, are deluding members of Congress who are too daffy to think for themselves, and, by virtue of our conviction that healing has something to do with wholeness, must have something in common with Nazi thought including anti-Semitism, the latter by virtue of our alleged rejection of scientific medicine.

Oh well, Weissmann’s accusations could have been worse. He might have pointed out that Hitler was a devoted vegetarian, which must mean that CAM, through its emphasis on meatless nutrition, is further linked with the *F hrer*. Or Weissmann could have mentioned that Hitler kept a dog, a German shepherd named Blondi³⁰—a clear link between Nazism and CAM by reason of CAM’s emphasis on animal-assisted therapy, in which dogs predominate. Then there is Hitler’s fondness for music.³⁰ Hitler regularly played Wagner, Beethoven, and Bruckner on the gramophone in his bunker, which could have furnished Weissmann yet another link between Nazism and CAM via the music therapy community, which often employs classical themes.

You might think that this sort of paper is a fluke. Not so. Wallace Sampson, of Stanford University School of Medicine, also contributed a paper titled “Antiscience Trends in the Rise of the ‘Alternative Medicine’ Movement” to the same issue of the same journal. After examining the controversy surrounding the drug Laetrile (*l*-mandelonitrile- β -glucuronic acid) in the 60s and 70s, Sampson³¹ concludes:

The holistic movement and its successor, the alternative movement, characterized by an even broader, all-inclusive attack on reason, have parlayed techniques of propaganda, academic resentment of science, and dubious philosophical speculations into the most effective assault yet on scientific biomedicine. Its object is probably the appropriation of the political and social power now in the hands of scientists and physicians, and its attendant economic rewards. The battle will be widespread, with universities providing one important arena. Change may take decades to occur. Meanwhile, the scientific and medical communities will be wise to learn from the success of pseudoscience.

CAM AND SIN

He has the right to criticize who has the heart to help.

—Attributed to Abraham Lincoln

Robert L Park,³² a professor of physics at the University of Maryland and an implacable foe of CAM, continues this drumbeat by implying that there is something sinful and immoral about CAM. An example is his paper “Fall From Grace,” a 1996 article published in *The Sciences*. The title of the article has interesting theological overtones. In Western religions, the Fall is

always into sin. Thus CAM, having fallen from the pedestal of respectable science, has descended into wickedness.

Park laments the fact that, as he sees it, “the total research capacity of the United States is declining for the first time in history.”^{32(p18)} He condemns Congress’s funding priorities, such as the Superconducting Super Collider, which, having been abandoned, is “filling with water” beneath the Texas prairie (another biblical allusion: the Flood).^{32(p18)} As a result of such Congressional misappropriations, “talented young Ph.D.’s, once courted by both academe and industry, find themselves shuttling from one temporary position to another—or shut out of science altogether.”^{32(p18)} (Sort of like a lot of CAM professionals?)

If you think the present situation is bleak, look what’s coming up: “The U.S. is preparing to spend nearly \$100 billion to construct a scientifically useless space station in low earth orbit; the National Institutes of Health is required by Congress to fund programs in ‘alternative medicine’ that serious scientists dismiss as quackery....”^{32(p18)}

Thus, by a mere flick of the semicolon, one of the most expensive science projects in the history of the human race is linked to a tiny office at the NIH, whose budget is only around one tenth of 1% of total NIH expenditures.

What about Park’s allegation that “serious scientists dismiss [alternative medicine] as quackery”? Well, *some* do, such as Herbert, Weissmann, and Sampson. But to suggest that all serious scientists deplore CAM as quackery borders on demagoguery. Park is on exceedingly thin ice. Scientific interest in CAM was substantial in 1996 at the time of his writing. Even then, “at least 34 US medical schools [were] reported to have started or [were] developing courses on alternative medical practices in their medical education programs.”³³ Even in 1995, “on average, physicians perceive[d] complementary medical therapies (such as acupuncture or manipulation) as moderately effective.”³⁴ Moreover, at that time “more than half of family physicians ... surveyed considered alternative medicine interventions (including diet and exercise, biofeedback, hypnotherapy, and massage therapy) to represent ‘legitimate medical practices.’”³⁵

And this trend has continued—something Park must find appalling, if he’s heard about it. In a recent survey, readers of *The Journal of the American Medical Association* identified alternative medicine as the seventh most important topic for publication in *JAMA* (out of 73 choices).³⁶ And the *JAMA* editorial board, its senior staff, and the editors of the American Medical Association *Archives* Journals ranked alternative medicine among the top three subjects (of 86) for their journals for 1998. This explosion of interest—by serious scientists and physicians—prompted *JAMA* to issue a call for papers for a theme issue devoted to “complementary, alternative, unconventional, and integrative medicine.”³⁷ A recent development the Right Men must find particularly distressing is that the NIH Office of Alternative Medicine, which they so love to hate, has been considered for having its status upgraded to a full-fledged national center.³⁸

Professor Park vented his rage against CAM in another

Right Man-type article titled “The Danger of Voodoo Science” (*The New York Times*. 1995:E15). In a virtuoso twist of logic, he makes a connection between the Unabomber and CAM. Park quotes the Unabomber’s comment that “[t]he people we are out to get are the scientists and engineers.... We advocate eliminating industrial society.” Get the connection to CAM? We, too, are anarchists out to destroy the scientific base of civilization. Here is Park’s evidence: “Researchers in the Office of Alternative Medicine at the National Institutes of Health espouse psychic healing and homeopathic medicine. What they all share is a profound hostility to modern science.... There is also a resurgence of belief in magic and psychic phenomena, which has spread to all levels of society, even to the National Institutes of Health” (*The New York Times*. 1995:E15).

