

March Meeting - The Shroud of Turin  
President's Corner - It's Not Holistically Clear  
Scientology: Religion or Business? by John Forester  
April Fool Award  
Ten Differences Between Astronomy and Astrology  
Pseudoscience or Protoscience?  
Editorial - The question of God  
Book Reviews  
Letters to the Editor

Motto of the month:

I'm personally protected from astrology because I'm a Gemini, and Geminis don't believe in astrology.  
-- Leon M. Lederman

[an error occurred while processing this directive]

The Shroud of Turin  
March Meeting

Dick McGrath, Professor of Theology at Thomas More College and founding member of A.R.T. spoke March 8 on the durably problematic Shroud of Turin. The shroud is an ancient religious relic kept in the Royal Chapel, a Roman Catholic cathedral in Turin, Italy. It is believed by some to be the burial shroud of Jesus. Skeptics are inclined to believe that the shroud is a medieval hoax. Dick's approach, firmly skeptical of both these positions, immediately won him the undivided attention of his audience. In his opinion the authenticity of the shroud has been neither proved nor disproved. Those who believe it is the burial shroud of Jesus have only their faith to support their claim, while those who insist that it is a medieval hoax are confronted with inconvenient shreds of evidence they have been unable to sweep away.

A major proponent of the devout view of the shroud is Rodney Hoare, who wrote *The Turin Shroud Is Genuine: The Irrefutable Evidence* (1994) a book dedicated to proving the authenticity of the shroud, if not to an impartial assessment of the evidence regarding the shroud. Skeptic Joe Nickell has written a book representing the major skeptical position on the shroud, that it was a medieval fake. His book is *The Inquest on the Shroud of Turin*, published in 1983.

Dick began his guided tour with a description of the shroud, a strip of ivory linen 14 feet long, three feet seven inches wide, and obviously a burial shroud. Imprinted on the shroud is a faint image, easier to see in a photograph than when viewing the shroud itself, of the front and back of a naked, bearded, and apparently crucified body. The image is formed as though the shroud were laid under the entire length of the body, up over the head, and from the head down to the toes. It was not wrapped around the body in a spiral. The image is a reverse image, like the negative of a photograph. The linen is good linen, a little heavier than shirt cloth, and well-woven. But the fiber content and manner of weaving are of no use in dating the cloth, since linen has been spun and woven in this way for millennia, and is known to endure for thousands of years.

The image is a very pale sepia. There are also marks that are obviously the result of fire damage incurred when the buildings where it was stored burned. There are also water stains, likely from water used to put out fire, and blood stains. The image includes evidence of scourging, a crown of thorns and a wound in the side, as mentioned in biblical accounts of Jesus's death. Although crucifixion was a common means of execution in Jesus's time, the use of a crown of thorns, wounding the side, and scourging may have been less common.

There is documentary evidence that the shroud passed through many hands before it reached its current home in Turin.

But establishing the falsity or authenticity of the shroud is hampered by gaps in the historical record of its whereabouts. The biblical accounts of the crucifixion of Jesus mention a folded linen associated with his burial, but there is no mention of a linen marked with an image. There are scattered reports of a shroud bearing an image by pilgrims visiting biblical lands in the centuries before the crusades. The Knights Templar captured the shroud during their siege of Constantinople in 1100, took it to France, and placed it in the care of Jeffrey DeCharny. For some years before 1532, it was kept by an order of nuns, the Poor Clares, at St. Chapelle in Paris. When St. Chapelle burned in that year, nuns trimmed away burned portions and patched the fabric. There is also documentary evidence for several other locations in France and Italy. The shroud has been at Turin since 1578.

There is documentary evidence the shroud now at Turin was owned by the House of Savoy in 1460. Before 1460, it was owned by Margaret DeCharny, who inherited it from her father. Margaret DeCharny is thought not to have forged the shroud because she refused to exhibit it, an action from which she could have profited. The Duke of Savoy also is thought not to have forged the shroud for the same reason.

