

The Fine Art Of BALONEY

Patrick McDonnell



HOW NOT TO BE FOOLED

MY PARENTS DIED some years ago. I still miss them terribly. I know I always will. I long to believe that their essence, their personalities, what I loved so much about them, are—really and truly—still in existence somewhere. But that doesn't mean I'm willing to accept the pretensions of a "medium," who claims to make contact with the spirits of the dear departed, when the practice is rife with fraud. I know how much I want to believe that my parents have just gone somewhere else. And I understand that those very feelings might make me easy prey for a clever con. Reluctantly, I rouse some reserves of skepticism. Nevertheless, I believe my mind is open. If some real evidence for life after death were announced, I'd want to examine it; but it would have to be hard, scientific evidence, not mere anecdote. Better the hard truth, I say, than the comforting fantasy.

Distraught cancer victims make pilgrimages to the Philippines, where "psychic surgeons," having palmed bits of chicken liver, pretend to reach into the patient's innards and withdraw the diseased tissue. Leaders of Western democracies arrange for millions of dollars to be invested in a scam to find

new petroleum reserves from aloft, or acknowledge that they regularly consult astrologers and seers before making important decisions. Under public pressure for results, police with an unsolved murder consult ESP "experts" (who never guess better than expected by chance, but the police keep calling).

Virtually every newspaper in America has a daily astrology column; hardly any have even a weekly science column. College students construct a makeshift hot-air balloon out of polyethylene dry-cleaning bags and candles, and the press dutifully reports another Unidentified Flying Object. A clairvoyance gap with the Soviet Union is announced, and the Central Intelligence Agency, under Congressional prodding, spends tax money to find out whether Soviet submarines in the ocean depths can be located by thinking hard at them. Statues of Jesus or murals depicting Mary are spotted with moisture, and thousands of kind-hearted people convince themselves that they have witnessed a miracle. A magician seems to start your broken watch by staring at it out of your TV set.

These are all cases of proved or presumptive baloney. A deception is perpetrated—usually on a victim caught up in some emotion such as wonder, fear or greed. (Occasionally, it's just some misunderstood natural phenomenon.) Credulous acceptance of baloney can

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A fake photo of UFOs, using a homemade model and multiple exposures. Some flying saucer reports are conscious hoaxes; some are the results of psychological aberrations; many are natural events incorrectly interpreted by the observers. Not one has ever provided firm physical evidence for alien visitors.

THE SKEPTICAL INQUIRER

The leading nonprofit organization of scientists, conjurers and others devoted to examining the borders of science is the Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP), chaired by the philosopher Paul Kurtz (Box 229, Buffalo, N.Y. 14215-0229). Its periodical, *The Skeptical Inquirer*, is cheerful, irreverent, instructive and often very funny. A representative sampling of subjects discussed includes the Bermuda Triangle; "Big Foot" and the Loch Ness monster; "crashed" flying saucers; claims that you can levitate yourself by meditating; ESP; the view that the Earth is really flat; the Shroud of Turin; divining rods and water witching; Nostradamus; the notion that more crimes are committed when the moon is full; palmistry; numerology; "remote viewing"; cult archaeology; a Soviet elephant that talks fluent Russian and a Soviet "sensitive" who, blindfolded, reads books with her fingertips; Edgar Cayce and other "prophets," sleeping and awake; diet quackery; ancient maps of Antarctica; "dream telepathy"; faith-healer fraud; analysis of a poltergeist in Columbus, Ohio, and how the scam was discovered; fire walking; phrenology; the "hundredth monkey" confusion; biorhythms; creationism; the emotional lives of plants; the systematically inept predictions of Jeanne Dixon and others; dietetics; Carlos Castaneda and "sorcery"; the search for Noah's Ark; the "Amityville Horror" hoax; miracles; mummies' curses; Atlantis and other "lost" continents; and innumerable cases of acute credulity by newspapers, magazines, and television specials and news programs.

lose you money; that's what P. T. Barnum meant when he said, "There's a sucker born every minute." But it can be much more dangerous than that, and when governments and societies lose the capacity for critical thinking, the results can be catastrophic.

What is critical thinking?

Basically, it's the ability to construct, and to understand, a reasoned argument and—especially important—to recognize a fallacious or fraudulent argument. The question is not whether we like the conclusion of a train of reasoning, but whether the conclusion follows from the premise or starting point.

Among the few simple rules:

- Propositions that are not testable are worthless—you have to be able to check assertions out.
- There must be substantive debate—it isn't enough simply to attack your opponent's character.
- If there is a chain of argument, every link in the chain must work, including

the premise—not just most of them.

• Arguments from authority carry little weight—"authorities" have made mistakes in the past and will do so again.

At the heart of science is an essential tension between two seemingly contradictory attitudes—an openness to new ideas, no matter how bizarre or counterintuitive they may be, and the most ruthless skeptical scrutiny of all ideas, old and new. This is how deep truths are winnowed from deep nonsense. Of course, scientists make mistakes in trying to understand the world, but there is a built-in error-correcting mechanism: The collective enterprise of creative thinking and skeptical thinking together keeps the field on track.