But something baffles Park, as this quote illustrates: “The response of scientists has been muted. Why have the scientists themselves, who are forever bemoaning the general scientific illiteracy, been so timid about publicly condemning this nincompoopery? Perhaps they fear being cast as intolerant, even of foolishness” (*The New York Times*. 1995:E15).

There is another possibility that Park never considers—something that may explain why most scientists have been hesitant to obstruct the workings of the OAM: their respect for the freedom of inquiry that lies at the heart of science itself. Perhaps they don’t want to be a part of the inquisition that Park advocates; maybe they feel uneasy condemning all of CAM as “nincompoopery” and “voodoo science.”

Park’s “voodoo science” article ends on a particularly disingenuous note: “But it is science that uncovers the problems and it is to science that we turn to solve them. This is not because scientists have any claim to greater intellect or virtue, but because science is the only means we have to sort out the truth from ideology or fraud or mere foolishness” (*The New York Times*. 1995:E15).

If science is the best arbiter of truth, why not let it proceed? If allowed to do its work, science might expose CAM for the “voodoo” and “nincompoopery” Park claims it is. If unimpeded, the OAM could turn out to be Park’s greatest ally. For all his sanctimonious support of science, Park appears to know ahead of time what is foolish and what is not. He really doesn’t need science to tell him.

Park’s implication that CAM is fallen and therefore sinful crops up in another of his papers in which he refers to the serpent, the great tempter, and to snake oil, one of his favorite metaphors for alternative medicine. “And if scientists do not explain that the NIH Office of Alternative Medicine is pushing snake oil, who will?” he asks. “The threat is to scientific integrity. We remain silent at our peril.”³⁹ And in “Buying Snake Oil With Tax Dollars,” a piece Park wrote for the op-ed section of *The New York Times* with biologist Ursula Goodenough of Washington University, warnings virtually slither off the page about “new-age techno-babble,” “universal energy,” “vortexes,” “magical notions,” and the evils of—you guessed it—the NIH’s Office of Alternative Medicine (*The New York Times*. January 3, 1996:A).

Leon Jaroff, founder and first managing editor of *Discover* magazine, appears to be another Right Man. In “Bee Pollen Bureaucracy,” a fustian blast in *The New York Times* (October 6, 1997), Jaroff describes the Office of Alternative Medicine as “a source of embarrassment in Washington.” In condemning CAM, he refers to “highly dubious practices,” “witchcraft,” and “quackery.” Jaroff accuses Senator Tom Harkin of Iowa, who was influential in the establishment of the OAM in 1992, of being particularly gullible because he “seems to believe in the curative powers of bee pollen and other unproved potions and practices.” Among Jaroff’s other targets are “guided imagery, yoga, massage, homeopathy, ... therapeutic touch ... [and] the use of magnets, strategically placed on the body, to relieve chronic pain” (*The New York Times*, October 6, 1997).

Like Park, Jaroff tries to have it both ways. He favors the scientific investigation of these therapies, but wants to shut down the office that was established to do the investigating. As he puts it: “Putting such treatments to a scientifically rigorous test is not a bad idea, of course.” But the problem, Jaroff contends, is that the OAM hasn’t validated or invalidated any of “these dubious nostrums or therapies” (*The New York Times*, October 6, 1997).

An obvious question Jaroff does not ask is, Why *hasn’t* the OAM been more productive? Could it be that attacks such as his have something to do with the problem? “A rational army would run away,” Montesquieu⁴⁰ once said about troops facing battle. This surely applies also to the scientists and physicians who work within the Office of Alternative Medicine. Why would anyone choose to endure the constant harangues and attacks they face? One could make a strong case for giving them medals of valor for putting up with the bilge and piffle of the Right Men. If these critics had expended 1% of their energy on constructive suggestions about how to evaluate the therapies they condemn, the controversies surrounding CAM might have been clarified a long time ago. But the Right Man prefers to attack, sabotage, and destroy. He likes to get out the hatchet and get on with things. Jaroff’s remark is typical: “Congress should cut its losses and shut down Tom Harkin’s folly” (*The New York Times*, October 6, 1997).

SEEING THE DEVIL EVERYWHERE

He who believes in the devil, already belongs to him.

—Thomas Mann⁴¹

The mythic side of “skepticism” reaches epic levels in the late arch-critic Carl Sagan’s book, *The Demon-Haunted World: Science as a Candle in the Dark*.⁴² Sagan dresses the Right Man theme in the garb of a cosmic melodrama—light against darkness, good against evil, the divine against the demonic. You can figure out for yourself to which side of the fence Sagan assigns CAM-related therapies.

Respected scientists have challenged Sagan’s oppositional, polarizing way of thinking. In his review of *The Demon-Haunted World*, professor of chemistry John O’M Bockris^{43(p559)} of Texas A&M University states: “[Sagan believes that] a mighty effort

should be made, nationally, to drag Americans out of the morass of unsound values, ridiculous beliefs in such scams as telepathy, homeopathy, dowsing, and (of course) anything having to do with organized religion.” Homeopathy qualifies for a particular drubbing from Sagan. So does parapsychology, which for years was one of Sagan’s favorite targets. In addition to demons, there are also “witches” out there (those darned witches again!), which is Sagan’s term for sensitives—people who claim to know things telepathically or clairvoyantly.

