

National Capital Area SKEPTICAL EYE

Summer 1991

Vol. 5, No. 3

The Best and Worst of CSICOP

By Lys Ann Shore

The May CSICOP Conference in Oakland, California, brought out the strengths and some weaknesses of the organization. CSICOP's controversial endorsement of the Amazing Kreskin as a conference speaker and a Prometheus author is discussed in the President's Column in this issue (page 3). Overall, the conference program showed how CSICOP has broadened and deepened its concern with the recognition and understanding of science, as well as the debunking of pseudoscience. The meeting addressed some cultural issues as well, in sessions on popular psychology and its spawn of self-help books, and urban legends, those strange tales of things that happened to a "friend of a friend."

The setting for the meeting was the Claremont Resort, a spacious and rambling survival from an earlier era, perched on a hillside overlooking San Francisco Bay. But the view wasn't the only reminder of the West Coast location: a look at the hotel's "Guest Directory" revealed a list of available services that included shiatsu massage, reflexology, aromatherapy, and "accupressure fresh cell facials." Ah, California!

The following paragraphs cover what, to me, were some of the most interesting and worthwhile moments of the conference; fuller coverage and reports of conference sessions will appear in an upcoming issue of the *Skeptical Inquirer*.

The keynote address by paleoanthropologist Donald C. Johanson was an outstanding event, a dramatic account of the search for human origins by one of the central figures in the effort. Best known for his discovery of the 3 million-year-old female skeleton known as Lucy, and of her fellows, known as the First Family, Johanson is the president of the Institute for Human Origins at the University of California, Berkeley. He has worked for 20 years in Africa, trying, as he said, "to wrest as much as possible out of the fossils to help answer the question of where did we come from." In his talk, illustrated with slides of his team at work in Africa, Johanson brought the audience into the actual procedures of searching for early human remains.

Johanson recognizes that his discovery of Lucy brought "tremendous responsibility" with it. Part of that responsibility, as exemplified in his CSICOP talk, is to bear in mind and to openly address the larger implications of his research. He tackles the issue of creationism firmly, but with a sense of humor. "Evolution is a fact, just like

continued on page 4

Confessions of a Lone Skeptic

By Elena M. Watson

Ilive in Norfolk, Virginia, a four-hour drive from our nation's capital. So why do I belong to the National Capital Area Skeptics? For my sanity mostly. There are no Eastern Virginia Area Skeptics, so I find it comforting to know that within my own state there are other openmindedly skeptical folks, even if they don't live next door.

Not that the Tidewater/Hampton Roads area is some rural backwater, mired in primitive superstition and sorcery. True, some refer to it as Backwater instead of Tidewater, but it's hardly the sticks. From Virginia Beach to Williamsburg, the area known as Hampton Roads contains a population of nearly 1 million people. We also have a number of colleges, such as William and Mary; NASA-Langley; and the Eastern Virginia Medical School. With all of these educational and scientific institutions nearby, why am I the only person who writes critical letters to the editor when the local newspapers (the Virginian-Pilot and Ledger-Star) print stories on the advantages of fire walking or local UFO reports? Is it just that I have too much time on my hands?

Perhaps the reason for this is the same as it would be anywhere else. The claims are seen as trivial ("So what if people think fire walking is going improve their lives!"); harmless ("Hey, who does it hurt if someone thinks he's seen a flying saucer instead of Venus?") or not worth the effort to investigate. There is often a tendency to assume that people don't really believe that stuff anyway.

The latter attitude was expressed by Jim Raper, managing editor of the Virginian-Pilot and Led

continued on page 6



encourages critical and scientific thinking

serves as an information resource on extraordinary claims

provides extraordinary evidence that skeptics are cool

Signed articles represent the opinions of their authors and do not necessarily reflect the views of NCAS. Unsigned articles

are the responsibility of the NCAS Newsletter Committee. Only articles clearly marked as such represent positions of the NCAS Board of Directors.

Board of Directors

D.W. "Chip" Denman, President Joe Himes, Vice President Grace Denman, Treasurer Gary Stone, Secretary Jamy Ian Swiss, Exec. Comm. Alfred Baer Mike Epstein Herb Federhen Karen Gray Pam Kogan Randy Lockwood Doug McNeil Seán O'Néill Steven Shore Scott Snell Walter Rowe

> Newsletter Editor Lys Ann Shore

Address NCAS Inquiries to: D. W. Denman 8006 Valley Street Silver Spring, MD 20910 301-587-3827

©1991 National Capital Area Skeptics



Letters

An Open Letter from the Amazing Randi

James Randi is well known to NCAS members as a founding member of the Committee for the Scientific Investigation of Claims of the

Paranormal (CSICOP) and dedicated debunker of paranormal claims, as well as a magician who has appeared frequently on television and on stage. Twice in recent years he has been an NCAS speaker; his appearance in June 1989 drew the largest crowd ever for an NCAS program-more than 600 people. In this letter to the skeptical community, Randi explains his current predicament and asks for help.

May 13, 1991

Uri Geller has announced that he intends to sue me "in every state and in every country." He currently has four lawsuits against me, two of which I have won (at a cost of over \$155,000 in legal fees) and one of which he has told me he is bringing in Japan, with one just served on me in California. This latter case concerns two statements I made about him in response to questions by a reporter for the *International Herald Tribune*: (1) Geller has fooled some scientists, (2) His tricks are the same kind that used to be on the back of cereal boxes when I was a kid.

Obviously, this is a frivolous lawsuit, and it seems evident that Geller is using the legal process both to break me financially and to silence me from speaking what I know to be the truth. I have a right under the Constitution to fairly say what I know to be true, and I will not surrender that right.

I have resigned from the Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP) since the Committee is always named in the suits, and in order that CSICOP will be spared further involvement in such suits if and when I again mention Geller's name.

This has been a very difficult thing for me to do. Should these actions continue, I will be forced into silence from my inability to support further legal costs. CSICOP has been silenced, and I'm next, it appears.

I now have no further funds to continue my defense. It has been suggested that a legal fund might be set up for my defense of these harassing actions by Mr. Geller. I hope that can be set in motion.

I'm in trouble,	folks.	Ĭ	need	help.
-----------------	--------	---	------	-------

James	Randi
-------	-------

A fund has been established. If you wish to contribute, checks may be made out to The Skeptics Legal Fund and mailed care of:

Robert Steiner, CPA P.O. Box 659 El Cerrito, CA 94530

Horrorscope

Here's How Paranormal Beliefs Can Hurt

Where's the harm of believing in (astrology, UFOs, etc.)? Most skeptics have heard that response more often than we'd like. A horrifying example of the harm that such beliefs can do comes from a recent report in the Washington Post (May 13, 1991, A20). Writing from Beijing, Post foreign service reporter Lena H. Sun reported that the abortion rate in China is up because many Chinese believe that children born during this lunar year, the Year of the Sheep, "will be plagued by a lifetime of bad luck." In the city of Tianjin, Sun noted, the birth rate is down 25 percent and the abortion rate up 60 percent for the first quarter of 1991 compared to the same period in 1990.

The Year of the Sheep, which began February 15, is one of the 12 years in the Chinese calendar cycle, each of which is symbolized by a different animal. Many Americans know the Chinese calendar through its representation on paper placemats used in Chinese restaurants. Some years of the cycle, such as the Year of the Dragon, are considered lucky, while others, like the Year of the Sheep, are believed to be unlucky. People born under certain signs are not supposed to marry those born under certain other signs, since some combinations of signs are believed to bring bad luck.

The Chinese government in recent decades has tried to discourage these beliefs, laboring to overcome a 2,000-year-old tradition. At the same time, the government's strict family planning policy of one child per couple has caused some parents who believe in the astrological tradition to try to achieve the most favorable timing for the birth of their child.

