

Bay Area Skeptics Information Sheet  
Vol. 7, No. 8  
Editor: Kent Harker

**BIG SOOTHSAYER BYTES APPLE**  
by Don Henvick

A friend calls a while back and tells me about a demonstration a so-called psychic is gonna give down the S.F. peninsula. I've seen this particular guy do his mumbo-jumbo before, but two aspects of this thing promise for some interesting developments. The psychic is gonna take questions from the audience after he does his thing, and the venue, far from being Madame LaZonga's Meditation Parlor, is part of a lecture series given by and for the employees of a very biggish computer company named for a popular and very distinguished fruit. So, this lot of hard-headed, scientifico-technical types will be less likely than most to get goo-goo eyed over what our miracle boy will have to offer. We shall see.

The auditorium is packed with several hundred assorted folk eager to see what an enlightened mind has to offer that their mere-mortal types don't, and that maybe even their favorite computer brain can't match.

Our Boy Seer is introduced and goes into his routine. I'm particularly fond of this guy because he doesn't do too much of the dreary cold reading which usually sends yours truly off to nap land in short order. His stuff is more visual, a combination of psychological arm-twisting and outright, though nicely camouflaged flim-flammery.

He starts out with seeing how the power of suggestion can affect some folks in the audience more than others. The most suggestible are praised for being more sensitive and psychic than the rest of us clods, and the Bogus Seer makes it a point to go back to these more pliable ones as the show progresses. Much of what he does is "explained" in terms of psychology and subtle body reactions for the benefit of those who may be less receptive than others to the astral-spirit explanation. But then the B.S. cheats like hell to make sure that his impressions are correct.

I'll give you an example. Twice, not once, but twice, he gets the audience to believe that by watching their reactions or taking someone's pulse he can tell if someone is lying or not. Those of us with some notions about psychology know this is true -- to a point. But the B.S. stretches it beyond the point of credulity, especially for those of us with some smarts in magic, when he ensures the outcome of his "Clever-Hans" experiment by engaging in some sleight of hand.

His demonstration of the power of the mind is nothing more than a

cheesy magic trick, though it seems like very few in this august assembly are aware of it. It makes no difference that these folks spend their days calculating and such like that, they're just as eager, if not more, to lap this stuff up, so the Bogus Seer really starts to dish it out. The B.S. hits 'em with stuff right off the shelf of every magician's mental magic library.

Picture this: he holds up a newspaper column and moves a pair of scissors up and down while a (randomly-selected) member of the audience tells him when to cut. The top line where the cut was made reads as he predicted, in writing, before the show. Strong stuff? You bet. Fake stuff? You bet. How about being able to figure out one line out of a whole book that a spectator is thinking of? How about letting a spectator he's never seen before choose one card out of a pack and that one card happens to have her name written on it!

The B.S. has started off slow with stuff maybe anybody can do -- maybe it's coincidence -- and has imperceptibly swayed into more amazing stuff, taking the audience along with him. The more skeptical in the audience aren't asked to swallow the whole thing at once, just slowly invited to let their minds accept something a little improbable, 'cause after all, "science hasn't figured out everything; maybe there are some things we don't understand, so don't be closed-minded." Once they've given this guy the benefit of the doubt, once they've surrendered their skepticism, he takes more and more advantage 'till, at the end, while I'm saying "Phooey!" they're saying, "Maybe!" and everybody else is saying, "Wow!" They should have just said "No!" to the Bogus Seer.

The demonstration finally winds up and I'm looking forward to the question period, but first the lecture organizer has an announcement. I'm not too surprised to hear it but I think the audience is and maybe you will be, too. The announcement is, "You've been had!" The B.S. is our own B.S., Bob Steiner, doing his fake-psyhic bit and doing it very nicely, thank you. Patiently, Bob explains that he is a phonus-balonus, doing his thing in an effort to see if the employees of Unnamed Fruit Computer Company are as gullible as everybody else. They are. Which is not to say they are dumb -- not at all -- but if they accept demonstrations of the paranormal without proper controls, there's no telling where they might let themselves be led.