The earliest known investigation of the shroud was undertaken when the shroud was displayed in public at Troyes during the middle ages. In 1389 Bishop Pierre D'Arcis of Troyes wrote to the Pope accusing a cleric in his diocese of presenting a cunningly painted phony shroud to the public for money. This letter is a mainstay of the skeptical argument that the shroud is a painted hoax, but the letter is not the whole story. D'Arcis was angry because the priest had not consulted him before displaying the shroud. He was also irritated because the shroud was not displayed at his cathedral, which could have used the income his entrepreneurial subordinate earned by turning the shroud into a tourist attraction.

All modern researchers conclude that the image on the shroud is not paint, as D'Arcis claimed. Nevertheless, D'Arcis's claim is the basis of Joe Nickell's position that the shroud is a medieval fake. Evidence that the image is not a painting includes chemical analyses and the fact that the image at a range close enough to paint it is too faint to see. In addition, the anatomy of the body in the image is that of an actual body, unlike the body images usually used by medieval artists, who knew little about anatomy. In addition, the image does not include two medieval cliches associated with images of Jesus, a loin cloth and a halo. Modern research can find no indication that brush strokes were used, which also suggests that it is not a painting as D'Arcis claimed.

A variety of theories attempt to explain how the image was put on the linen if it was not painted. Some involve natural chemical processes that could have occurred between the linen, the body that it wrapped, and material in the tomb. Experiments indicate that if conditions were right, the image could have appeared because of reactions between the warm corpse, the linen and other materials. Another theory suggests that the corpse was stained with red ocher, which rubbed off on the linen. This theory has been tanked along with the other "painted image" theories. Another theory, a favorite among the religiously motivated, suggests that the image consists of linen fibers singed by a flash of bright light caused by the resurrection of the body. Unfortunately for backers of this theory, investigation suggests that if such a light were bright enough to burn the image into the cloth, it would have been hot enough to incinerate the entire shroud.

Dick's conclusion is that the jury is still out on the question of how the image was formed. None of the evidence is persuasive, in part because the shroud has rarely been examined, due to the reluctance of religious authorities to permit tampering with an object of great religious significance. Methodological problems have also complicated the problem. Even recent research has not been properly controlled. Carbon 14 dating of the shroud has been carried out, placing the date of the linen itself at 1260-1390 but possible contamination of the samples, possible confusion of the original linen fibers with fungus and bacteria accumulated over the centuries, and possible bias caused by telling researchers what date was expected have marred the results. Better methodology better controlled is needed.

Dick's conclusion pleases neither the religionists nor the skeptics. His evaluation of the evidence is that the believers' theory that this linen cloth is the shroud of Jesus is not supported, but neither is the skeptical notion that it is a medieval hoax. There is no satisfactory explanation for the image at present. A careful scientifically controlled study in which every effort is made to avoid experimental bias followed by complete publication of all the evidence discovered might be able to answer some of the questions raised by earlier work. The Roman Catholic Church, Dick added, has no official position on the status of the shroud.

Virginia Jergens.

[an error occurred while processing this directive]

President's Corner

[Wizard holding up a candle]

It's not Holistically Clear.

Last week I stumbled onto a local radio talk shown in which the host and her guests were discussing the virtues of the holistic medicine being practiced at the Wellness Centers under construction by a local hospital. The two hospital employees sounded like very nice people and they explained that they preferred "Holistic" to "Alternative" because their services were meant to complement regular medicine and not replace it. They provided some typical alternative medicine factoids which, if taken seriously, would suggest that eliminating western medicine would be small loss. After all if you eliminated the health effects of bad habits, environmental poisons, bad genes, bad thoughts, and stress, the trillion dollar plus medical industry influences only ten percent of illnesses.