In her Post report, Sun noted that "it is clear from newspaper reports and talks with ordinary Chinese that the belief is deep-rooted--and quite widespread." She repeated the remark of a woman quoted in the China Women's Journal. The woman, who was pressured into having an abortion, said, "We are not willing to suffer this. But our mothers and mothers-in-law do not want us to have babies in the Year of the Sheep because they say girls born in the Year of the Sheep will see their husbands die young."

Meanwhile, China's family planning officials worry that the shortage of babies this year may mean more births than usual next year, which will be the Year of the Monkey.

An assumption is subject to change. It might be called a very firm opinion, but it can be discarded if it doesn't work. A certainty is not subject to change. It is permanent. If circumstances don't support the certainty, it is the circumstances that must be redefined, not the certainty. -- Marshall Powell



Amazing Happenings

By Chip Denman

On page 2 of this issue there is news of James Randi's resignation from CSICOP, after 15 years as its best-known member. But just as one "Amazing" magician ends his association with CSICOP, another was introduced at the May CSICOP conference as a new "ally in skepticism"—the Amazing Kreskin.

It may strike some readers of this newsletter as odd that Kreskin, whose mindreading act has been described in the last two issues of the Eye. could be considered an advocate of skepticism. After all, Kreskin a few years back marketed a test-your-own-ESP kit and generally has encouraged his audience to believe in his powers as a "sensitive." Within the past year the Washington Post described Kreskin's ghosthunt in a Georgetown home, and credited Kreskin with coining the term paraESP ionage, "which he explained is a way to learn the other side's secret stuff by, among other ways, using the mind to soak up the 'energy' left behind" (Washington Post, August 1, 1990, B1). At the time, I was called by a representative for the "Larry King Show," who expressed surprise when I described Kreskin as a magical performer and not a genuine psychic.

Nonetheless, Kreskin's next book, ESP: Extra Sensitive Perception, is being published by Prometheus Books, and Kreskin himself appeared at the Prometheus booth at the recent American Booksellers Association trade show. Interestingly, it was another Prometheus book— The Psychology of the Psychic by Marks and Kammann—that ten years ago gave a detailed examination of the tricks used in Kreskin's mentalism act. Why did Marks and Kammann devote so much space to Kreskin in a book that also looked closely at self-claimed psychic Uri Geller? Because surveys of Kreskin's audience showed a willingness to attribute psychic powers to him, even in the absence of specific claims on his part.

Paul Kurtz, chairman of CSICOP, made the remark that "95 percent of what Kreskin does is a trick," leaving us to wonder about the remaining 5 percent. Kurtz, a distinguished philosocontinued on page 5

CSICOP Conference, from page 1

gravity, but some people are not easily able to accept it." He sees the purpose of his work as "to remind us of our place in nature, for we are still part of the natural world, in spite of our supposed superiority of culture."

The session on catastrophism and evolution, which took place the morning following Johanson's address, gave a different kind of insight into the process of "doing science." The participants were a trio of Berkeley professors, from three different fields. Walter Alvarez, a geologist, Richard Muller, a physicist, and Jere Lipps, a biologist, have combined forces to examine the question of abrupt, catastrophic events and their implications for the evolution of life on earth. Each of the three addressed his two colleagues as much as the audience, responding to what the others had said, and engaging in a kind of banter that revealed the human side of doing science. Lipps set the lighthearted tone at the start, by announcing firmly, "I'm the paleontologist and I'm right. Those other guys [Muller and Alvarez] are the ones you should be skeptical of!"

The session followed an unusual format, with two rounds of brief talks. The first set provided an overview of the issues, while the second round focused on specific research results. Most exciting was the news from Alvarez that his research group believes it has located the site of the meteoritic impact responsible for the mass extinction that occurred at the end of the Cretaceous era and the beginning of the Tertiary (called the K-T boundary). The site, in Yucatán, Mexico, displays many signs of disturbance activity precisely at the K-T boundary. According to Alvarez, the disturbance looks like the result of a "megatsunami," which would have been caused by the impact.

The urban legends session featured an unexpected element of local interest for NCAS members, as one of the speakers devoted his talk to a case history, the "Missing Day in Time" story which supposedly took place at NASA Goddard Space Flight Center in Greenbelt, Maryland. The speaker, Ian Harold Brunvand, is a professor of English at the University of Utah who is well known for his books on urban legends, The Vanishing Hitchhiker and most recently Curses! Broiled Again!

Brunvand defined an urban legend as a bizarre story told by a credible source, always told as something that really happened to an FOAF, and combining a fact known to be true with an illusion. A common theme of such tales is the conflict between science and government, on the one hand, and religion, on the other. The "Missing Day in Time" story, which circulates among fundamentalists and tells how a computer confirmed a biblical event, is one of the commonest such stories. Brunvand has collected many versions of it, all generally attributed to the same individual, one Harold Hill, and usually citing the same Spencer, Indiana, newspaper story, and less often including a date. One version is reprinted here in the accompanying box.

Reprinted from a handout provided by Jan Harold Brunvand as part of his talk in the urban legends session at the 1991 CSICOP conference.

The Sun DID Stand Still

Did you know that the space program is busy proving that what has been called "myth" in the Bible is true? Mr. Harold Hill, President of the Curtis Engine Co. in Baltimore, Maryland, and a consultant in the space program, relates the following development:

"I think one of the most amazing things that God has for us today happened recently to our astronauts and space scientists at Green Belt, Maryland. They were checking the position of the sun, moon, and planets out in space where they would be 100 years and 1,000 years from now. We have to know this so we don't send a satellite up and have it bump into something later on in its orbits. We have to lay out the orbits in terms of the life of the satellite, and where the planets will be so the whole thing will not bog down! They ran the computer measurement back and forth over the centuries and it came to a halt. The computer stopped and put up a red signal, which meant that there was something wrong either with the information fed into it or with the results as compared to the standards. They called in the service department to check it out and they said, "It's perfect." The head of operations said, "What's wrong?" "Well, they have found there is a day missing in space in elapsed time." They scratched their heads and tore their hair. There was no answer!

One religious fellow on the team said, "You know, one time I was in Sunday School and they talked about the sun standing still." They didn't believe him; but they didn't have any other answer so they said, "Show us." He got a Bible and went back to the Book of Joshua where they found a pretty ridiculous statement for anybody who has 'common sense'. There they found the

Concerning the story's origins, Brunvand noted that Harold Hill, president of Curtis Engine Company and an electrical engineer, told the tale in an inspirational book published in 1974. There, he cited as his sources a religious flyer and a book by one "Professor Totten." Totten turns out to have been a military science instructor at Yale University from 1890 to 1892, known as an anti-Semite and a crackpot. His book Joshua's Long Day and the Dial of Ahaz: A Scientific Vindication was published in 1890 by Destiny Publishers. NASA Goddard Space Flight Center has issued a terse press release denying any knowledge of or involvement in the "Missing Day" story, although acknowledging that Harold Hill worked there briefly in the early 1960s as a plant engineer.

Lord saying to Joshua, "Fear them not; for I have delivered them into thine hand; there shall not a man of them stand before thee." Joshua was concerned because he was surrounded by the enemy and if darkness fell they would overpower them. So Joshua asked the Lord to make the sun stand still! That's right - "The sun stood still, and the moon stayed . . . and hasted not to go down about a whole day." Joshua 10:8,12,13. The space men said, "There is the missing day!" They checked the computers going back into the time it was written and found it was close but not close enough. the elapsed time that was missing back in Joshua's day was 23 hours and 20 minutes -- not a whole day. They read the Bible and there it was -- "about (approximately) a day."