In a classic example of understatement, Bockris writes: “In spite of Sagan casting himself as the St George of Science, a number of the views he held will surprise scientists....”^{43(p560)} Bockris doesn’t miss the irony in Sagan’s stance. Bockris asks, “But if it is really true, as the book brings out, that such a large number of undeniable phenomena ... offer present science facts for which it has utterly no clue, then, maybe, it is time to stop yelling fraud, sober up, and take a good hard look at the basics of consciousness and our relation to the world we experience.”^{43(p562,563)}

In another review of *The Demon-Haunted World*, professor of chemistry and science studies Henry H Bauer⁴⁴ of Virginia Polytechnic Institute and State University—Blacksburg, wryly states that “‘the devil is in the details,’ and [that Sagan’s] book is replete with errors of fact, oversimplifications, opinion stated as fact, and the like.” But Bauer^{44(p564)} generously finds that “Sagan’s heart is clearly in the right place, about science, education and society in general.” Indeed, Sagan is often revealing about his own biases, which is a quality that separates him from classic Right Men. He acknowledges that skeptics sometimes “wax superior and contemptuous.... I’ve even sometimes heard, to my retrospective dismay, that unpleasant tone in my own voice.”^{42(p297)} Sagan virtually excoriates CSICOP, acknowledging that “CSICOP is imperfect. In certain cases [the] critique is to some degree justified [that CSICOP is] hostile to every new idea ... will go to absurd lengths in its knee-jerk debunking, is a vigilante organization, a New Inquisition.”^{42(p299)} In spite of these shortcomings, however, in the end Sagan sides with the Inquisition because of their willingness to tell “the other side of the story....”^{42(p299)}

James Gorman, deputy science editor of *The New York Times Book Review*, was struck by the tabloid flavor of some of Sagan’s passages; for example: “The candle flame gutters. Its little pool of light trembles. Darkness gathers. The demons begin to stir.” In response to this passage, Gorman notes that Sagan “could write for the tabs” (*The New York Times Book Review*, April 7, 1996:10).

RIGHT MEN: CONTRA SCIENCE

I strongly agree with the dictum of Charles Sanders Peirce that our foremost obligation must be to do nothing to block inquiry.

—Marcello Truzzi⁴⁵

It isn’t proper to dignify comments of Right Men by referring to them as skepticism. A skeptic is someone who suspends

judgment until the facts are in. A Right Man is more properly called a “pseudo-skeptic,” or perhaps a cynic. Genuine skepticism, in order to operate, requires information and data—the gathering of which, as we’ve seen, the Right Man opposes. The observations of psychologist Charles T Tart^{17(p39)} about the so-called skeptics of parapsychology research apply also to the Right Man syndrome encountered in the field of CAM:

I can understand some of these people getting incensed about charlatans who claim they are doing something psychic, or spiritual, and are clearly ripping people off. But why would they go out of their way to stop *scientific research*, especially if these organizations were really skeptical and scientific? “Skeptic” means not having made up your mind but looking at the evidence. You would think instead that they would be helping us *get* money. But that’s not what is happening. Instead, you get incredible emotional intensity. Basically, these people spend a lot of time and tremendous amounts of emotional energy *opposing* research. As a psychologist this gives me pause. It doesn’t make sense to devote so much emotional excess, and energy and time, opposing something that’s trivial, considering all the other problems there are in the world. What’s lying underneath all that?

Right Men typically reverse the charges, however, and accuse those they oppose of being against science. I should know; my own comments about the role of science in CAM have been misinterpreted and distorted beyond recognition. Referring to an editorial of mine in *Alternative Therapies*,⁴⁶ Sampson^{31(p195)} states:

He [Dossey] goes on for nine pages about the supposed fact that blinded studies cannot measure the effects of initial conditions or of consciousness; yet he offers no substitute system for evaluation. He thus leaves us with this nonsequitur: present knowledge is adequate to dismiss the utility of most alternative methods; but there are ineffable qualities that our methods cannot detect and alternatives cannot define; therefore, alternative methods must be accepted, their practitioners licensed, and their services paid for by public funds and health insurance.

This is such an egregious misrepresentation of my views that I shall offer a few comments in self-defense. I believe that CAM-type interventions should be investigated relentlessly; but, as I explained in my editorial, the double-blind, randomized controlled trial (RCT), which many believe is the gold standard of clinical research, may be inadequate for many CAM-type therapies. This is hardly a heretical position, because the debate about the adequacy of the RCT is widespread and is not limited to the evaluation of complementary and alternative therapies.^{47,48} As Sampson surely knows, there is a firestorm of controversy in orthodox medicine surrounding the adequacy of RCTs.^{49,50} In fact, the relevance of and rationale for the RCT have been debat-

ed since it was first transferred to clinical medicine from agricultural research.^{49(p531)}

According to a recent *JAMA* editorial: “[S]tudies have shown that RCTs can be vulnerable to multiple types of bias at all stages of their life spans.... [M]ost reports of RCTs, even those published in prominent journals, are incomplete and do not reflect the empirical methodological evidence available.... RCTs can indirectly lead to biased health care decisions.”⁵¹ “Enthusiasm about the results of clinical research should not be based on its *P* value,” cautioned an authority on RCTs.⁵² According to another group of investigators,⁵³ evidence from RCTs, rather than being a gold standard, may have “more the value of a coffee future—likely to be altered by tomorrow’s experience.”