Questions follow a familiar pattern: "How did you do it?" "Maybe ghosts are not real, but how about UFOs?" "How DID you do it?" My favorite is from a seemingly intelligent young woman who asks Bob if he mediates, and if not, how can he get those powers that he uses?

Some people never get the message no matter how clear.

POP GOES PSI

S.F. Examiner science writer Key Davidson, critic of psi and very sympathetic to the goals of CSICOP did a wonderful piece on the

current state of parapsychology.

It seems that the Bottom Line is probably going to be the determining factor for the immediate future of parapsychology. In the ever-tightening fiscal realities of the '80s, the "'70s high has become the '80s low," observes Davidson. Due to the dismal failure of some of the most prestigious parapsychology institutions to produce anything significant, government grants have dried up, and private grants are also on the wane. The Pentagon has suffered some embarrassment from some of the kooky projects begun to counter the alleged "psi-gap," and has withdrawn funding from a two-year, \$425,000 study. To this economic crunch was added a crushing blow from the prestigious National Research Council (NRC), "which has concluded there is `no scientific justification, from research conducted over a period of 130 years, for the existence of parapsychological phenomena."

Here in the Bay Area, the most important center of parapsychological research is J. F. Kennedy University in Orinda, and it is on the brink of closing its parapsychology laboratory. Elsewhere well-know researcher Charles Honorton announced that his Princeton, N.J. lab just lost a \$300,000-a-year private grant. Honorton et al. blamed the NRC in a searing press release for the funding crisis, charging the NRC with "bias and unfairly lumping parapsychology with a wackier fad -- people who try to communicate with plants."

One of the principal architects of the NRC summary is CSICOP's Ray Hyman from the University of Oregon. For his part Hyman has become the focus of a concerted attack from the circling wagons of the 300-member Parapsychological Association of North Carolina.

"You can't believe what venom has been directed at me," Hyman said. "I've been called everything -- a hatchet man, a religious zealot, everything."

Probably the most telling comment came from Brendan O'Regan of the Institute of Noetic Science in Sausalito. "The field has been demoralized by CSICOP's activities, starved to death by the lack of funding, and flogged to death by researchers pursuing the same old questions."

For the first 120 years the parapsychologists had the stage all to themselves -- there lacked a cohesive, united front to confront the hemorrhage of irrationality. CSICOP is now the vehicle, and it has proved to be the truncheon that has breached the gates.

Who says we aren't making a dent?

## A WORM IN THE APPLE

Steiner's presentation at Apple was not met with universal elation. When you pry the lid off psychic nonsense, the believers just don't take too kindly to the light in which they are suddenly bathed. At the

end of Steiner's exhibition, organizer Joe Wujek announced to the startled crowd that, "You've been had. This was a hoax." (See Don Henvick's article about the presentation.)

A disgruntled employee posted the following diatribe on the AppleLink electronic mail, edited for space but otherwise left in its pristine, garbled original, misspelling, punctuation and all. Instead of filling the thing with a bunch of "sic", an asterisk will serve to note it is not our poor proofreading. All ellipses are original. (Permission to print was granted by Mr. Wujek.)

"To: WUJEK

"Unfortunately, you're right...this was was a hoax. Instead of hearing what we thought and what was advertized\* to be, as a lecture by a psychic investigator, we got magic tricks! Does this make sense? What happened to the lecture, the experiences and common ways people are influenced or tricked.\* He was asked more than three times to explain a particular item `the birthday game', and he had difficulty in communicating probability I can understand; his mumbo-jumbo and explanations and yours, frankly, were not communicated well at all.

"He didn't even feel he could devulge\* some of his basic magic tricks... what a joke. My brother did magic and I've always enjoyed it. I've seen great magicians.... Most of them were enjoyable and entertaining and I was a willing participant whether I new\* how it was done or not.