The absence of any evidence for the efficacy of holistic treatments (therapeutic touch, therapeutic massage, reflexology etc.) is not a problem because most western medicine has not been tested. If it does no harm, then it is as good as most medicine and certainly worth the fifty to sixty dollars an hour that will be charged at the three new centers. Sister Kathy explained that the real problem is that the patients are so confused by the plethora of new treatments that they need the medical equivalent of a spiritual advisor to help them sort out which treatment is compatible with their particular set of problems. A group of nurses have volunteered for this hazardous duty. In only ninety minutes or so for \$75.00 they will help you select the specific panacea that will influence your unique body, mind, soul, demon, or spirit misfit.

I was with her every second until reflexology appeared on her list of cures. Reflexology? Old foot rubbing "zone therapy"? All of those diseased organs connected to the toes, or is it ears, or fingers, or meridians? Is it all of them, or only those you believe in? I would love to be a fly on the wall in a therapeutic advice session or two to find out if anything is too implausible to receive support. It has been my experience that the Holistic Community is loathe to engage in, if not completely ignorant of, constructive criticism. They chuckle and brag about how truly ancient their methods really are when they have no mechanism for sorting out the useful from the placebo. Western medicine relied on leeches, bleeding, and calomel in 1800 and if it had trusted to the critical approach of the American Holistic Medical Association would it have changed since? Middle class suburbanites are probably not threatened by flirting with comforting mental or spiritual treatments, and in the present day and age it sure beats going to church. But at sixty dollars an hour, not on my health care!

J.F. Gastright (president)

[an error occurred while processing this directive]

Scientology: Religion or Business?

by John Forester

The New York Times carried several pages about how the IRS has changed its long-standing ruling that Scientology is a business into one that Scientology is a religion. Therefore all its business, including the fees paid by members, are tax free. National Public Radio, in its All Things Considered, broadcast a description of Scientology that included, among other things, a reference to that article. This combination has enabled me to understand more about Scientology.

I was a teen-aged subscriber to Astounding Science Fiction when it published Hubbard's article on Dianetics as its one-per-issue factual article. I thought dianetics might be just one more rehash of psychological ideas then current. The claim was that experiences leave physical traces in the brain which affect one's later emotions and concepts. Some of these traces can be recalled as memories, while others cannot, or are not recalled, but still affect actions. If Hubbard wanted to call these traces engrams, that was his privilege. At that time there was no attempt to demonstrate the physical description and identification of engrams, any more than there had been successful attempts to demonstrate and identify the physical nature of Freud's or Jung's equally hypothetical constructs. The only evidence was indirect, by estimating

the emotions aroused by discussing these engrams, either by some form of empathy or instruments similar to lie detectors. Nowadays, I get a mailing about once a year advertising such services, and I dismiss it as hokum.

Insofar as this description is concerned, Scientology is just another profitable psychological therapy that justifies its former U.S. and present German classification, as a taxable activity. That its supporters are vehement in Scientology's support should carry no weight in this analysis, for so are the supporters of Repressed Memory Syndrome, former lives regressions, the militant militias, the Libertarians, and numerous other theories. Whether Scientology is true or false is also irrelevant. Government taxes the profits, regardless of the truth or falsity of the claims or presentations. To do otherwise would destroy our community with conflicting claims by all who might assert their right to operate without being taxed.

How then could the IRS change its opinion to agree that Scientology is a religion? The NYT strongly implied that Scientology was blackmailing the officials of the IRS. Not that the officials had committed any particular crimes, but Scientology would harass them to political death by suits alleging all sorts of activities that could be made to look deplorable. That is an expensive strategy, but then Scientology is an immensely profitable activity that could afford such a strategy and, by the same token, would collect an enormous amount of extra profit if it became non-taxable.