If RCTs are golden, then, some are more golden than others. As a result of these deficiencies, some observers have suggested that we may be going off the gold standard. For example, a recent article in the *Journal of Clinical Epidemiology*⁵⁴ heralded “the demise of the randomized controlled trial” in conventional medical research. Therefore, to suggest that the RCT is inadequate is hardly unusual, and is not the same as advocating bailing out of science altogether in favor of an “anything goes” policy, which Sampson implies I favor.

Sampson would have his readers believe that it is mainly a bunch of ill-tempered cranks in the CAM movement who object to RCTs. We do this, he implies, because we have no evidence, can’t produce any, and fear being exposed as quacks. Our complaints about RCTs are a smoke screen concealing our efforts to infiltrate orthodox medicine and unleash our silly therapies on the public.

Sampson complains that I offer “no substitute system for evaluation.” The purpose of my editorial was not to analyze the options to the RCT that are available. That has since been done by others⁵⁵ including Levin and colleagues,⁵⁶ who comprise the Quantitative Methods Working Group convened by the NIH in 1995 in support of the Office of Alternative Medicine. This group was charged by the NIH with identifying methods of research and data analysis that can be applied to CAM. Although they, too, questioned the adequacy of the RCT, they did not advocate its abandonment, but concluded that other research methods and analytic procedures can be used in addition to the RCT. The working group stated^{50(p1079)}:

[T]here are numerous options for researchers seeking to investigate the efficacy of particular alternative therapies or health-care interventions.... These include large RCTs, small RCTs, nonrandomized trials with contemporaneous controls, nonrandomized trials with historical controls, cohort studies, case-control studies, cross-sectional studies, surveillance studies, consecutive case series, and single case reports.^{56,57} ... Existing conventional research strategies are robust and appropriate even when the therapeutics of an intervention are said to be based on unknown, mysterious,

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NOTES ON THE JOURNEY

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or novel mechanisms of action.... Existing outcome measurement already offers a wide range of choices. These include clinical and laboratory indices; rates and ratios measuring morbidity, mortality, risk, and survival; and multidimensional indices of pain, overall health status, physical functioning, symptomatology, psychological well-being, and quality of life.

Lest there be any doubt where I stand personally with regard to applying science to the field of CAM, allow me to affirm the conclusions of the NIH/OAM Quantitative Methods Working Group^{50(p1092)}:

For alternative therapies to become accepted, they must endure the same degree of scientific scrutiny as conventional therapies.... [A] prospective patient ought to be able to begin a course of treatment with a reasonable idea of its success rate beyond just the practitioner's opinion. Without these modest caveats, CAM will not, and should not, become accepted by the larger medical community.

EXPLAINING RIGHT-MAN THINKING: SIX PERSPECTIVES

Scientific data do not arrive with little "true" and "false" labels attached to them. On the controversial frontiers of science, be they in medicine, physics, or parapsychology, each scientist has to make decisions regarding whether to accept or reject certain data as representative of reality. It is at this point that science ceases to be objective, because in making those decisions each scientist brings with him or her the full weight of past experiences as well as preconceptions and simple blind prejudices.

—Richard S Broughton⁵⁸

Earlier we looked at the experience of cognitive dissonance and the role of the unconscious in explaining the Right Man syndrome. Now, having had a closer look at *how* Right Men think and behave, let's explore further *why* they do so by examining six additional perspectives.

The Teflon Mind

*Oh! let us never, never doubt
What nobody is sure about!*

—Hilaire Belloc⁵⁹

Henry Dreher has written an admirable book about behavioral medicine and psychoneuroimmunology: *The Immune Power Personality*.⁶⁰ In it he reviews research showing that our emotions, thoughts, and behaviors influence our immune function and general health, sometimes dramatically. Following the publication of this book, Dreher encountered criticism he found surprising. Some of it

was disconcerting—one reviewer called his carefully documented work a "book of hugs." Dreher found, to his surprise, that mean-spirited criticism does not always come from *outside* the field, but sometimes from *inside* the ranks of CAM. He states⁶¹:

I thought we'd moved beyond this kind of blanket skepticism.... [E]ven people who seem kindly disposed toward mind-body science and medicine are liable to cross a line from a rigorous critical examination, which I believe is essential, to unremitting skepticism.... They receive and interpret data that illustrate meaningful mind-body interactions with a Teflon mind. Nothing sticks.

For the most part, I do not believe that Right Men ignore data, distort fact, and manipulate truth consciously. Their selective blindness is more likely to be an unconscious phenomenon, as we've seen, over which they have little control. That is why the Teflon mind is such an enduring characteristic of the Right Man. They literally *do not see* what they reject.