These little words in the Bible are important, but they were still in trouble because if you cannot account for 40 minutes you'll be in trouble 1,000 years from now. Forty minutes had to be found because it can be multiplied many times over in orbits. This religious fellow also remembered somewhere in the Bible where it said the sun went BACKWARDS. The space men told him he was out of his mind. But they got the Book and read these words in Il Kings: Hezakiah, on his death-bed, was visited by the Prophet Isaiah who told him that he was not going to die. Hezekiah asked for a sign as proof. Isaiah said, "Do you want the sun to go ahead ten degrees?" Hezekiah said, "It's nothing for the sun to go ahead ten degrees, but let the shadow return backward ten degrees." Il Kings 20:9-11. Isaiah spoke to the Lord and the Lord brought the shadow ten degrees BACKWARDS! Ten degrees is exactly 40 minutes! Twenty-three hours and 20 minutes in Joshua, plus 40 minutes in II Kings make the missing 24 hours the space travelers had to log in the logbook as being the missing day in the Universe! Isn't that amazing? Our God is rubbing their noses in His Truth!"

The above article was copied from "The Evening Star", Spencer, Indiana. It is verified by Mr. Harold Hill, who gave permission for reprinting, February 22, 1970.

How do such legends as the "Missing Day" or "Vanishing Hitchhiker" stories grow and spread? Brunvand notes that many gain circulation not just through being repeated from one individual to others, but through the popular press. General and inaccurate references to supporting evidence are apparently sufficient to convince many people that such stories have a foundation.

I found the urban legends session almost as compelling as the one on catastrophism and evolution. And although the two topics could hardly be more different, taken together the sessions--like Johanson's keynote address--exemplify a concern with science and society that I hope will continue to be a focus of CSICOP's efforts.

President's Column, from page 3

pher but not a conjuror, may simply be saying that Kreskin's signature effect, the blindfold paycheck location described in wonderful detail in our last issue, does not depend on gimmicks, gaffs, or other storebought sneaky stuff. As someone who conjures a bit myself, I agree. But most magicians would still call it a trick. More important, I wonder how many others, seeking better understanding of apparent miracles, would hear such a statement from an eminent skeptic and jump to a wrong conclusion.

It is a good thing when CSICOP invites speakers of diverse views. And a quick look around NCAS or any other organization of skeptical thinkers confirms that the term "skeptic" covers a lot of ground. However, it is not a good thing when we, as active proponents of critical thinking, even inadvertently confuse semantically correct disclaimers with the impressions that they may create.

On stage virtually all conjurers—with the possible exception of Penn & Teller, currently appearing in New York City—want the audience to think about the wizard and to pay no attention to the man behind the curtain. In that clear context, few skeptics—even hard-nosed ones—object to equivocal statements. But as soon as the show is over and the rabbits have been cleaned out of the hats, the performer who wants to be considered a skeptic must be clear about what he or she can really do. The skeptical movement has a long history of association with such magicians: Maskelyne, Houdini, Randi—and even Dunninger, the model for Kreskin's own act, wrote to expose psychic phonies. Up to now, Kreskin has not made clear when he considers the show to be over.

I have not yet seen Kreskin's new book. Perhaps he will once and for all repudiate the vague statements and evasions that have been made in the past. Until then, I find it too Amazing.

Skeptics and the Law: A New NCAS Project Randi's legal battles may be a sign of things to come. The June '91 issue of Fate Magazine published an article entitled "Taking a Skeptic to Court." Other cases have accused skeptics of improper criticism and actions.

It is imperative that skeptics remain well informed on the legal issues, so that our strong criticism of poor thinking and pseudoscience is not diminished. Outspoken skeptics must hold to an especially high standard in our use of proper criticism.

NCAS is calling for individuals with special interest and skills in these issues to develop an information resource for skeptical advocates within NCAS and elsewhere. Attorneys, librarians, database experts, CPAs and other professionals are needed to share their ideas and expertise.

Please call Chip Denman at 301-587-3827. □

ger-Star, in regard to astrology columns. Shortly after it was revealed that Nancy Reagan had consulted an astrologer while in the White House, Kerry Sipe, public editor of the VP/LS, devoted his weekly column to the issue of horoscopes. Sipe interviewed Paul Kurtz, chairman of CSICOP, and endorsed CSICOP's campaign to include a disclaimer above astrology columns, proclaiming them to have no basis in reliable fact, but to be presented merely for entertainment value. Raper had no disagreement with the disclaimer, but felt there was no need for the VP/LS to run it because "I can't imagine that there are many people who take newspaper horoscopes seriously. It's clearly understood that they are there for entertainment." Sipe commented that he'd like to share Raper's confidence "that people can always distinguish between wisdom and whimsy. But I'm afraid I can't."

Mhai:
can a mid-mannered
but standcale minded housewife;
with some extra line on her hands, do about
soft nevisiaper articles: For starters, complain!

Considering that Sipe is the public editor, meaning that he is the person people deal with when they have a complaint or criticism about the content of the paper, this last statement would seem to carry a lot of weight. He has frequent direct communication with the readers, unlike Raper, and thus is a better judge of how well they can discriminate between the plausible and the fantastic. And if he is unsure about the public's ability to critically assess what they read, I'd believe him. And that is kind of scary.

have different criteria for different kinds of stories. Hard news and investigative pieces are expected to have a very high degree of accuracy. Feature stories and human interest pieces are treated more casually, as entertainment. But the difference is not always apparent to readers.

The second aspect of the problem is that often people aren't sure what to think. They may see science as just something that confuses them. So by default they fall back on their beliefs. It can and does happen to all of us at times. And popular culture is full of assumptions about the paranormal, such as: "Well, there must be something to it, or so many people wouldn't be seeing them" (fairies, UFOs, Yeti, etc.); and "Everyone is a little bit psychic."

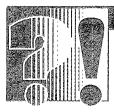
So what can I, a mild-mannered but skeptically minded housewife with some extra time on my hands, do about any of this? Well, for starters, because I think uncritical articles endorsing wild claims, even in "soft" feature stories, just add to public misconceptions, I usually complain to the public editorbut (and this is the important part) not before doing my homework! This means that I try to research the particular claim first. Then I may call the public editor, but I usually also write to him in a detailed, logical manner. I also write

letters to the editor for publication, which I try to keep as succinct as possible. But since they have always been printed, I suspect that the *Virginian-Pilot* prints all letters to the editor that it receives.

Does it do any good? I'd like to think so. And I've managed to have my say and still maintain open lines of communication with the paper. I've even gotten some nice letters back from the public editor. Maybe someday we'll even have an active Backwa-sorry, Tidewater-skeptics' group.

Maryland's Ghostbuster Bill

The real estate business may be even nuttier than we thought. As if the St. Ioseph trend weren't enough (see news story on page 11), a real estate agent talked Maryland state senator Arthur Dorman (D-Prince George's) into sponsoring a so-called "Ghostbuster Bill." The purpose of the bill, as reported in the Washington Post (April 1, 1991) under the headline "Is Your House Haunted? Call Your Md. Legislator," was to prevent house buyers from suing their real estate agent "for not disclosing that a previous occupant was murdered there." Has any Maryland home buyer ever tried to sue a real estate agent on such grounds? No, it appears—although there has been one case in California, and a fictional one in an episode of "L.A. Law." The Maryland legislature, evidently concerned with more vital issues, did not pass the bill.



A Skeptic's Response

Mass Hysteria

This feature of the Skeptical Eye is designed to provide skeptics with brief, logical answers to questions that may arise in conversation. In the Washington area in recent months, one such topic has been the mysterious Fairfax school faintings, which were reported in the local newspaper and in the Washington Post. To provide a context for understanding the events and evaluating the news reports, NCAS board member Seán O'Néill, a registered hypnotherapist and psychotherapist, here explains the concept and outlines the history of mass hysteria.