Scientology demanded tax free status as a religion, but what constitutes a religion? Holding services? Regular meetings do not qualify an organization as a religion, or corporations could claim this status. Benefiting the members? Same argument for the corporation's stockholders. For me, the NPR broadcast answered the question. Scientology has a theology that is revealed only to those who have paid enough and earned sufficient status to qualify. That theology is as foolish as any other religion, maybe more foolish than most. Although supposedly secret, enough of it has been revealed to disclose its character. Scientology does not use this secret theology as its proselytizing medium, in the way Christianity uses the gospels. Scientology uses this theology for two purposes. First, as an incentive to get its true believers to pay even more money to obtain the secret. That is why Scientology keeps the theology secret from the public, and has sued those who have published parts of it for violation of copyright. In this, Scientology is quite correct. It owns the rights and the rights are profitable as long as the copyright lasts. The second purpose I will discuss later.

Scientology's dogma is a sort of science-fiction theology, rather like Chariots of the Gods and similar foolishness, a tribal creation story told in a form that appeals to naive people raised in a scientific age. You can't prove it, you can't disprove it, and its characters are extraterrestrial and supernatural entities. I deduce that scientologists don't worship these beings, or pray for them to save current scientologists from either tornadoes or their sins, or to reward scientologists with either happiness or money. At most, these beings are regarded as a Deist might regard his god, as the creator who is now letting the universe operate according to scientific laws. If that were all, there would be as little point to Scientology as to Deism or, for that matter, to strictly predestined Calvinism. However, Hubbard accepted from Calvinism a theory of Original Sin. His beings, thetans I think they are called, committed, just as the Christians' Adam and Eve did, the original sin that binds us into all eternity unless we work to overcome it. The thetans perpetrated foul engrams upon our ancestors, engrams that we all have inherited and must individually work out, through expensive Scientology therapy, if we want to live full lives.

That, I submit, is the characteristic that might enable Scientology to qualify as a religion.

However, the secrecy surrounding Scientology's theology might also disqualify Scientology as a religion. Religions are characterized as presenting a theory that relies on supernatural entities, they are about the universe and man's position in it and they prescribe how men should behave. All literate religions publish their theologies so that the people may know them and be persuaded of their truth. It is true that formerly men were burned at the stake for translating the Christian Bible into the common language, lest the people develop religious ideas that would jeopardize the religious bureaucracy, and as of course they did, but that tradition has long been discredited. In any case, the Bible was not secret, because it was always commonly available to those who were educated in Latin, the official international language of the time. The fact that Scientology refuses to publish its theological documents demonstrates that Scientology is far more a secret, profit-making operation than it is a religion. It doesn't want to spread its truth far and wide, as a true religion would, but wants to keep it profitably secret. That suggests that the US government must allow Scientology to keep its tax-exempt religious status only if it puts all of its present and future documents into the public domain, or otherwise make them publicly available at reasonable cost. Only then can Scientology be considered to be a genuine

religion.

Of course, doing that would much reduce the appeal of Scientology. When its theological documents are seen to be just as foolish as those of other religions, and to be without the historical background of the established religions, it would be seen, to the rational observer, to be just another profit-making self-help operation, regardless of its tax-exempt status.

-- the author may be reached at: forester@ccnet.com

[an error occurred while processing this directive]

April Fool Award

[Man laughing hysterically]

The April Non-Skeptic Award

(We think you are dead wrong and foolish to boot)

During the past few months, we have been collecting outrageous claims from the news media for an award to be given April 1st. We received four nominations. However, we as skeptics need to remember that the people involved in these items actually do believe in what they are doing and saying. They are not necessarily looking at scientific evidence. They are interpreting what they see and think by what they or someone else has said is the truth or fact. Skeptics, seeing no current scientific evidence, do not believe them.

Having said that, the four claims we received are as follows.

February 13, 1997 at 8:40 AM, WVXU broadcast an opinion piece by Don Merrill, a political science and electronic media major at the University of Cincinnati. Mr. Merrill claimed that the variety of human opinion is like the electromagnetic spectrum, like light waves, x-ray waves, radio waves, sound waves, etc. As though human opinions were as fixed and stable or as simply progressive as the electromagnetic spectrum. A remarkable combination of poor physics and bad political science.