Consider a comment by the publishers and editors of a "skeptical" journal launched in 1997, *The Scientific Review of Alternative Medicine*. This publication bills itself as "the first peer-reviewed journal exclusively dedicated to applying rigorous tests to the claims of alternative medicine"⁶²—quite a claim, in view of the fact that *this* journal, *Alternative Therapies*, was about to enter its *fourth* year of publication at the time this comment was made. Could the editor of the new journal, Dr Wallace Sampson, simply not have been aware that *Alternative Therapies* existed? That it is heavily peer-reviewed? That its rejection rate of research papers is roughly that of the *New England Journal of Medicine*? That its editorial and advisory boards are composed of individuals with envious academic credentials? That it encourages the rigorous testing of alternative therapies and regularly publishes such studies? That it publishes clinical trials that are *unfavorable* as well as favorable to CAM? That it publishes a variety of opinions, including those of skeptics?

It seems unlikely that Dr Sampson did not know, at the very least, that we exist, in view of the fact that in 1995 he actually *published* an article in *Alternative Therapies*: "Homeopathy Does Not Work."⁶³ A deliberate obfuscation from Dr Sampson? Probably not; it is quite likely that he actually believes that no other peer-reviewed journal exists in the field of CAM, in spite of having published in one. This is how the Teflon mind operates: nothing sticks.

Locus of Power

When the gun came into widespread use in the 1500s, it decisively leveled the killings fields around the world. As writer Barbara Ehrenreich points out in her highly acclaimed book *Blood Rites*,⁶⁴ warrior elites almost everywhere held out against its explosive power for as long as they could. She notes:

In Egypt, the elite Mamluk warriors disdained the gun. In Italy, one sixteenth-century condottiere ordered the eyes plucked out and the hands cut off of any enemies caught

with firearms. Japan went the furthest, with the central government actually banning the gun a few decades after its introduction by Europeans in 1543. As Noel Perrin⁶⁵ has written, the Japanese warrior elite had been quick to grasp the gun's potential threat to their entire social system: "It was a shock to everyone to find out that a farmer with a gun could kill the toughest samurai so readily."

Right Men, in their objections to CAM, are behaving like the warrior elite who protested the change in the locus of power that followed the introduction of guns. Many CAM therapies allow people to wield their own weapons and slay their own diseases. They are no longer totally dependent on healthcare professionals—medicine's warrior elite—a reversal of power many Right Men find threatening.

Birth Order

Why do some scientists defend the status quo, while others are more comfortable with new possibilities and radical ideas? Social scientist Frank J. Sulloway sets out to answer these questions in his book *Born to Rebel: Birth Order, Family Dynamics, and Creative Lives*.⁶⁶ The idealized version of science holds that scientists are always open to new ways of thinking, but Sulloway^{66(p33iii)} argues that "[m]ost people, including scientists, *resist radical innovations*," and that far more than evidence is required to change someone's mind.

Is intelligence the major factor that accounts for how scientists respond to new ideas? Surely not. Sulloway^{66(p360)} notes: "As Darwin himself once pointed out about science, the smartest people do not tend to make the most important discoveries." He continues: "IQ is only weakly related to achievement among people who are smart enough to become scientists.... [A] scientist who has an IQ of 130 is just as likely to win a Nobel Prize as a scientist whose IQ is 180."^{66(p357n)}

Sulloway shows that *birth order* is among the major factors affecting how open one is to new ideas. This will be a new idea for many people—but it is one that, according to one reviewer, is supported by Sulloway's "massive statistical data-set" and his "magisterial command of the literature and of research techniques."^{67(p427)}

Sulloway emphasizes that siblings compete for that greatest treasure of all—parental attention and care—in different ways. Firstborns usually find it a successful strategy to conform, to be like their parents, to please them. Those born later can hardly displace the firstborn from their niche of parental favor by employing the same method of obtaining it, so they invoke a different style. As a consequence, "[t]he longer siblings live with one another, the more different they become."^{66(p83)} A general pattern emerges: firstborns learn to conform; those born later do not. These habits persist in life and make huge differences in how an individual responds to new ideas. The result: As a general rule, the more heterodox an innovation, the more siblings are likely to disagree over its merits.^{66(p351)}

Sulloway's data analysis shows that individual later-borns, such as Darwin and Wallace, the co-origins of the theory of evolution, "were 9.7 times more likely than individual firstborns,

ON SKEPTICISM, SCIENCE, AND UNCERTAINTY

When we are not sure, we are alive.
—Graham Greene⁷⁷

The most important discovery of the twentieth century is human ignorance.
—Lewis Thomas⁷⁸

Science is not meant to cure us of mystery, but to reinvent and reinvigorate it.
—Robert Sapolsky⁷⁹

We fear something before we hate it; a child who fears noises becomes a man who hates noise.
—CV Connolly⁸⁰

Most men occasionally stumble over the truth, but they pick themselves up and continue as if nothing had happened.
—Attributed to Winston Churchill

Every great advance in natural knowledge has involved the absolute rejection of authority.
—TH Huxley^{81(p331)}

To be uncertain is to be uncomfortable, but to be certain is to be ridiculous.
—Chinese proverb

The wise man says, "I am looking for the truth," and the fool, "I have found the truth."
—Russian proverb

Science commits suicide when it adopts a creed.
—TH Huxley^{81(p330)}

Cynicism: "[T]hat armor, that curse, that evasion, that way of staying safe while seeming wise."
—Wallace Stegner⁸²

The first half of my life, I responded to arrogant people with anger and arrogance. Now I respond to their fragility with delicate care.
—Theodore Isaac Rubin⁸³