By Seán O'Néill

By the year 1692, the Massachusetts colony was disturbed and uneasy. The English king had revoked the colony's charter, and there were rumors of war with France. The Indians were a continuing threat, taxes were unbearably heavy, and attacks by pirates had damaged the commercial traffic of the colony (Jackson, 1956).

In this unstable environment awoke an ancient fear--witchcraft (Russell, 1980). In Salem Village a small group of girls, aged 9-19, began to behave in an extraordinary way. Screaming and crying, they said that they were possessed. These girls had been in the habit of talking about magic with a West Indian slave, Tituba, although they knew that in their Puritan community such free discussion was considered sinful. And sin produces guilt. Elizabeth Parris, at nine, felt the most guilty. Soon she became symptom-ridden, complaining of nightmares, anxiety, hallucina-

Such mischeefes as are inputed to witches, happen where no witches are; yea, and continue when witches are hanged and burnt; whie then should we attribute such effect to that cause, which being taken awaie, happeneth nevertheless?

Reginald Scott The Discoverie of Witchcroft 1584

mightmares, anxiety, hallucinations, and paranoia.

The village physician, Dr. Griggs, diagnosed witchcraft. When little Ann Putnam heard of the diagnosis, she fell to the floor and began screaming that she too was possessed.

Now there was no reason for the girls to fear exposure of the

storytelling group, no reason for guilt or anxiety.

Soon, nine girls and one grown woman claimed possession; they named Tituba as the witch who had possessed them, and then accused a variety of others in the village, including a four-year-old girl, of witchcraft as well. Trials and executions followed--some 20 deaths in Salem Village, and many more lives there irrevocably damaged (Starkey, 1973).

By the end of the eighteenth century, the so-called civilized world had executed a significant fraction of its population for witchcraft. Although it is impossible to know exactly how many lives were lost, since many records have been lost or destroyed, most historians agree that the number of deaths NCAS Skeptical Eye/Summer 1991

in Europe "reached holocaust proportions in many areas" (Karlsen, 1987, 266n4). It is important to note that the executions constituted "systematic violence against women," since "witches were generally thought of as women and most of those who died in the name of witchcraft were women" (Karlsen, 1987, xii).

What do we know of such phenomena? It is always possible, although perhaps unlikely, that the accused really were

witches and the afflicted indeed possessed. Some substance, such as ergot fungus in the grain supply, could have caused toxic reactions and hallucinations, as has been suggested by some modern historians. Or the cause may have been mass hysteria.

Mass hysteria and mass behavior are terms used to designate the characteristic actions and reactions of crowds. While mass behavior includes such phenomena as rioting, lynching, panic, fads, crazes, and social movements (Goldenson, 1985), mass hysteria involves the spreading of symptoms from one suggestible indi-

vidual to another. The symptoms typically involve a conversion reaction, in which a psychological conflict is removed from consciousness and expressed as a physical malady.

The development of conversion reactions usually involves the following: (1) a desire to escape from some unpleasant situation; (2) a fleeting wish to be sick and avoid the situation, which is suppressed as unfeasible or unworthy; (3) under additional or continued stress, the appearance of the symptoms of some physical ailment (Coleman, 1980). In this view, the hysteric (from the Greek word for uterus) tends to be a highly suggestible and dramatic adolescent female who is quite excitable and unable to see any relation between her situation and the stress symptoms, the nature of which is usually determined by observing others or from hearing or reading descriptions reported by the media.

Whatever specific causative factors may be involved, however, the basic dynamic pattern seems to be the avoidance or reduction of anxiety-arousing stress by getting sick, thus converting an emotional problem into a face-saving physical one. It is useful to note that the role is helpful only in a culture that provides sympathy and support for sick persons, where it is reinforced by secondary gains--in essence, it works. Although not a conscious role (Coleman, 1980), it seems that sometimes conscious acting may be superimposed on unconscious role playing to intensify the gains.

Thirteenth-century Europe suffered "dance manias," or groups of people dancing, screaming, and fainting in the streets. People of all sorts were affected (Goldenson, 1985). Believing that they had been bitten by spiders, they drank wine and tore their clothes off—and were treated with sympathy and tolerance by the unaffected citizens.

In 1945 a small town in Illinois was plagued by the "phantom anesthetist of Mattoon," who reportedly sprayed a paralyzing gas through bedroom windows onto the bodies of young women. Of course, this received heavy media coverage, and groups of armed citizens were organized to apprehend the marauder. Their attempts failed, and the reports and symptoms subsided in about two weeks (Coleman, 1980).

Beside the stress-reduction model, there is a competing view that offers to explain the mental dynamics of mass hysteria (Gehlen, 1977). This is a model of reinforcement rather than avoidance, and focuses directly on benefits gained by the participants, such as temporary fame, power to manipulate persons in authority, notoriety, and a sense of belonging, in addition to the more obvious benefit of the sympathetic attention that victims receive. In other words, if being sick gets benefits, some people will incline to become ill.

Although mass hysteria is relatively rare in modern times, there are some further illustrative examples. A 1960s outbreak of what seems to have been mass hysteria resulted in the shutting down of an American textile mill (Kerckhoff and Back, 1969). The phenomena involved a mysterious illness with symptoms of rashes, fainting, and nausea, believed to be caused by insects in a shipment of English cloth. State and federal health officials investigated, but no physical dysfunction was ever found.

Steward (1991) reports the outbreak of symptoms in the Arab schools in the Israeli West Bank. Between March 21 and April 3, 1981, the students were presumably attacked by a mysterious illness, the symptoms of which included nausea, headache, dizziness, and fainting spells. Each incident appears to have been initiated by students noting a funny smell, like gas. Although these incidents began with a few schoolgirls, ultimately almost a thousand individuals were affected. The political consequences of Arab girls claiming that they were being gassed by the Israelis were predictable. Perhaps less so were the medical results: no fatalities or

lingering effects, no environmental toxins found by the World Health Organization or the U.S. Centers for Disease Control, and no significant laboratory results from tests run on the victims. Although typical in course and symptomatology, the West Bank incident is an unusual example in that it involved a large number of victims and was spread over an extended geographical area (more than 100 miles).

More typical in all respects is the possible case of mass hysteria that occurred recently at West Springfield High School in Fairfax, Virginia. Last year, the 2,200-student school underwent a \$7 million renovation, in which classrooms, insulation, and ventilation were all upgraded. When the school opened in September for the 1990-91 year, a few girls began to complain of fainting, hyperventilation, and headaches. Within months, the rescue squad began calling almost routinely at the school--62 percent of the time for the same 10 female students.

Investigations were demanded. Then, on April 23, a tragedy occurred: Catherine Tarantino, a 15-year-old West Springfield student, died at home of unknown causes. On April 25 the local health department released findings that there was "no evidence that the air or environment is responsible for the ailments" (Washington Post), but this provided little reassurance.

On April 26, some 200 students walked out of school in protest. A meeting was called to emphasize the findings. Two schoolrooms were closed due to a slight elevation of carbon dioxide levels, but not everyone affected had been in these rooms. A team of epidemiologists from the Virginia Department of Health and the federal Centers for Disease Control began checking medical records.

Further Reading

General:

Mackay, Charles. Extraordinary Popular Delusions and the Madness of Crowds. New York: Harmony Books, 1980. Originally published in 1841, this book was the founding work on the subject of mass behavior. It has been republished many times, and is widely available in used-book stores.

On the Salem witchcraft trials:

Boyer, Paul, and Stephen Nissenbaum. Salem Possessed: The Social Origins of Witchcraft. Cambridge, Mass.: Harvard University Press, 1974.