"We came and were asked to listen patiently and to particpate\* in a demonstration. At the end of the demonstration, instead of being asked whether we believed his demonstration to be of a psysic\* nature or involving ESP, we were asked whether we believed in ESP. I feel these are two entirely different questions. Mr. Steiner chose to believe his own illusion, that people don't know the difference between his work and possibly something they would call an extra-sensory perception experience. His work was well done, but by no means would I have called it an ESP experience. And he was entertaining, except the audience this time was left with a bad taste in their mouth.

"And what's most unfortunate, instead of helping people remove the veils of darkness from a particularly difficult experience they feel they might have had, he forces people to shut the doors and not talk or come to understand the issues and reasons behind some events.

"What amazed me was your act was worse than the `charlatans and faith healers' you propose to uncover.

"Isn't it possible that people are growing in their degree of sensitivity and perceptions and just maybe, sometime in their life, something might happen to them that is perceived as beyond their realm of understanding? Things happen all the time, we don't understand the reasons, but we somehow know them to be true. And sometimes, amazingly enough they are.

"Thanks for your sense of enlightenment, it sure opened my eyes...the dark ages are still here, and so is prejudice and misunderstanding."

Steiner, not one to let such nonsense pass, replied and has given BASIS permission to print his response (also edited for space).

"While it is clear that you were upset by the presentation, I believe that the anger and outrage in your reply were all out of proportion to what was presented. "You state about me: 'He didn't even feel he could divulge\* some of his basic magic tricks....' You proceed to tell that your brother was entertaining, and that you enjoyed the magic he performed. Question: Did your brother ever divulge the secrets of magic from the stage to a large audience, thereby not only violating the oath of the craft, but destroying a substantial part of the entertainment art form of magic?"

"You claim that you have seen great magicians. Did they ever divulge the secrets of the craft from the stage to a large audience? "You state that 'the audience this time was left with a bad taste in their mouth.' Much as you would like to believe that, I must remind you that you do not speak for the audience. Based upon the experience of over a decade of making such presentations, I am happy to report that your opinion is a tiny, tiny minority view of the event."

"Furthermore, the considerable applause at the conclusion of the presentation and the large number of people who personally congratulated and thanked me belie your assertion of a bad taste left in the mouths of members of the audience."

"You claim that my act was 'worse than the charlatans and faith healers [I] propose to uncover.' Do you truly consider what I did at Apple Computer to be worse than the effect on an eight-year-old boy on crutches who left a 'faith-healing crusade,' still crippled, with tears streaming down his cheeks? Do you consider my presentation to be worse than the self-proclaimed 'psychic' who takes money from people to have them allegedly communicate with their dead loved ones?"

"It is this type of thing, which goes on all the time that make me believe that it is worth the risk of a tiny, tiny shock to the outrageous and angry sensitivities of the likes of you, in order to alert the majority to the potential danger of irrational belief."

Joe Wujek sent a note with Bob's letter to the employee in question praising the public efforts of BAS in general and Robert Steiner in particular.

(Editor's note: At the time this issue is in your hands, Robert Steiner is being installed as President of the Society of American Magicians, a world-wide organization founded in 1902. Bob is not busy enough with his professional accounting business, his duties as President of SAM, and his performances and lectures, so we installed him on the board of BAS.

We're glad to have you back in a more direct, active role, Bob.)

## EDITOR'S CORNER

We skeptics have been naive and shortsighted in our response to the creationists -- seen for the most part as nettlesome, though minor, pests. We have assumed they would go away if ignored. We have waited for them to run out of steam or be humiliated out of existence because they are opposed not only by secular groups, but mainstream Christianity (and certainly non-christian religions) too.

This has not happened, and could represent a potentially costly error in terms of the advancement of science and pluralism in a democratic society.

Creationists make their public appeal under democratic slogans like "equal time," "open mindedness," "alternative views," and talk of the "marketplace of ideas." This is their public approach, but when speaking to each other, their aims are stated very differently. They sell tolerance as a substitute for the hard evidence their viewpoint lacks.