I never saw an instance of one or two disputants convincing the other by argument.
—Thomas Jefferson⁸⁴

such as Lyell and Agassiz, to advocate evolutionary ideas.”^{66(p34)} Birth order, Sulloway believes, also helps explain why French scientists were more resistant than were English scientists to Darwinian theory. In 1859, French scientists had only 1.1 siblings compared with 2.8 siblings among scientists in other countries—indicating that French scientists were much more often firstborns and therefore innately unlikely to accept a radical innovation. Sulloway^{66(p26)} adds: “Throughout the debates over evolution, 80-year-old laterborns were as open to this theory as were 25-year-old firstborns.... [B]eing laterborn was equivalent to a 55-year-old dose of the openmindedness that typically resides in youth.... Compared with laterborns, firstborns are especially overrepresented among the members of *establishment* science.”^{66(pp253,254)}

Families sometimes complicate the effects of birth order by raising later-borns as firstborns—thus the concept of *functional* firstborns. An example is the Danish astronomer Tycho Brahe (1546–1601), who was so unwilling to go against convention that he would not excuse himself from the table to empty his bladder—and died as a result. Sulloway^{66(p27)} wryly observes: “A man who was incapable of setting aside table manners for a call of nature was hardly suited to challenging, as Copernicus did, the foundations of cosmology.”

Are Right Men disproportionately firstborn? Does their birth order condition them to favor the status quo and reject the novel ideas of CAM? This leads to the corollary question: Are proponents of CAM disproportionately later-born? Are they predisposed to rebel? Does their birth order prepare them to respond more openly to new possibilities?

Right Men as Resistant Organisms

*For the obdurate people will not believe
What they do not see and distinctly feel.*
—Hermann Hesse⁶⁸

As we’ve seen, Right Men claim to be susceptible to reason. “Just show us the facts,” they say, “and if the evidence is strong enough, we’ll agree with you.” But when such evidence is forthcoming, Right Men typically turn a deaf ear. It’s as if they mutate in a way that leaves them immune to evidence, like bacteria mutating to resist the “persuasions” of an antibiotic. When resistance is fully developed, it is impossible for Right Men to be persuaded by fact. In spite of this, CAM researchers struggle to find increasingly potent “killer evidence” that might convince Right Men, like drug researchers trying to discover more powerful antibiotics that can keep up in the race with resistant organisms. These efforts eventually prove futile, however, because Right Men always evolve more efficient methods of resisting whatever evidence is produced.

Right Men also colonize readily. Like resistant microbes, they take over any environmental niche that may be available. Academic faculties and medical staffs are particularly attractive to them. They tend to clone as well—forming, like CSICOP, local organizations to propagate their points of view.

In the natural world, pathogens sometimes appear simply to go away mysteriously. Tuberculosis, for instance—the “white death”—began to disappear from the great cities of Europe for reasons that are not entirely clear.⁶⁹ This also has proved to be the eventual fate of many intransigent Right Men who have opposed new ideas in medicine and science. Sometimes they just die off. As physicist Max Planck put it, science changes funeral by funeral.

One way of provoking bacteria to mutate and become resistant to an antibiotic is by battling it out with them using inadequate doses of the drug in question. This guarantees a fiercer fight in the future, as we have unfortunately learned repeatedly in medicine. Perhaps there is a lesson here about how to deal with Right Men. For them, the dosage of evidence for CAM will *always* be inadequate. Because there is no dose of data that *could* conceivably convince them, the wisest course may not be to “treat” them at all, but to ignore them and let nature take its course. The lack of attention just might drive them crazy.

“Treating” Right Men with no evidence at all: this could be construed as a clinical test of one of the underlying principles of homeopathy, the idea that a remedy may be so dilute as to contain nothing of the original active agent. If this “treatment with nothing” worked—if the Right Men, on being ignored, came around eventually to a positive regard for homeopathy—this might count as indirect evidence for homeopathic philosophy. What would the Right Men say when they discovered they have been unwitting subjects in a “study” that helped validate homeopathy, the CAM therapy they despise above all others?

CAM Apartheid

*The perfect hostess will see to it that the works of male and
female authors be properly separated on her bookshelves.
Their proximity, unless they happen to be married, should not
be tolerated.*

—Lady Gough’s *Etiquette*⁷⁰

The resistance of Right Men to CAM conceals a fear that good science may be degraded or contaminated by bad science. Rigid barriers must therefore be erected to keep out the contaminating influences.

This may be why Right Men are so troubled by the integration of CAM with orthodox medicine. To them, integration is a sneaky strategy—the nose of the camel under the tent. To prevent this, orthodox medicine must be segregated from CAM at all costs—CAM apartheid.

Philosopause

The philosopher has to be the bad conscience of his age.
—Nietzsche⁷¹

Many Right Men seem prematurely to have entered a phase of their life that could be called the “philosopause”—literally, a

cessation or shutdown of the tendency to philosophize (note 3). They complain about what they consider the worthless theorizing in the CAM community about issues involving epistemology, ontology, causality, the mind-brain relationship, and the nature of consciousness, among other things. Unlike menopause, whose symptoms can be ameliorated by hormone replacement and other measures, there is no known treatment for the philosophopause. Unfortunately, the symptoms are often progressive.

This list is far from complete. Other possibilities could be added—for example, a proposal attributed to the novelist Joseph Conrad: “[B]ad digestion inclines one to skepticism.”

I should add, too, that some of my comments about the origins of Right-Man behavior are satirical. My overall point, however, is serious: that the Right Man’s professed allegiance to data and reason are only partial explanations for what he says and does.