Hansen, Chadwick. "Andover Witchcraft and the Causes of the Salem Witchcraft Trials." In *The Occult in America:* New Historical Perspectives, ed. Howard Kerrand Charles L. Crow (Urbana: University of Illinois Press): 38-57.

A junior, Tarrin Lupo, was interviewed (Fairfax Journal) and observed that "there are some (students) who are just looking for a day out of class." On May 2, however, 500 parents, "emotional and angry" (Washington Post), demanded at a community meeting held in the West Springfield cafeteria that the school population be shifted to another high school. Several parents shouted, "Close it! Close it!" noting that one girl had fainted more than 30 times before being withdrawn from school by her parents. And yet, a school official who spoke with me on condition of anonymity said that no cause could be found--"not by the EPA, not by anybody" (Fairfax County Schools employee, 1991). Within a few days, 42 students and one teacher had complained of various symptoms. At the meeting, one father asked parents whose children had suffered some sickness to stand and "hundreds of parents jumped to their feet" (Washington Post).

On May 4, the Tarantino autopsy data were reported: she died from the effects of a prescribed drug, Imiprimine. No connection to the difficulties of the other students in the school was found.

At this time another student walkout was planned, but never materialized. Still, on May 3 there was a 10 percent absentee rate, about twice the school average. Many of the affected students were withdrawn from school to finish the academic year being taught at home.

A national radio program reported on the events (National Public Radio, 1991); while noting that "fewer than 60 have actually fainted," the report opined darkly that since ambulances were called so frequently to the school, "there is something wrong at West Springfield!"

Pathways Diagnostic Inc. was hired to examine the conditions at the school, and the firm's findings were reported in the Washington Post on June 11. According to Pathway's president, Edward N. Light, tests showed no problems that would account for the ailments. He told Post reporter Peter Baker, "The faintings could not be correlated with any specific environmental factors. I found no airborne health hazards. The air quality was found to be comparable to other schools."

Parents of Springfield schoolchildren promptly complained that the study was too limited and that school officials were not taking the matter seriously enough. Mary Colombell, whose daughter is one of the girls who fainted repeatedly, was quoted as saying, "Right now, our kids feel abandoned...by West Springfield High School." Ms. Colombell transferred her daughter out of the school last January.

In addition to the three environmental studies, including the Pathway study, the Post reported that state and federal scientists are conducting an epidemiological study "to deter-

mine if the affected students have any common medical problems." And on top of that, school superintendent Robert R. Spillane has hired a private epidemiologist to integrate and analyze the studies.

In the meantime, a letter writer to the Fairfax Journal at last used the words mass hysteria. She noted the involvement of teenage girls and echoed the observations of Stewart (1991) and Gehlen (1977): "It's fun to be part of the crowd...to be a little scared, and it's even more fun to walk out of school." Prosaically, she wondered how many of the affected students came to school without breakfast or without preparing homework for class.

To be sure, it is not yet absolutely proven that no toxic agent exists at West Springfield High. And it would be wrong in any event to trivialize the fears and concern of the parents of the affected children. Hysteria is not the same as malingering, and once a wave begins it can be almost irresistible: the alternative to an external cause is to suspect oneself. But we must note the classic diagnostic cue, called *la belle indifférence*. In many cases, having fainted and then awakened, the girls simply returned to class. They did not remain ill, nor did they exhibit the sort of fear that one would expect in such a circumstance. Like the "possessed" girls of Salem Village, they functioned well at other times.

Again, as in the Salem Village cases, the interpretations of the events reflect the fears of the time. No one much is possessed anymore; our demons are the product of our own alienation in a technological civilization. We fret over our environment, our interpersonal liaisons are hounded by the fear of AIDS, and we are the potential victims of our own advances in chemistry, building insulation, and food additives.

The modern media are as much a danger in spreading hysteria as was the gossip of seventeenth-century villages. We cannot expect the press to yell that the emperor has no clothes before all of the relevant facts are known; still, it would be appropriate to provide some education about mass hysteria when reporting such incidents as the West Springfield phenomena. Treatment of hysteria involves the removal of reinforcing conditions that have influenced the development and maintenance of the symptoms. Although good effects have also been obtained with the use of hypnosis, placebos, and miracle cures, critical thinking and noninflammatory reporting offer the best hope of keeping our problems, and their solutions, firmly grounded in reality.

References

Coleman, James. 1980. Abnormal Psychology and Modern Life. Glenview, Ill.: Scott Foresman.

Fairfax County Schools employee. 1991. Personal communication, May 20.

Fairfax Journal. 1991. "Student shifts eyed in fainting," April 29; "Springfield fainting spells mystery for

Mass Hysteria, from page 9

- school officials," May 8; "Back to school at West Springfield" (letter), May 15; "School faintings fall off but parents are still worried," May 22.
- Gehlen, Frienda. 1977. "Toward a Revised Theory of Hysterical Contagion." *Journal of Health and Social Behavior* 18:27-35.
- Goldenson, Robert. 1985. The Encyclopedia of Human Behavior. Vol. 2. New York: Doubleday.
- Jackson, Shirley. 1956. The Witchcraft of Salem Village. New York: Random House.
- Karlsen, Carol F. 1987. The Devil in the Shape of a Woman: Witchcraft in Colonial New England. New York: W.W. Norton.
- Kerckhoff, A. C., and K. W. Back. 1969. "The Bug." Psychology Today 3:46-49.

- National Public Radio. 1991. "All Things Considered," May 10.
- Russell, Jeffrey. 1980. A History of Witchcraft: Sorcerers, Heretics and Pagans. New York: Thames and Hudson.
- Starkey, Marion. 1973. The Visionary Girls. Boston: Little, Brown.
- Stewart, James. 1991. "The West Bank Collective Hysteria Episode: The Politics of Illness." Skeptical Inquirer: Winter 153-60.
- Washington Post. 1991. "Mysterious faintings plague Fairfax school," April 27; "Parents demand that West Springfield High be closed," May 3; "Springfield death tied to medicine," May 4; "Faintings at Springfield school still a mystery after 3rd study," June 11. □

Cold Fusion Update

By Steve Shore

It seems that the cold fusion episode has entered another phase. The New York Times and Washington Post have both (26 April 1991) carried reports that new explanations are available for the phenomenon, even though neither Stanley Pons nor Martin Fleischmann has been heard from recently (see "Skeptic's Response: Cold Fusion" in the Spring 1991 issue of the Skeptical Eye, 6-7). Still participating in "science by press conference," F. Mayer and J. Reitz reported that the cold fusion phenomena were due to a new class of particles called "hydrons," smaller than the normal hydrogen atoms that promote fusion (never mind that atomic hydrogen is the one place in nature where quantum mechanics has been shown to hold precisely). Another lone researcher, an M.D. named R. Mills, also announced a new and different type of quantum behavior for the poor hydrogen atom. Both of these wild notions are due to appear in Fusion Technology, a publication of the American Nuclear Society. The Post reported also that yet another press release from MIT concerning a theoretical explanation for cold fusion resulted from the American Physical Society meeting in April. Meanwhile, the University of Utah is still funding the Cold Fusion Research Institute.

As if to emphasize the long lifetime that a pseudoscientific claim may enjoy, I recently unearthed a neglected letter to *Nature* concerning polywater (*Nature* 301 [1983], 18). Written in 1982, after the publication of Franks's book *Polywater*, the letter is from B. Derjaguin, the central figure in the polywater flap. In a long reply, critical of both the publication of Franks's book and *Nature*'s favorable review

of it, he makes the following point: "This reasoning [that many of the polywater researchers ignored thermodynamic implications of their findings] ignores that in our experiments we have measured not the pressure of the polywater vapour, but that of a solution of a very weakly volatile 'anomalous component' in the normal water. As regards the anomalous component itself, we have supposed (and still believe) that the products of its evaporation are not the molecules of ordinary water; therefore, there is no reason to believe that I and other scientists have ignored the second law of thermodynamics." More than a decade after the collapse of the polywater flap, Derjaguin was still claiming some basis for the phenomena he reported, in spite of the overwhelming evidence for the contaminant explanation of the effects.