This became clearer than ever to me after I read Ken Ham's "The Lie: Evolution". Ham is an Australian and recent adjunct to the Institute for Creation Research (ICR) near San Diego. His prosy book, which includes 31 pages of sophomoric cartoons depicting the evils of evolution, begins by warning FCs (fundamentalist Christians) that the creation/evolution debate is the most important issue they face, because the problems of society -- "lawlessness, homosexuality, pornography, Nazism, racism, drugs, male chauvinism, war and abortion" -- find their roots in evolution. If I was surprised to discover that all the ills of the world originate with evolution, I was flabbergasted to read that "In fact, I [Ham] have not yet met one informed evolutionist who has disagreed with me concerning the relationship of evolution to these particular moral issues. [p. 84]"

Ham begins his thesis by saying that evolution is not science because "we cannot DIRECTLY test the past using the scientific method, [p. 5, my emphasis]" and then says one page and two cartoons later that "the evidence for creation...[is] what the Bible says concerning Noah's Flood, the Tower of Babel and other related topics. [p. 8]" Ham acknowledges that creationism is not science: "The reader needs to be aware that, when we discuss creation/evolution, in both instances we are talking about beliefs, that is, religion. Creation is a religious position based on the Word of God.... [p. 12]"

If science consists only of that which we can DIRECTLY test there is no such thing as science because there is no such thing as a DIRECT test of anything. Even looking at something two feet away is indirect, because what we see happened a very short time ago -- the time it takes for the light to travel from the object to our retina to be passed (and processed) by the optic nerves and the visual centers of our brain. There is no direct connection even with our own

consciousness. All science is historical in this strict sense.

Probably the most common logic error in Ham's book -- and a linchpin of creationist logic -- is the false dichotomy. Everything is black or white. All of the complex scientific and sociological issues in our experience are grandly simple in the world according to Ham. All matters can be sifted by Scripture into sheep or goats. In what amounts to a colossal misunderstanding of science, he hangs his readers on the manufactured dilemma of distressing uncertainty: "Unless we know every bit of evidence is available, we can never really be sure that any of [our] conclusions were right. This is a real problem for any human being -- how can he ever be one hundred percent sure about anything? [p. 19]"

How to solve this problem? Do not despair. Though there may be uncertainty on one side, on the other is the "irrefutable evidence of the Scriptures,... This ends our dilemma. We are in no doubt.... [p. 20]"

A cartoon on page 25 sums it up: a smiling, suited-and-tied man (the evolutionist counterparts are usually ill-clad, scowling, long-haired and dirty) holds a sign which reads, "OUR THINKING IN EVERY AREA" as the character points to the Bible on which he stands. To this is added the declaration, "If the Bible is not the infallible word of the One who knows everything, then we have exactly nothing. [p. 25]"

With such thinking, of course, the FCs are in an all-or-nothing position. Ham states that "...if you do not have a believing understanding of that book [Genesis], you cannot hope to attain full comprehension of what Christianity is all about" and accompanies it with an illustration of a crumbling block of Christianity resting on a crumbling block of Genesis -- i.e., if a literal Genesis a la FC is not the foundation of Christianity, it will crumble.

If one ever had any doubts about the real purposes of the scientific creationists they are abruptly dispelled in Ham's excitement about the success of their "creation ministry." Relating his experiences of teaching creationism (in Australia) to non-Christians, he says, "The results [teaching creationism] have been astounding. Many, many students have listened to the claims [of creationism] and have shown real interest in Christianity with a number of conversions as a result. [p. 31]"

FCs have established centers for creation "research" in the guise of science. These are really launching platforms for "creation ministries." Since evolution is the root of all evil, teaching it turns souls away from the Truth, so it must be destroyed. The real agenda has nothing to do with equal time: "This is the real problem. If we want to see... humanism collapse (which any thinking Christian must), then we have to reaim [sic.] the cannons at the foundation of evolution. It is only when the foundation is destroyed that the structure will collapse. The foundation of evolution needs to be destroyed and the foundational basis of creation restored to its rightful place of importance. [p. 93]"

Increasingly, FCs are urged to remove their children from schools and teach them in the home. The burgeoning home-school program is bringing significant problems to public education in some areas, and we can be assured that there is no such thing as equal time for evolution in these home schools.