TRUST ME, I’M A SCIENTIST

The louder he talked of his honor, the faster we counted our spoons.

—Ralph Waldo Emerson⁷²

I have long been intrigued by the names the Right Men choose for their publications, such as CSICOP’s *The Skeptical Inquirer*, which from the slant of its articles might more accurately be called *The Dogmatic Inquisitor*; and *Free Inquiry*, which is “free” mainly to those whose points of view do not deviate from the Right Man party line.

Interesting also is the Right-Man habit of attaching “scientific” to the names of their journals and organizations—for example, the *Scientific Review of Alternative Medicine*, and the Committee for the Scientific Investigation of Claims of the Paranormal. Why is it necessary to *proclaim* one’s allegiance to science? After all, one would hardly expect an organization or a publication to call itself *unscientific*. Why not just *be* scientific, and let one’s record speak for itself? By dubbing themselves scientific, the Right Men are seeking to imply, of course, that organizations and journals with competing points of view *aren’t* scientific, and that they alone can be trusted to tell the truth. This tactic is demeaning toward other organizations and publications, and it is also condescending to individuals outside the group, who presumably cannot think for themselves and must be told what is scientific and what is not. This is a classic expression of that irritating tendency among Right Men to arbitrate reality for everyone else.

When politicians preface their comments with “Trust me,” we immediately wonder about their honesty. Why would they need to *tell* us they’re not going to lie? We ought to be equally suspicious when a group or journal tells us they’re scientific. Why would they need to assure us they are, unless they have something to hide?

Calling oneself scientific when one isn’t has several advantages. It fools a few people, to be sure. It can be an effective public relations gesture (until the public catches on). It stimulates a

Whenever you think God has shown you other peoples’ faults, take care: your own judgment may well be at fault.
—Attributed to St Catherine of Siena

Nothing in life is so exhilarating as to be shot at without result.
—Winston Churchill⁸⁵

The dust of exploded beliefs may make a fine sunset.
—Geoffrey Madan⁸⁶

It is wonderful when people of divergent views come together, not to emphasize their differences, but their points of unity.
—Attributed to Paramahansa Yogananda

An unclothed man shocks a crowd—a moment later, if nobody is generous with an overcoat, someone is collecting handkerchiefs to knot around him. A naked fact startles a meeting of scientific society—and whatever it has for loins is soon diapered with conventional explanation.
—Charles Fort⁸⁷

Scientists, especially when they leave the particular field in which they have specialised, are just as ordinary, pig-headed and unreasonable as anybody else, and their unusually high intelligence only makes their prejudices all the more dangerous....
—HJ Eysenck⁸⁸

The intelligent man finds almost everything ridiculous, the sensible man hardly anything.
—Goethe⁸⁹

There are no whole truths; all truths are half-truths. It is trying to treat them as whole truths that plays the devil.
—AN Whitehead⁹⁰

To jaw-jaw is always better than to war-war.
—Winston Churchill (*The New York Times*, June 27, 1954:1)

I suggest that those who feel the rightness of healing do not spend a lot of time arguing with those who do not, but rather get on with giving, receiving and/or studying healing.
—Daniel J Benor⁹¹

It is harder to crack a prejudice than an atom.
—Attributed to Albert Einstein

sense of certainty and righteousness among those involved, which feels good. It kindles camaraderie and inflames bravado within the organization—the male bonding of Right Men. It is also a way for Right Men to rationalize the deplorable sort of behavior pointed out above by insider Sagan—to say, essentially, “I have a license to exaggerate, distort, and obfuscate as much as I like, because I’m doing so in the name of science.”

THE BEASTS ARE LOOSE: RIGHT MEN AS FAILED ZOOKEEPERS

Their statements reveal that Right Men see demons, witches, serpents, bees, and vampires—a veritable zoo—everywhere in CAM; and that, like any good zookeeper, they are doing their best to keep the beasts corralled. But it is too late and the Right Men know it. The creatures have jumped the fence and are loose in the land. The best the keepers can do now is issue warnings that danger is lurking. Their cautions are like those of cartographers of ancient times, who often illustrated unknown territory with fierce dragons in an attempt to alert sailors and explorers to the dangers they faced.

CAM: PROMISED LAND OR DESERT?

The incessant charges that CAM is an area unworthy of exploration are reminiscent of the period of American history following the Lewis and Clark expedition of 1804 to 1806. Nothing much was known about the West at the time, which gave people’s imagination the chance to run wild. Courageous young Americans tended to see the West as the Promised Land, whereas the conservative, settled folk back East claimed it was the Great American Desert. The myth grew up that the West was uninhabitable, and detractors compared it to the Sahara.⁷³ Historian Winfred Blevins^{73(p25)} states:

[They] scoffed at whatever might be west of the Hudson River, or whatever river they happened to live east of. Some of these people even proposed legislation to make venturing west of the settlements a crime.... These people feared the effect of the wilderness on civilized man. Man had been nurtured, they thought, by Christianity and the work ethic out of a state of savagery and depravity; if men returned to the wilderness, if they left the civilizing persuasions of society, they would again become as beasts....

And isn’t this warning a dead ringer for the diatribes of Right Men against CAM?