Leslie and Jacobi, authors of *Unveiling the Secrets of the Soul* in an interview on "Interconnect," WVXU, 91.7 FM, 10:00 A.M., Thursday, January 23, 1997, made this claim: Mozart was too young to have written his early symphonies "himself." He "channeled" them by "moving his consciousness out of the way," thus allowing a more mature consciousness from somewhere to write them for him. Other odds and ends from the same show: One member of the pair said she had developed breast cancer because she repressed unhappy feelings, thus storing up bad energy in her body which caused the cancer. She also said the soul has many parts, much like an automobile. That human beings are essentially electrical, so that when we say something mean we put "negative energy out in the world," which comes back to us as negative energy later. Similarly with positive energy. The energy comes back to us because of "magnetism," in which positive energy attracts positive energy, and negative attracts negative. That is very unlike any magnets you may have run into.

In the Cincinnati Enquirer on November 13, 1996, Chris West was extolling the "benefits" of Therapeutic Touch. The article was entitled "He's Hooked on Holistic....." This article describes the reaction of one man to hip replacement surgery. He was nervous about the procedure. He was encouraged by people at the Wholistic Center to use Therapeutic Touch, and Acupuncture along with his medical treatment. Prior to this experience he claims he was very skeptical. After the surgery, he was convinced enough to issue a memo to the employees of the Cincinnati-Dayton Franciscan Health System (he is president) bringing Wholistic services to their attention. However, at the end of the article he states, "Did it help me recover faster? Come back to work faster? Use less pain medicine? I like to think it did. But can I prove that? No." I think his words speak for themselves.

The Cincinnati Enquirer's USA Weekend Magazine on February 23, 1997, ran the following quote on page eight: "Students learn to read auras so they won't sever patients energy fields with their scalpels" in big bold letters. Yes, it was an attention grabber but the author is serious! The article basically reported that the University of Virginia Medical School in Charlottesville along with a lot of other medical schools around the country are now teaching alternative called "integrative" medical subjects. These subjects include homeopathy, acupuncture, meditation, massage, nutritional therapy, and herbal remedies. Surely doctors should be more aware of relaxation techniques and general nutrition. However, to promote the idea, that "Anyone who wants to put on a course can do it," is going too far. Whatever

happened to medical research ? And, more worrisome would I want to trust my doctor who tells me to just relax, place your broken leg at a 45 degree angle and it will straighten and heal if you just meditate.

-- Donna Loughry

[an error occurred while processing this directive]

## Ten Differences Between Astronomy and Astrology

-- Cosmic Messenger

-- Astronomical Society of Kansas City (Oct. 1996)

Alcohol makes complex astronomical concepts very difficult to comprehend. Alcohol makes complex astrological concepts much easier to comprehend

Astronomers occasionally make accurate predictions.

Telescopes come in a staggering array of shapes and sizes. All ouija boards look the same.

Nancy Reagan never asked an astronomer for advice.

Transposing two object's coordinates makes a big difference. Transposing two persons' horoscopes makes no difference.

Astronomers believe in the truth of relativity. Astrologers believe in the relativity of truth.

Your VISA card limit is of no interest to an astronomer.

Carl Sagan does not have a 900 number, now or ever.

An astronomer may plan his evening according to the position of the stars. An astrologer plans his whole life according to the position of the stars, moon and planets.

Astronomers never try to contact dead astrologers.

[an error occurred while processing this directive]

## Pseudoscience or Protoscience?

An excellent list of questions to help with a difficult and important problem. How do we separate pseudoscience from "protoscience," a new science working to establish itself as legitimate science.

Has the subject shown progress?

Does the discipline use technical words such as "vibration" or "energy" without clearly defining what they mean?

Would accepting the tenets of a claim require you to abandon any well established physical laws?