It is important to keep in mind this central feature of pseudoscience, and most especially pathological science, when we read of extraordinary claims. No weight of evidence will ever prove enough to quash the claims made by true believers. Normal science may be self-correcting, but pseudoscience earns its title primarily by denying this function of peer review and replication in testing its claims.

Finally, I want to make a short comment, based in part on discussions over the past few months with colleagues. There was nothing of lasting value learned from the polywater episode. There has been nothing of lasting value learned from cold fusion. Although it focused public attention on science for a short time in a way that generated more excitement than results, the ultimate product has been a weakening of the image of the research scientist in the mind of the general public, who see this as yet another scientific mistake.

St. Joseph-o'-the-'Burbs

By Elena M. Watson

At long last the St. Joseph statue craze has hit Norfolk, Virginia. As you may recall from the last issue of the SEye, burying the little fellow in one's front yard is said to expedite the sale of the house. In mid-April the "Real Estate Weekly" section of the Virginian-Pilot reported that locally Long's Religious Supply store couldn't keep tiny effigies of the real estate saint in stock.

Even more telling is the revelation that a company in Modesto, California, called Inner Circle Marketing, has come up with "The Underground Real Estate Agent Kit." Selling for \$8, the kit contains a small statue of St. Joseph, sealed in plastic for burial, a tote bag (presumably for toting the little guy home from the store and then out to the front yard), and detailed instructions on handling "the patron saint of family and household needs."

So once and for all, here is the way to do it: first bury the saint six inches deep near the "for sale" sign, head first, feet up, and facing the street. Then recite the following during the burial:

"Oh, St. Joseph, guardian of household needs, we know you don't like to be upside-down in the ground, but the sooner escrow closes, the sooner we will dig you up and put you in a place of honor in our new home. Please bring us an acceptable offer (or any offer!) and help sustain our faith in the real estate market."

Inner Circle Marketing claims to have sold more than 4,000 kits since starting up in December, thanks to St. Barnum, no doubt.

But Are They Friendly Spirits?

The Washington City Paper (7/12/91) carried an advertisement for a home described as "brick cruciform shaped...aligned on the Vernal Equinox." Along with large porches, gardens, and stables, it comes "complete with ghost."

The ad did not state whether a statue of St. Joe had been buried anywhere on the 12 acres.

Science Fairs: Can We Do More Than Preach to the Choir?

By Mike Epstein

I recently helped judge the Montgomery Area Science Pain as part of the NCAS Science Fair Program. We gave out flower awards to deserving students, but it occurs to me that we no not helping others who need help more. And in the cases we uncovered this time, there's not much we can do to remedie the situation. The official goal of the Science Fair Program is to reward excellence in critical thinking. The unofficial goal, however, is to plant a few seeds of critical thought in the minds of students who lack that excellence. In some cases, when a student is mature and independent enough, we can discuss instances of questionable reasoning at length and provide documentation to aid the student in developing his or her perspectives. In other cases, a student's lack of maturity or the presence of sensitive social issues may prevent this course of action. The latter is what we experienced in this year's science fair.

This was the first of the Montgomery Area science fairs that the Muslim Community School participated in. Several students from that school featured quotations from the Koran in their projects. The citations were ancillary to their projects, and it was obvious that they felt deeply enough about their religion to try to find a relationship between science and their holy scriptures. One student went beyond that to develop a project as a direct consequence of her interpretation of a passage in "The Chapter of the Resumection" (LXXV Mecca), which reads: "Does man think that we shall not collect his bones? Able are we to arrange his fingertips!" I have given the passage here as it appears in one translation; the student used another translation which save the second sentence as, "Yea, verily, we are able to restore his very fingers." The result was a project called "Fingerprinting! -- Another Scientific Example from Allah's Creation." In it, the student explained the differences among fingerprints and built a device for taking fingerprints. However, her premise, taking the scriptural passage as evidence. was that the uniqueness of individual fingerprints and the art of fingerprinting were known thousands of years earlier than is generally believed.

The student and I talked for a while about the science, which led to a discussion of the interpretation of scripture and the leap of faith required to reach such a conclusion. My interpretation was that the passage dealt solely with the resurrection of the body. Perhaps she understood the point I was trying to explain: that she was fitting a known scientific phenomenon to an indefinite target, a scriptural passage, using 20-20 hindsight. I would have reacted similarly to a project on creation or another scriptural interpretation related to science by a student from a Christian or Jewish school.

continued on page 12

Science Fairs, from page 11

Another project in this fair was entitled, "The Technology of Modern Aerodynamics Came from Ancient Africa." The student had taken a one-page summary from his African studies textbook, What They Never Told You in History Class (I. K. Kush, Luxorr Publications, 1983) that referred to the discovery by Dr. Khalil Messih of a 2,000-year-old glider in an Egyptian museum. Again, the student took a leap of faith and concluded, based on the similarity of the glider to an American Hercules Transport Aircraft, that modern aerodynamics was known centuries ago in Africa. He even drew a picture of an Egyptian testing the glider and explained how it must have been done. My extended discussion with the student reavealed that (a) he had been unable to find the original article on which the textbook summary was based (published in the Journal of African Civilizations, November 1979), and (b) anything beyond the observation of the apparent similarity of the glider and the transport plane was speculation on his part. Then he said the magic words: "Perhaps it was just coincidence." A small victory!

How far must we go in respecting religious and ethnic sensitivities when encouraging critical thinking among stu-

dents? This is a difficult question, and one that will undoubtedly arise again, since an official of the Montgomery Area Science Fair indicated that the choice of projects in the fair is based on decisions made by the schools submitting the projects. And the fair, of course, is open to all educational institutions, both public and private. What more can we do to help those students who obviously don't think critically? A brief attempt at enlightenment on a personal basis is as far as I think NCAS science fair judges can go, unless perhaps they share a religious or ethnic background with the student that might provide a basis for more discussion.

The two cases I have given here represent the hardest situations to deal with. More common are cases where educational inadequacies alone have led to students' uncritical attitudes. NCAS science fair judges should feel more freedom to interact with these students. An invitation to an NCAS meeting, the gift of a book or a copy of the Skeptical Inquirer, or a subscription to the Skeptical Eye represent some possible approaches. We have an obligation to do more than reward those who already think critically: In the words of seventeenth-century cleric Thomas Fuller, "If you have knowledge, let others light their candles at it."

New Age Bookstore about to Fold?

Washington's largest New Age bookstore may have to acknowledge that the Age of Aquarius just isn't here yet. A report in the "District Line" column of Washington's City Paper (May 17, 1991, 9) stated that Australian entrepreneur Norris Blanks may be about to close his bookstore-cafe, Astraea, and file bankruptcy. The possibility of a Chapter 11 filing "is very real, and very imminent," Blanks told reporter Deborah Papier.

The store on Pennsylvania Avenue at 13th Street opened one year ago as a multipur-

pose center for New Age activities, offering poetry readings, film showings, and concerts in a circular minitheater, as well as a cafe and a bookstore specializing in New Age and metaphysical titles. Owner Blanks opened Astraea out of his personal New Age vision, which even led him to install special cone-shaped light fixtures to channel cosmic energy. From the beginning until recently, the store remained open 24 hours a day, and it held more than 200 special events in its first year. (The literary calendar for the month of June in the Washington Post Book Review, however, listed no scheduled events at Astraea.)