But while Easterners ranted about the worthlessness of the West, and while official maps labeled it UNEXPLORED TERRITORY, an incredibly brave group of individuals who came to be called “mountain men” disregarded these warnings. They trapped beaver and traveled “all over the West as familiarly as other men went to the post office.”^{73(p24)} And while Easterners denied that reliable knowledge of the West existed, “any tavern

conversation in St Louis could have provided accurate information about the West....”^{73(p24)} Yet, even in 1844, forty years after Lewis and Clark, as thousands of emigrants were traveling the Oregon Trail, the following public speech was heard⁷⁴:

What do we want with the vast, worthless area, this region of savages and wild beasts, of deserts, of shifting sands, and whirlwinds of dust, of cactus and prairie dogs? To what use could we ever hope to put these great deserts or endless mountain ranges, impenetrable and covered to their base with eternal snow? ... I will never vote one cent from the public treasury to place the Pacific coast one inch nearer to Boston than it now is (note 4).

I grew up in Texas in a culture that was created by those hardy folk who went west. Texans like to drive pickup trucks, a preference that may be held over from the crude wagons their pioneer forefathers drove into this land. Like their ancestors, pickup drivers in Texas aren’t much given to ceremony and convention, and they are sometimes brusque. This trait is often reflected in their bumper stickers. My favorite, which dates to a few years ago, must have been plastered on half the pickups between Amarillo and Brownsville. It sums up my advice to all Right Men: LEAD, FOLLOW, OR GET OUT OF THE WAY.

You Right Men may condemn CAM as a worthless, dangerous land, but the explorers have already headed west. The maps of CAM still contain empty spaces, but researchers are busy filling them in. *You* may not want to venture west of your Hudson, but don’t impede those who do.

DOING OUR WORK

If I were to try to read, much less answer, all the attacks made on me, this shop might as well be closed for any other business. I do the very best I know how—the very best I can; and I mean to keep doing so until the end. If the end brings me out all right, what is said against me won’t amount to anything. If the end brings me out wrong, ten angels swearing I was right would make no difference.

—Abraham Lincoln⁷⁵

Some people think it is a mistake to pay too much attention to Right Men because it wastes time. As EB White⁷⁶ put it: “One of the most time-consuming things is to have an enemy.” Moreover, there is a natural inclination among those involved in CAM not to engage controversy. This standoffish attitude, if taken to extremes, can become counterproductive and even pathological. As psychologist Tart says, “I like spiritual people who are very loving and all that, but there’s a certain kind of pathology of, you know, ‘Stomp all over me because I’m so sweet and enlightened.’”^{17(p64)} Others say that Right Men don’t deserve attention because they are more bluster than substance, and nobody takes them seriously. This is the view taken by Wright in his description of CSICOP^{2(p42)}: “Despite

their best efforts to arbitrate reality for the rest of us, ... CSICOP's public profile and political clout in the Land of the Free remain somewhat inferior to those of the Benevolent Protective Order of Elks."

Well, not really. Right Men create chaos, obstruct progress, inhibit the workings of science, obfuscate, and create personal pain for a great many practitioners and researchers of CAM. How should they be dealt with? There is no single answer. Each individual must decide for herself.

For my part, I find it distasteful to deal with Right Men. I consider myself pacific by nature and am an introvert besides. I have an extreme dislike for the kind of arguments I've engaged in above. I deliberated for 3 years about whether to write this article, trying all along to find reasons *not* to. I can state without hesitation that crafting this editorial has been the most unpleasant experience I have had as executive editor of *Alternative Therapies*. Why not let things continue to slide? My reason is, simply, that enough is enough. Over the past 3 years the tenor of the abuse directed at CAM has escalated, and the fear-mongering and misrepresentation to the public have intensified. This should not go unchallenged. The CAM community at some point must break silence and emphatically say, "This is not OK."

THE NEXT STEP

As we continue to encounter the blasts of the Right Men, as we shall, let us keep in mind the big picture. There is no doubt about the growing acceptance of CAM in medicine and in our culture. For a variety of reasons—economic, sociological, psychological, political, and scientific—this trend is almost certain to increase. Both physicians and patients realize that CAM contains something of value, something that must be refined and perfected through the application of proper science. Even if the Right Men were to succeed in one of their high-priority missions, dismantling the NIH's OAM, it would make little difference in the long run. There is no turning back.

So, to my colleagues in this field, I offer these words of encouragement: We have come a long way; it's not for nothing that we've acquired these scars. Progress has been possible because we have done good scientific work, and good science remains our best hope of accomplishing our primary goal—the improvement of the health of those we serve.

Who knows? If we are lucky, science may one day prove to be a stage for a genuine dialogue with the Right Men. It *would* be nice to see the rancor abate, to pool our energies, to share our insights, to collaborate—to be, even, friends.



Larry Dossey, MD
Executive Editor

Notes

1. Right Women certainly exist as well, but Right Men are overwhelmingly more common. I therefore refer to this syndrome as a masculine phenomenon throughout my editorial.
2. It is possible to be a lighthearted skeptic. Wright^{20p42} points out that in Great Britain formal organizations made up of skeptics are of "a more genial sort" than in the United States.
3. I first came across the term "philosophy" in "The Job is Finished," an article from *The New York Times Book Review* (June 30, 1996:11-12) by science writer Natalie Angier, who uses the term differently.
4. Although this speech traditionally has been attributed to Daniel Webster, historian Bernard DeVoto⁷⁴ asserts emphatically that Webster never made it. Its origins appear obscure.

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