Are popular articles on the subject lacking in references?

Is the only evidence offered anecdotal in nature?

Does the proponent of the subject claim that "air-tight" experiments have been performed that prove the truth of the subject matter, and that cheating would have been impossible?

Are the results of the aforementioned experiments successfully repeated by other researchers?

Does the proponent of the subject claim to be overly or unfairly criticized?

Is the subject taught only in non-credit institutions?

Are the best texts on the subject decades old?

Does the proponent of the claim use what one writer has called "factuals" - statements that are a largely or wholly true but unrelated to the claim?

When criticized, do the defenders of the claim attack the critic rather than the criticism?

Does the proponent make appeals to history (i.e. it has been around a long time, so it must be true)?

Does the subject display the "shyness effect" (sometimes it works, sometimes it doesn't)?

Does the proponent use the appeal to ignorance argument ("there are more things under heaven, than are dreamed of in your philosophy")?

Does the proponent use alleged expertise in other areas to lend weight to the claim?

-- Lee Moller, Rational Enquirer, vol 6 (4, April 1994)

(published by the British Columbia Skeptics Society)  
[an error occurred while processing this directive]

From the Un-easy Chair  
The question of God

The question of God, and if God, then God's miracles tends to come up in any assembly of skeptics. This newsletter is determinedly neutral on the question, as is the *Skeptical Inquirer*, published by the Center for Inquiry in Amherst, NY. The Center provides a separate quarterly journal, *Free Inquiry*, for philosophical unbelievers and agnostics, and maintains the Council for Secular Humanism as an organization for freethinkers.

An earlier issue of this newsletter, (June 1996, p. 6) supplied evidence that about a third of skeptics maintain a belief in the divine. Many other skeptics are satisfied that reasoned inquiry can show any belief in the supernatural as untenable. In consequence not all skeptical publications feel a need to divide religion from scientific skepticism. The *Skeptic* published by the Skeptics Society in Altadena, CA, tends to support unbelief. Similarly, *The Skeptic* from Manchester, England, seems to view religion as merely one more form of irrationality. The issue, however, is more complicated than rejecting superstition. It is fairly easy to show that the literal claims of the Christian fundamentalists can not hold water. Many miracles can be debunked by careful observation. Holy elephant gods drinking real milk, or paintings of the Virgin Mary shedding tears have been found deceptive. God is not some sort of superman miracle worker.

The important question is whether God exists as prime mover or creator of the universe, as an abstract principle of reality. Both, the knowledge of science and the knowledge of god rest in principle on human experience. The great difference is, that scientific experience is public and must be verifiable by all. Our experience of the divine is private, the visions and convictions of the believing individual. Yet, who is to say that St. Paul's vision of the Christ, or Martin Luther's experience of a storm are not every bit as real as the most conclusive experiment.

Even for boiled in oil skeptics some questions remain very difficult to answer. To think of the nature of the possible answer, even that can defy reason. Here is an example: why is mathematics true, why does nature work according to rules which may have been imagined by a human mind before they are found to apply to some real world phenomenon? Mathematics has been described as a human invention, as a logical game or language, which does not exist in nature. Yet, the universe revolves according to the rules of the calculus while the dice follow those of statistics. It seems unavoidable that whatever we posit as God, he too must adhere to mathematical logic.

-- Editor  
[an error occurred while processing this directive]

## Book Reviews

By Wolf Roder  
*Science on Trial: The Clash of Medical Evidence and the Law in the Breast Implant Case*

by Marcia Angell, M.D.  
(New York: W. W. Norton & Co. 1996)

This is an enormously important book for understanding how the American legal and jury system is seriously out of order and needs reform. Angell, who is a medical doctor, lawyer, and executive editor of the *New England Journal of Medicine*, assures us there is no evidence that women's silicone breast implants cause immune or any other illness. Epidemiological studies completed only since the breast implants were banned, indicate that any yet unknown or hidden harm can only be minor. Yet, courts and juries have made multi-million dollar awards and lawyers have filed hundreds of individual and class action law suits for damages caused by breast implants. These have driven a major American manufacturer, Dow Corning, into bankruptcy, and stand to wreck its parent companies Corning Glass and Merrill Dow.