Any who think creationists support such fuzzy-headed notions as free speech or the "marketplace of ideas" had better stop dreaming and realize the FCs have declared war. The militaristic lingo they use is combined with a potential for violence expressed in the bombings of abortion clinics around the country.

FCs cannot tolerate any form of dissent because it threatens the very foundation of their being. Those Christians that see metaphor or mythology in Genesis are denounced and condemned to The Pit. FC exegesis, like their science, is simple: "When Scripture is meant to be taken symbolically or metaphorically, it is either obviously so from the context or we are told so. [p. 80]" Theistic evolution, they say, is just another of the wiles of the Prince of Darkness, perhaps even more evil than more conventional forms of wickedness because it has the appearance of religion.

What is to be done?

First, let's get off our duffs and take this attack seriously. FCs have declared that the only thing that will stop them is the 2nd Coming, so we are truly in this thing for the long haul.

The keys are education and vigilance, and organization is the necessary follow-up. There is a growing list of resource books and information as more and more scientists rise to the once ignored threat.

Watch what is happening in your schools very closely, and be prepared and willing to confront school boards and administrators. Find out what your local science teacher is presenting, especially in the 5th to 8th grades. Concerned science educators have banded together to form Committees of Correspondence (BAS advisor Eugenie Scott heads the Northern California group) for clearinghouse activities. If you detect FC attempts to unlawfully foist their doctrines in the public schools, immediately contact Dr. Scott's organization at Box 9477, Berkeley, CA 94709. If you wish to assemble a group of concerned parents, again Eugenie's group can provide speakers seasoned in the political, social and scientific issues.

Don't take it lying down. Don't take it standing up. Don't take it at all.

**PSYCHICS DON'T FIND CRASH**

Morris Huggins sent us the story reported in the Fresno Bee in which

National Park Service Ranger Paul Fedor received an anonymous phone call around midnight about a plane that had been reported missing for a week. The aircraft was last reported in an area near Sequoia National Park.

The caller, alleging psychic powers, said that two of the four people were still alive -- she "saw" them "standing on a two-foot slab of concrete," and described in great detail what they were wearing.

Later that same day, Fedor felt a chill up his spine when a relative discussed the case with him by phone and inadvertently verified some of the description of the clothing. Most people are not aware that this tactic is a common trick of psychics: a detailed description of clothing for several people is almost certain to hit something on SOMEONE. Because of the detail, it will seem striking if anything fits, and that's all the victim is likely to remember.

Search efforts were diverted to the area best described by the psychic and proved fruitless. A police helicopter then began work along the route last reported by the Oakland radar center when Emergency Locator Transmitter (ELT) signals were picked up (these devices are required to be installed in all aircraft and are automatically actuated upon impact) from the crash site. The terrain was so rugged that rescue crews had to be helicoptered in two days later.

The psychic had said the wreckage would be found in the Mineral King area by Crystal Lake near chaparral, in heavily forested terrain, close to a bridge near a road.

The wreckage was located about 100 miles from the closest description the psychic gave; there were no roads, and the nearest thing to a bridge was a horse bridge about 5 miles away. The aircraft had flown at high speed into a vertical rock mountainside at a fairly steep angle and disintegrated to the point that the engines could not be found. All aboard were evidently killed instantly.

So, radar and other "normal" means are still the best way to find lost aircraft.

Officials confirmed that they have "never had a case where [a psychic] provided them with information that was critical in finding a plane." Of course, the problem comes that sometime one of them is likely to give some information that will be helpful, and it remains to be seen if those same officials will be able to remember all the duds and chalk it up to the law of averages.