Papier reported in City Paper that, in spite of his present financial troubles, Blanks "continues to believe in the spiritual promise of the Avenue...and of Astraea." "Everybody warned that Washington wasn't ready for

this," Blanks told her. "But I still believe the time is right, and the place is right. It's going to work.

All we need is to reprogram the energy."

Maybe reprogramming it from New Age to skeptical might help...

Meet the BITNET SKEPTIC Discussion Group (LISTSERV)

By Gary Stone

(with apologies to computer scientists everywhere) (INTERNET: 74435.1756@Compuserve.com)

The SKEPTIC Discussion Group is an automated exchange of electronic mail, or e-mail, moderated by Norman R. Gall, Dept. of Philosophy, York University, Toronto, Ontario, Canada. He describes it as "a discussion group designed for philosophers, psychologists, natural and biological scientists, writers, etc., to take a 'skeptical' and scientifically informed look at claims of the paranormal, i.e., creationism, health fraud, witchcraft, crypto-zoology. Anything that might appear in the Skeptical Inquirer is fair game." The accompanying sample of an actual discussion reveals the varied expertise the group's participants, as well as the interesting and often unusual subjects that come on the table. Here is how you can become a participant in the group.

The SKEPTIC Discussion Group is hosted on computer YORKVM1 on the BITNET network, but you can participate from any computer equipped with modem, by using email sent via INTERNET. At present, there are just over 100 subscribers worldwide. (Some of those "subscribers" are actually feeds into other networks, so the total number of participants is considerably higher.) Whatever e-mail message one sends to the topical address SKEPTIC is copied back out to all other "subscribers" by the LISTSERV program. Currently, subscribers to SKEPTIC receive about ten items per week.

To subscribe to SKEPTIC, send an e-mail message to LISTSERV%YORKVM1 with the one-line instruction: SUBSCRIBE SKEPTIC [your full name.]

CMS/VM systems may use the message: TELL LISTSERV AT YORKVM1 SUBSCRIBE SKEPTIC [name.]

VMS systems may use: SEND LISTSERV AT YORKVM1 SUBSCRIBE SKEPTIC [name.]

Via INTERNET use:

LISTSERV%YORKVM1.BITNET@uga.cc.uga.edu

Try the above @gateway or your favorite @gateway into BITNET. You will receive an e-mail message confirming your subscription and some information about topic SKEP-TIC and general information on LISTSERV. From then on you will receive copies of all e-mail sent to topic SKEPTIC.

To contribute a message to SKEPTIC, address your e-mail exactly as you did to subscribe, but substitute the word "SKEPTIC" for "LISTSERV" in the address. SKEPTIC will accept e-mail from registered subscribers only.

To discontinue your subscription at any time, send an e-mail message to LISTSERV%YORKVM1 with this text on the first line:

SIGNOFF SKEPTIC

To sign off from all such topics network-wide, use: SIGNOFF *

Note that commands are sent to LISTSERV%YORKVM1, while messages are sent to SKEPTIC%YORKVM1.

To learn more about SKEPTIC or the other topcs handled by LISTSERV, before or after you subscribe send an e-mail message to: LISTSERV%YORKVM1 with any one of these commands on the first line:

INFO ? complete list of available documentation; LIST SHORT brief description of all LISTSERV topics; REVIEW SKEPTIC profile and members of LISTSERV SKEPTIC;

STAT SKEPTIC your personal distribution options; INDEX SKEPTIC to see a list of archived messages (for subscribers only);

GET [filename] to have an archive file sent to you (don't type the brackets).

Printed below is the transcript of several typical exchanges.

Date: 18-Mar-91 12:19 EST

From:>INTERNET:MSE%NBSENH.BITNET@uga.cc.uga.edu Subj: WHERE THE HELL IS HELL?

Need some HELLLLLP

Last year there appeared a story in several places concerning a group of scientists in Siberia who "discovered" the gates to HELL. I have a copy of the article that appeared in the Trinity Broadcasting Network monthly magazine (Feb. 1990), but SOMEWHERE I remember seeing a debunking of this article. I've looked everywhere I know but can't find it. And I need it because I'm currently in an argument with a coworker about that article.

Can anyone help? Thanks. Mike Epstein

THAT THE STATE

Date: 18-Mar-91 16:53 EST

From:Tom Faller

>INTERNET:tomfal%TR6.WES.ARMY.MIL@uga.cc.uga.edu

Reply to: Re: WHERE THE HELL IS HELL?

Mike:

The wording has changed over time (as all good fairy tales do), but the story, as I remember it, was about Soviet geologists who, in drilling a hole for natural gas in Siberia, had had a breakthough into empty space, and had heard

BITNET, from page 13

voices and screams coming from their drill pipe. There was some embellishment about lowering a microphone down the hole, etc. I published a debunking to at least one list, but as I can't find a copy of it either, I'm going to try to remember how it went. Here goes:

First of all, this is obviously a fake from the view of anyone who has ever spent any time on a drilling rig. I have; I used to work for Exxon, and have been on several rigs, and am familiar with the properties of the Earth's interior as a professional geophysicist and seismologist. The picture you get from this article is that of a couple of people with their ears cocked to the top of this big hollow pipe, listening to the faint screams coming up from below. Forget this. Drill pipes are full of mud and rock chips. The mud is weighted to keep that big hollow drill pipe from popping out of the crust like a soda straw in a glass of Coke. The mud provides pressure for the drill bit, cools the bit as it circulates, and brings rock chips back to the surface (you can't dig a hole without getting rid of the dirt!). So first, there's a couple of miles of mud in the way.

Second, the "microphones" that geologists use are called geophones; they have a frequency response of about 2-200 Hz, about a deep bass. Screams would be a couple of octaves higher. Real microphones can't take the heat or pressure of a couple of miles of mud piled on them.

Third, if the drill hit a hollow spot, if you could envision a lot of mud putting out a big fire, well no wonder there were screams.

Fourth, before any drilling goes on, the area is thoroughly surveyed seismically. A "hole" would show up like a sore thumb, "brighter" than any gas or oil pocket. A "hollow earth" would show up even quicker. We've been profiling the deep earth for thirty years now, with a lot of success. Our models aren't perfect, but saying that they are that wrong is like saying that the Earth is flat. If a Hell exists, it's a spiritual place, it's not deep in the Earth somewhere.

Fifth, this kind of report travels the way most "urban legends" do, by way of mouth, through nonscientific publications, on bulletin boards, or in short by way of channels where people are unlikely to ask for critical verification, or where they may have a vested interest in keeping the story going ("Godless Commies Get Taste of What's Coming"). It goes without saying that there was no report of this in ANY scientific journal, or any mainstream publication. Sorry, Trinity Broadcasting Network Monthly, you guys took it hook, line, and sinker. Or was it dreamed up there?

Any REAL verification of a major religious article of faith proof of a soul, measurement of karma, location of purgatory, etc., would be the news item of the millennium, and would be plastered across all the news media. Anyone who believes this kind of stuff, to the point that they argue it, is

a few verses short of an epistle, if you take my meaning. Let me know if you need more, or if specific things get murky.

Tom Faller

Date: 19-Mar-91 15:36 EST

From: "OrvilleG.Marti":>INTERNET:OMARTI%TIFTON

@uga.cc.uga.edu

Reply to: Re: WHERE THE HELL IS HELL?

Sender: SKEPTIC@YORKVM1.BITNET

Mike, the story was mentioned in a recent (3-4 months ago) article in one of the major Christian magazines. I forget which one. Also, in the Nov.-Dec. issue of Biblical Archaeology Review (a respected archaeology magazine), the editors decided to run what looked like a "straight" story on the subject. In the next issue, March/April 1991, BAR had received many indignant letters wondering why such material would appear in a magazine like BAR. Original sources for the story were given. Essentially it is a hoax. BAR's editors did themselves a disservice by running the item "straight" because, as a reader pointed out, it tends to give ammunition to fundamentalists who look for such material in respectable publications to bolster their own views.