A number of problems are at work. The American court system is not geared to use scientific epidemiological knowledge, which is by its nature statistical. Rather, decisions always have to be made on whether this one woman

plaintiff was harmed, which in the nature of medical science can not possibly be certain. In the absence of sound science, judges allow "experts" to qualify as witnesses who do not accept the scientific consensus, but ride their own idiosyncratic opinion hobby. The opinions must be in the plaintiff's favor for the experts to earn their large witness fees. Lawyers are permitted to work on a thirty to forty percent contingency fee, and thus have strong interests in promoting these cases. There is no threat of "loser pays the accused's costs" as there is in most European countries.

The average American, and thus any member of a jury, is scientifically illiterate and mathematically innumerate. Counsel in addition will be sure not to allow any well educated person to remain on the jury. Neither are lawyers and judges known for their scientific sagacity. Juries are encouraged to ignore the evidence, while counsel play on their emotions and exaggerate the health problems of their client. "The resultant verdict may have little to do with the merits of the case, and everything to do with theater. If things go well, a sympathetic jury may award large damages for emotional distress, as well as economic damages. The outcome is a gamble for high stakes." (pp. 74-75).

Using the example of the silicone breast implant litigation, Angell, demonstrates every point she makes. She further examines the role played in this and similar cases by the Food and Drug Administration, whose banning of the devices fed the legal and public furor. Yet, at the time neither the FDA, nor the company, nor the scientific community had any evidence the devices caused harm, while thirty years of use clearly showed harm to be rare. Or as Angell puts the point: "We depend greatly on science and its technological fruits, we like to talk about what research shows and what it doesn't, we think we understand risks, but when it comes to the recurrent medical scares that sweep across the land like locusts, all our sophistication goes out the window. Just give us the conclusion, tell us who to blame, and don't bother with the evidence." (p. 12).

The Killing of History: How a Discipline is being Murdered by Literary Critics and Social Theorists

by Keith Windschuttle

(Paddington, Australia: Macleay Press, 1996)

What Gross and Levitt<sup>1</sup> did for the hard sciences, and Krugman<sup>2</sup> for economics, Windschuttle is doing for the discipline of history. The world of scholarship and science is under attack by critical post-modern attitudes and philosophies which proclaim the relativity of all knowledge. Real truth, so the claim goes, does not exist, and all previous so-called science is mere opinion, called "discourse", of dead, white males. Sokal<sup>3</sup> in his famous hoax in Social Text parodied these ideas to the delight of all reasoning mankind.

The case for history is more difficult to argue, for the discipline is admittedly not a science. Historians do not aspire to formulate general laws, nor can they engage in experiment. Nor can the complexity of human affairs ever lead to predictions some expect from secure knowledge. Distinct interests lead different historians to select diverse facts from the plethora available; and these in turn may result in quite varied interpretations. The facts themselves are frequently in question, or only imperfectly known. Moreover, honest historical writing must at the same time be good literature. It is easy to appreciate that some hard science types may think history is mere opinion and anything is possible. Only when the history called earth science, or biological evolution, or cosmology is attacked do some scientists admit there may have to be fact to back historical narrative.

In contrast a French school of literary philosophy and anthropology associated with the names of Foucault, Derrida, and Lacan has come to assert history is mere "text" open to any interpretation. In this view history is not truth, but a fiction accepted by powerful and recognized groups specific to the culture propounding it. Windschuttle defends positivistic learning which must rest on fact. Specific facts may be in dispute, but the disputes must be clearly set forth so that the known can set limits to interpretation. This distinction between history and myth or fiction has been recognized since the enlightenment. Moreover, while history can not be predictive, it is "contingent", which means events must be in accord with what went before and can not be just any fictive narrative.