The tragedy could be, however, that while serious efforts to locate a crash are diverted to follow the psychic crapola someone could be dying. The psychics usually make their calls anonymously so they won't have to take the heat when they are wrong. But if it can somehow be construed that they aided in the case they come out to bask in the warmth of their claimed successes.

BASIS thinks that alleged psychics should be required to register in

person and to have their information taped, and when efforts are fruitless following their leads the bums should have to pay for all the investigative expenses that were diverted on the false information. Those are our tax dollars at work.

PLEASE NOTE: BAS Secretary Rick Moen has moved -- and with him the mailing address. Please do not send material for BASIS to the S.F. address; use the San Jose P.O. box. All proper addresses can be found in the "Calendar."

## ROUND TWO

In the June issue of BASIS we reported Shawn Carlson's debate on KCBS radio with astrologer Pat Brown. In that exchange, Ms. Brown asserted that she had conducted a rigorous test of her astrology forecasts in which she kept records on 44 people.

Shawn obtained a tape of the broadcast and transcribed it for BASIS because he was not going to let some of her assertions go unchallenged. From the tape:

Brown: "[I] have 44 people who keep a dairy who I do what I call a `mental cage' where I mathematically calculate every planet in motion to every planet their chart. They then determine if this is exacting or not. So far, it has not missed on any one of the 44 people that I am working with. This is a test that I am using with all the people essentially that I know. You can't get any closer than that...."

Shawn: "Her `test' is so poorly controlled that no reputable scientific journal would publish it."

Brown: "I am doing this research project with Dr. Harry Gorden. He's vice president of Dell Laboratories. He is a scientist that has been considered for the Nobel peace prize. He did the first papers that have been written up in the scientific journals on DNA. He finds this study to be very accurate. I am doing it with other people that he has sent to me of who I do not know, and he is also checking with them. And he is conducting research as a scientist."

When you go up against Carlson, you'd better have your facts straight, because they will be checked out. Here is the reality after Shawn contacted Dr. Gorden.

Dell labs is a pharmaceutical company, and Dr. Gorden is a pharmacologist working there. He has never been considered for the Nobel peace prize or the Nobel prize in any other field. He does not endorse Pat Brown's "research" project in any way. He indicated that, as a scientist, he did not wish to pass judgment on any field, even astrology, before evaluating the evidence. He further clarified that he wasn't aware of any evidence either for or against astrology.

(Carlson sent him a copy of his "Nature" article as well as his complete review, recently published in the European journal "Experientia", of the experimental research into astrology and astrologer's claims.)

As to his feeling about the scientific validity of Brown's project, he said that she explained to him what she was trying to do and he told her that if the proper double-blind controls were followed then her results MAY be indicative of whether or not there was something to astrology. He also stated that her public assertions constituted improper use of his name.

This is an endorsement?

BASIS then tried to contact Ms. Brown to see what she had to say for herself.

Three separate messages left on her phone recorder did not produce a return call.

When you hear astrologers tout the alleged scientific evidence for their pronouncements, get the specifics and challenge them.

## MARCH MEETING

by Ivan Linderman

Mr. Peter Bishop, President of the Humanist community of the San Jose, began his presentation with a short history of ESP experimentation. Harry Houdini, the famous early Twentieth-Century magician, was one of the first spiritualist skeptics. Having performed spiritualist tricks as a youth, Houdini was familiar with the techniques employed by spiritualists. When his mother died, Houdini wanted to contact her after her death and sought the aid of spiritualists, but he observed they were only using the same tricks he had used as a boy. Disappointed, Houdini wrote several books unmasking spiritualists: "The Unmasking of Robert Houdin", 1908 (from whom Houdini took his stage name), "Miracle Mongers and Their Methods", 1920 and "A Magician among Spirits", 1924. Houdini also cooperated with "Scientific American" to evaluate paranormal claims.

Prior to Houdini's death on Halloween 1926, he agreed with his wife that he would try to communicate with her after his death. Ten years later, in 1936, having received no legitimate post-mortem communication from her husband, Mrs. Houdini declared the experiment a failure.