At the borders of science—and sometimes as a carryover from prescientific thinking—are a range of ideas that are appealing, or at least mind-boggling: the notion, say, that the Earth's surface is on the inside, not the outside, of a sphere; or the proposition that your soul

DETECTION

BY CARL SAGAN

THE COLD READ

Why are we so easily taken in by fortune-tellers, astrologers, psychic seers, palmists, tea-leaf readers and their ilk? Of course, they note our posture, facial expressions, clothing and answers to seemingly innocuous questions. But a key tool for all of them is the so-called "cold read," a statement of opposing predispositions so tenuously balanced that everyone will recognize a grain of truth. Here's an example:

At times you are extroverted, affable, sociable, while at other times you are introverted, wary and reserved. You have found it unwise to be too frank in revealing yourself to others. You prefer a certain amount of change and variety, and become dissatisfied when hemmed in by restrictions and limitations. Disciplined and controlled on the outside, you tend to be worrisome and insecure on the inside. While you have some personality weaknesses, you are generally able to compensate for them. You have a great deal of unused capacity, which you have not turned to your advantage. You have a tendency to be critical of yourself. You have a strong need for other people to like you and for them to admire you.

Almost everyone finds this characterization recognizable, and many feel that it describes them perfectly. Small wonder: We are all human.

AN HONEST MAGICIAN

Most scientists are not good at detecting bamboozles. Scientists are used to contending with Nature, who fights fair. Magicians cheat. But many of them pretend they don't, and hint that they have mystic powers.

James "The Amazing" Randi, well-known as an escape artist in the tradition of Harry Houdini, is a founding Fellow of CSICOP and a recent recipient of the MacArthur (so-called "genius") prize fellowship. He has played a major role in debunking Uri Geller's spoon-bending and in demonstrating how easily scientists—even well-known and capable scientists—can be deceived.

Randi has recently exposed some of the plague of "healers" who, invoking the name of God or Jesus, produce miraculous cures. Many people find them impressive. But Randi found cases where people who could walk, if imperfectly, were given wheelchairs at the beginning of the "service," and then encouraged to walk out of the wheelchair after prayers had been offered—a simple-minded scam that reveals profound contempt for the people the preacher was pretending to heal.

With a radio-frequency scanner, Randi discovered that one preacher's uncanny knowledge of the names, addresses, Social Security numbers and medical histories of supplicants in his audience was provided by the preacher's wife—transmitted during the service to a small device, seemingly a "hearing aid" in the preacher's ear. She in turn had obtained this information by straightforward interviews before the service began. Randi's suspicions were aroused that so young a "healer" should need a hearing aid—and if he could make the blind see and the lame walk, how come he couldn't cure his own deafness?

Since Randi's exposures threaten the livelihood of bamboozlers, he has managed to get a few of them pretty annoyed. But it is clear that he and his colleagues are performing a courageous and essential social service for the rest of us.



Mystical powers or a clever trick? Randi at work.

might return after death as an elephant or a worm; or the conviction that some people have the "psychic" power to bend spoons by looking funny at them. Proponents of these ideas do not much exhibit skeptical habits of thought.

Because such claims are charming or inspiring—and also because, on average, scientists, teachers and the media do so poor a job of explaining science and reasoning to the public—the pseudosciences prosper. It is barely possible that a few of these claims might one day be verified by solid scientific data. But it would be foolish to accept them now. Much better, for those claims not already disproved, is to contain our impatience and await the evidence.

We recognize that beliefs in Santa Claus, the Easter Bunny or the Tooth Fairy—however appropriate they may be for childhood—are unusual articles of faith in adult society. We may be justly concerned about the competence and reliability of grownups who profess such persuasions. But in other matters, some more fanciful, we are encouraged to exhibit a saintly tolerance for nonsense. One of the saddest lessons of history is this: If we've been bamboozled long enough, we tend to reject any evidence of the bamboozle. We're no longer interested in finding out the truth. The bamboozle has captured us. It is simply too painful to acknowledge—even to ourselves—that we've been so credulous. (So the old bamboozles tend to persist as the new bamboozles rise.)

Thus, seances occur only in darkened rooms, where the ghostly visitors can be seen dimly at best. If we turn the lights on a little, so we have a chance to penetrate the hoax, the spirits disappear. They're shy, we are told, and some of us even believe it. A little girl who had been a co-conspirator in a famous 19th-century flimflam—spirit-rapping, in which ghosts answer questions by loud thumping—grew up and confessed the imposture. But in many circles the public apology was ignored. Spirit-rapping was too reassuring to be abandoned merely on the say-so of a confessed rapper. The story began to circulate that the confession had been coerced out of her by fanatical rationalists.

If it is sometimes easier to reject strong evidence than to admit that we've been wrong, this is information about our-

selves worth having. What does such behavior imply for our future?

Skeptical habits of thought are essential for nothing less than our survival—because baloney, bamboozles, bunk, careless thinking, flimflam and wishes disguised as facts are not restricted to parlor magic and ambiguous advice on matters of the heart. Unfortunately, they ripple through mainstream political, social, religious and economic issues in every nation.

Finding the occasional straw of truth awash in a great ocean of confusion and bamboozle requires intelligence, vigilance, dedication and courage. But if we don't practice these tough habits of thought, we cannot hope to solve the truly serious problems that face us—and we risk becoming a nation of suckers, up for grabs by the next charlatan who comes along.

"STOP THE LIES"

Critical thinking is not always in evidence in the White House or the Kremlin. From an article in the wake of the Iran scandal by the conservative columnist Leon Wieseltier in the Dec. 7, 1986, *New York Times Magazine*:

For the White House, the truth is a problem to be solved. Since the Administration is always already right, since its confidence in its correctness is never shaken by events, it has become invulnerable to facts. The facts are there to be arranged, altered and assembled into a picture of the world that will never challenge, but always confirm. There is no binding truth. There are only different stories. If one story fails to please, another story must be loosed. The story told at the end of the day is true.

Similarly, Politburo member Boris Yeltsin calls attention to endemic corruption, research institutes that "have done nothing for years," increasing drug addiction and declining life expectancy—all in the face of a Soviet bureaucracy that blandly covers up every problem.

"It is necessary to stop the lies," Yeltsin is quoted as saying.