History is not fiction, nor is it merely 'perspective'. The core of history--the basis for the conclusions that individual historians reach and the basis of the debates that historians conduct between each other--is factual information. Despite the speculations of Foucault and his followers, history remains a search for truth and the construction of knowledge about the past. (p. 154)

In this book we are taught and have to learn a lot about the philosophy of science--an indispensable subject for skeptics. This is not an easy read. It is, however, a powerful refutation of the multi-culturalists, afrocentrists, feminists, and other writers who would like the world to be as they want it, rather than what it is.

Paul R. Gross and Norman Levitt Higher Superstition: The Academic Left and Its Quarrels with Science (Baltimore: Johns Hopkins Univ. Press, 1994) reviewed in CS 4 (Oct. 1994) p. 2

Paul Krugman Pop Internationalism (Cambridge: MIT Press, 1996) reviewed in CS 6 (Feb. 1997) p.

Alan D. Sokal "Transgressing the Boundaries." Social Text 14 (Spring/Summer 1996) p. 217-252. Reported in CS as "The Sokal Hoax." 6 (Oct. 1996) p. 3

[an error occurred while processing this directive]

Letters to the Editor

As most of you know, ART is an offspring of CSICOP (Committee for the Scientific Investigation of claims of the Paranormal) and most of you are subscribers to their excellent magazine. Two of our members felt called upon to comment on articles in the most recent issue, Vol 21, March/April 1997.

On Martin Gardner's article about "Farrakhan and the magic number 19" pp. 16-18.

Unveiling 2x9? Don't Let Any 19 Stand There Naked!

No matter what Martin Gardner asserts, the number 19 is still definitely and indubitably the ninth prime. No other number can claim that distinction. If you put a one, the first prime, in front of the nine you get 19. What is more if you take the square of 19 and add twice 9 to that, you also get a prime, namely 379. Even Martin Gardner can not explain why 379 is a prime, it just is.<sup>1</sup> There you have it, all factual.

Moreover, if you multiply a wage of 19 by 2000, the number of working hours in the year, you get 38,000, which is a fine starting salary for an engineer just out of college, or for a young professor of such brotlose Kunst as philosophy. Who however needs to have a Ph.D, which takes him at least, minimum, six additional years of academic slavery to earn. In which time the engineer has amassed hundreds of thousands. All of this is true, I guarantee it.

bio-astrologer Esmeralda von Lowenzahn-Dentdelion

Kitty Ferguson, The Fire in the Equations (London: Bantam Press, 1994)

On Joe Nickell's article "Something to Cry About: The Case of the Weeping Icon" pp. 19-20

The Icon is Sweating, Not Weeping!

So the icon was sweating from the forehead, not weeping from the eyes. Just because the priest or somebody mislabelled what was happening, you can't blame that on His mama. I think it is outrageous for Joe Nickell to quibble about it being tears or olive oil or whatever. If God can make a cheap print picture of His mom weep miraculously, he just as surely can make her perspire olive oil. Does Joe Nickell really believe the sweat of Our Lady is human sweat? Do we not know that her breasts give the finest wine<sup>1</sup>, which is therefore known as Liebfraumilch. So definitely expect olive oil as her perspiration. The question Joe Nickell ought to ask is: "Why is she sweating? Is her son again in some trouble with the authorities? Has he gotten into another fight with that Darwin of the Apes fellow, or what?"

theologian Franz Bibfeldt

which raises the question: "was her son then a little drunk right from the beginning?" That is, however, a topic for another essay at another time.

Theologian Franz Bibfeldt was featured on the cover of The University of Chicago Magazine (February 1995). He was born in either 1897 or 1947 and is author of the major exegesis, apologia, and hermeneutic philosophy [!] Vielleicht.

[an error occurred while processing this directive]