Even though Houdini's efforts as a skeptic were widely publicized, J. B. Rhine began his famous ESP research during the 1930's. Mr. Bishop judged Rhine's intentions to be without fraudulent intent, even though the early work with Zenner cards had many problems. By 1937, one year after Mrs. Houdini declared her ten-year attempt to communicate with her dead husband a failure, Rhine started publication the "Journal of

Parapsychology".

In the opening issue, Rhine invited skeptical criticism and declared high standards for published articles: "The need for multiple replications by different observers...is greater in this field... to convince a skeptical public."

During the 30's and 40's, experiments reported in "JP" were flawed, but improved during the 50's and 60's. During the late 60's however, members of Rhine's laboratory were discovered to have reported fraudulent results. By the 70's, interest in such figures as the now defunct Uri Geller revitalized the field.

Charles Honorton (Psychophysical Research Laboratory at Princeton University) then developed the general protocol for what would be called the Ganzfeld PSI Experiments. The first base upon which these experiments was founded was a tacit assumption that even though popular psychics were known to be fraudulent, researchers should examine what they do and try to emulate their results in a non-fraudulent manner. Second, since all the experiments of Rhine and his group showed only minimal effects, a technique to amplify these effects was sought. It was hypothesized that ESP was related to dreaming, hypnosis, relaxation and general "perceptual restriction." By perceptually isolating subjects, background "noise" which interfered with the demonstration of psychic abilities would be eliminated; i.e., psychic abilities would be enhanced by perceptual isolation.

The Ganzfeld (german for "whole field") have the following general protocol:

1. A Sender of telepathic messages and a Receiver of these messages, attain a state of deep relaxation.
2. The Sender and Receiver are separated by a barrier, which can be as inconsequential as a wall or as substantial as separate rooms or even on the other side of the planet.
3. Both the Sender and the Receiver have access to an identical pool of items. The pool of items may be Zenner cards, photographs of different locales, etc.
4. The Sender selects one item from the pool and sends that image to the Receiver telepathically.
5. Having received the telepathic message, the Receiver selects the corresponding item from their identical pool of items.
6. Ostensibly, when the Sender and Receiver select the same Item, telepathic transmission is scored as a hit. Otherwise, it is a miss.
7. The hypothesis that ESP exists would be confirmed by a proportion of hits statistically significantly greater than chance.

Between 1974 and 1981, 42 different Ganzfeld PSI experiments in 34 separate reports (10 by Honorton) were generally praised as showing good design against fraud. In 1978, Honorton published a paper claiming 55% of all Ganzfeld PSI experiments demonstrated ESP at  $p = 0.05$ . Blackmore and Sargeant claimed 50% replication rates for Ganzfeld PSI experiments. The seeming scientific proof of ESP was picked up by the popular press. Scott Peak, in "The Road Less Traveled", concluded these experiments had clearly proven ESP exists. A recent NOVA program on PBS also concluded the Ganzfeld PSI experiments demonstrated ESP probably exists.

In 1981, Dr. Ray Hyman, was asked to assess the status of PSI research. Hyman selected the Ganzfeld PSI experiments as the most likely series of research to have a chance of passing close scrutiny. Hyman asked Honorton to help gather data to evaluate from this field. Two articles were eventually published, and a series of nine separate articles in the March 1986 issue of "JP", which included "A Joint Communique: The PSI Ganzfeld Controversy" by both Hyman and Honorton.