Date: 18-Mar-91 19:01 EST

From:>INTERNET:MSE%NBSENH.BITNET@uga.cc.uga.edu

Subj: WHERE THE HELL IS HELL?

Thanks to everyone for the information. The article claimed to be a translation of an article in Ammenusastia, a Finnish newspaper. Perhaps Ammenusastia is the Finnish National Enquirer or even better, Ammenusastia means "April Fool" in Finnish.

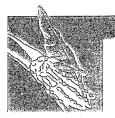
Mike E.

Wanted: Computer Equipment

for a Skeptics' Bulletin Board

NCAS would like to establish a computerized "Skeptics' Bulletin Board." This would become our own local system for members to swap thoughts and late breaking news, as well as facilitating NCAS business such as production of this newsletter. Several members have volunteered to handle the thankless task of system operator, but first we need a computer.

If you have any computer equipment to donate-from a modem to a whole system--please call the NCAS line at 301-587-3827 and leave a message. \square



Pasi Life Reporting

In the board elections held this spring, all the board members running for another term were reelected. In addition, Scott Snell was elected to replace board member Kevin Kraus, who resigned due to other commitments. Reelected were: Alfred Baer, D.W.

"Chip" Denman, Grace Denman, Herbert M. Federhen, Randy Lockwood, Douglas McNeil, Seán O'Néill, and Gary Stone. The board then elected the new executive committee: Chip Denman, president; Joe Himes, vice president; Gary Stone, secretary; Grace Denman, treasurer; and Jamy Ian Swiss as the fifth, non-officer member of the committee.

On April 21, NCAS board member Steve Shore gave a talk at the Tysons Pimmit Library, "Theory Is Not a Four-Letter Word." He traced the evolution of the concept of theory from the ancient Greek philosophers through the Renaissance, up through the Victorian era, and into the present day. "The popular view of theory since the nineteenth century, and the view that is now dominant, is that a theory is an individual opinion drawn from merely thinking about the world. It's not a hypothesis, it's a construct. So if you look at very disparate phenomena, and make a generalized, highly abstract statement that systematizes them, you can then sit down, knowing that you've 'done theory.' In other words, theory and opinion become the same thing," he said. In conclusion, he offered these aphorisms:

Theory proceeds according to the same rules as empirical investigation: it must be consistent and it must be predictive. Ultimately, anyone doing theory is trying to understand something related to empirical results. . . . Physical theory is not just mathematics, it uses mathematics.

A theory must conform with experience. If it violates experience, it's not a theory, it's merely wrong.

Theory is not just explanation. It may not lead directly to manipulation of the world, but it will lead to some observation of something new.

Theory does not have to be right. Its role is to systematize and

to lead--not necessarily in the right direction, but in one that's not obviously wrong.

We theorize because we're human and can't help trying to understand the world around us.

OGravity isn't a theory; that gravity is universal is theory.

Shore's presentation is available on videotape to NCAS members as part of the NCAS Video Archives, maintained by NCAS secretary Gary Stone. Stone has issued a catalogue of the archive, listing the tapes available and the conditions of borrowing. Subjects (listed alphabetically) range from animal rights, astrology, astronomy, and creationism through education, past lives, quackery, and science literacy, to skepticism. Send tape requests to Gary Stone, P.O. Box 153, Annapolis Junction, MD 20701, tel. (before 9 pm) (301) 470-1530.

-- L.A.S.

Good Publicity for the Sleeping ProphetT

Two days after NBC's "Unsolved Mysteries" program aired a segment on the late Virginia Beach psychic Edgar Cayce (see "Unsolved Mysteries Focuses on Virginia's Sleeping Prophet" in the Spring 1991 issue of the Sheptical Eye, 1), the Association for Research and Enlightenment (ARE) placed an ad in the Virginian-Pilot for an "ARE Open House" to be held two days later, March 24th. This free offering to the public was said to be "in response to the interest of the Tidewater public in the story of Virginia Beach's renowned psychic EDGAR CAYCE..."

Perhaps not coincidentally, the ARE also placed a prominent television ad immediately following the broadcast of "Unsolved Mysteries," which provided viewers with the telephone number and address of the center in large viewer-friendly letters.

This seems to indicate that the ARE considered the show good publicity, in spite of the comment made by the director of the segment that "Unsolved Mysteries" was not approaching Cayce's story from a position of belief.

--Elena M. Watson

Time to Renew? Time to Check the date printed on the nrenew your membership in NC.	ailing label on this issue. If you are l	ooking into a past-life, then it mus	if he time to
Yes, I want tojoin NCA Single:@ \$20 Domble (2	S. renew my membership. members at same mailing address)	@ \$30 FmN-time studem?"	<u> </u>
Make checks payable to	NameStreet		
NCAS and mail to: 8006 Valley Street Silver Spring, MID 20910	CityPhonePhone	State Zip	
	*Students: Listinstitution attending		



How does belief in a miracle cure, a method of divination, or the existence of a paranormal phenomenon spread? As folklorists know, such beliefs pass from one individual to another, in a broadening network. I call this "the friendly connection." I've seen the process at work among my own family and friends, just as you surely have among yours. Take my Great-aunt Mabel (name changed to protect sensitive feelings), who like most folks her age suffers from a variety of aches and pains. One of her cronies stops by and says, "You poor dear! Is your back troubling you again? Take some of these--my doctor gave them to me when my back hurt, and they work just great." Mabel pops a few without question--and without telling her doctor.

The same sequence of concern, offer, and uncritical acceptance occurs over and over again in offices, locker rooms, and watering holes, wherever friends meet. Often, the people who fall for it are ones who think of themselves as savvy consumers, wise to sharp tricks of all varieties. Yet the kind offer catches them off guard.

I think the key factor in such transactions is concern. The

thought that someone in this uncaring society actually cares how we feel or what our needs are touches us and causes us to turn off the critical thinking which is so often seen as negative in intent. That's how I explain why one of my friends, a cool, poised professional manager, would accept a set of 17(!) Ram Dass tapes from a member of her board ("You're having trouble with staff relations? Here, try these, they sure helped me...").

What can we do about the friendly connection, aside from cautioning Great-aunt Mabel not to take any medication not prescribed by her doctor? At least, if we're aware that it exists, we can try to recognize it when we see it and make others aware of it as well. After all, our skeptical eye should be turned on every aspect of our lives, not just what we read or see in the media.

Keep Your EYE Open

Send your articles, letters, and original artwork for future publication in the *Skeptical Eye*. Contributions should be short (500-1000 words maximum, or two to four double-spaced pages) and typed, not handwritten. If you use a computer, please send hardcopy along with your floppy disk (5.25" or 3.5", WordPerfect or ASCII). Please be sure to include your name, address, and telephone number. Send all contributions to *Skeptical Eye*, 8006 Valley Street, Silver Spring, MD 20910.

Help Plan CSICOP's 1992 Conference

CSICOP's next North American Conference will be held in Dallas, Texas in the Fall of 1992.

The planning committee is calling for suggestions for speakers, topics, themes, and events for the conference. Themes under consideration include: "Fraud in Science;" "Teaching Small Children Critical Thinking;" "Qigong and Chinese Medicine;" "The Entertainment Industry and How It Promotes the Paranormal;" "Controversies in Science, i.e. Global Warming;" and "Hauntings."

Send your ideas to Lee Nesbet, Special Projects Director, CSICOP, Box 229, Buffalo, NY 14215.

Nonponit Organization Pusage Plaq AV , bleitrield Ees supposite of the sup

National Capital Area Skeptics 8006 Valley Street Silver Spring, MD 20910