Hyman's initial 1985 paper noted the following criticisms of Ganzfeld PSI experiments:

1. Sensory Leakage. The Barrier may not have completely excluded contact between Sender and Receiver; e.g., if Sender handles items in pool before they are provided to Receiver. Honorton agreed this was a possible problem in early experiments that had been solved by providing two separate pools of items. To their credit, no higher incidences of purported ESP occurred in earlier experiments where sensory leakage may have occurred. Experimenters tested this hypothesis and discovered subjects of experiments did not use channels of communication when they were provided.
2. Feedback or Improper Randomization. Once an item is removed from the pool, the degrees of freedom decrease by one. That is, it is more likely Sender and Receiver will select same item by chance alone. Therefore, when Sender selects an item, scrupulous care must be taken to return the item to the pool and randomize all Items in the Pool such that probability of selecting any Item is same as before Item was selected. Hyman noted some correlation between feedback (i.e., improper randomization) and reported positive ESP and concluded 28% of studies suffered from improper randomization.
3. File Drawer Problem. Hyman noted it was unclear exactly what constituted a study to be included in Honorton's summary of 42 experiments. Hyman noted many studies were informal and suggested experimenters began informal studies and if they obtained positive results published. Otherwise, negative studies went unreported. By eliminating some of the more informal studies, Hyman showed replication of positive ESP in only 30% of studies vs. 43 - 55% reported by Honorton.
4. Number of Trials. The most serious objection by Hyman was the observation that studies which demonstrated positive ESP had the fewest number of trials. Seven of the 42 experiments had only 5 - 19

trials, and these 7 studies showed the most positive ESP; 5 of 7 were statistically significant at  $p = 0.05$ . Studies have larger number of trials had lower levels of replicability and were less likely to demonstrate positive ESP. This observation lends credence to the File Drawer phenomenon since it appears to indicate researchers were quick to report positive results rather than continue performing additional trials.

5. Multiple Testing. Techniques for scoring hits were not limited to simply determining whether Receiver picked same item as Sender. Techniques for scoring hits varied from concluding negative ESP was demonstrated if Receiver picked fewer items same as Sender (24% of studies) to scoring a hit if Receiver picked an item from same half of pool as Sender. In some cases (e.g., when items were geographical locations) a panel of judges was used to determine whether a hit had been made.

6. Statistical Errors. Hyman noted many statistical errors primarily concerned with type of statistical test to be applied; single- vs. double-tailed, etc. Hyman also noted a good correlation between studies with statistical errors and purported demonstration of positive ESP.

7. Experimenter Effect. Two experimenters, one of whom was Honorton, accounted for most of the studies in the group.

8. Inadequate Documentation. Many studies were simply abstracts rather than formal papers. Examination of laboratory notebooks from these studies revealed even more problems.

Hyman's position can best be summarized as follows: Experimental error was being concluded as proof of the existence of ESP.

In the 1986 joint communique, Honorton appeared to agree with Hyman (although differing on several issues) that Ganzfeld PSI experiments to date had not yet demonstrated ESP. The final verdict is still out. Both Hyman and Honorton noted past experiments had deviated from ideal conditions and that future experiments would have to be more scrupulous. The interesting point was also made that even if these experiments never yield any results, the lessons in experimental design will help science as a whole.

After the formal presentation by Mr. Bishop, the discussion centered on two topics: Humanism and ESP. The general consensus was there was little hope of ever convincing believers there is no such thing as ESP, and an equally unlikely probability of convincing skeptics there is.

Gerald Straub, author of "Salvation for Sale: An Insider's View of Pat Robertson" (Prometheus Books) will be in the Bay Area to speak on "Religion and Politics" with an update on the significance of Robertson's presidential campaign in October. We will have detailed

information next month.

-----

Opinions expressed in "BASIS" are those of the authors and do not necessarily reflect those of BAS, its board or its advisors.

The above are selected articles from the August, 1988 issue of "BASIS", the monthly publication of Bay Area Skeptics. You can obtain a free sample copy by sending your name and address to BAY AREA SKEPTICS, 4030 Moraga, San Francisco, CA 94122-3928 or by leaving a message on "The Skeptic's Board" BBS (415-648-8944) or on the 415-LA-TRUTH (voice) hotline.

Copyright (C) 1988 BAY AREA SKEPTICS. Reprints must credit "BASIS, newsletter of the Bay Area Skeptics, 4030 Moraga, San Francisco, CA 94122-3928."

-END-