

UFOs, Dr. Hynek is fond of saying, exist primarily as reports. To have a report we must have a person to make it. That's where things get sticky, and not just because some people like to lie. Even those who don't—most people—can be mistaken. Well over 90 percent of those things reported as UFOs are really something else, and that "something else" may not even exist in the world the rest of us inhabit; it may be nothing more than a vivid fantasy whose only reality is a psychological one. Dr. Frank B. Salisbury considers what all this means to UFO research.

Can Science Solve the UFO Mystery? **by Frank B. Salisbury**

Science works by constructing hypotheses that are based upon objective, verifiable data and then by testing these hypotheses. However, it is a problem to obtain objective, verifiable data in relation to UFOs. The data are mostly witness accounts, which by their very nature are not objective. How then can the data be verified? How can we do what scientists do, namely, take the objects into the laboratory or go back into the field and duplicate the observations?

There are tangible data, but they are always subject to subjective interpretation. In dealing with photographs we need to be aware that the *possibility* of fraud exists in virtually every case. The movie *Star Wars* showed us dozens of beautiful UFO photographs! It takes money to produce really beautiful, fraudulent UFO pictures but any amateur can produce run-of-the-mill, fraudulent UFO photographs.

Proceedings of the First International UFO Congress

CHICAGO, 1977

compiled and edited by

Curtis G. Fuller

and the editors of

FATE Magazine—

Mary Margaret Fuller,

Jerome Clark,

Betty Lou White

ATTENTION: SCHOOLS AND CORPORATIONS

WARNER books are available at quantity discounts with bulk purchase for educational, business, or sales promotional use. For information, please write to: SPECIAL SALES DEPARTMENT, WARNER BOOKS, 75 ROCKEFELLER PLAZA, NEW YORK, N.Y. 10019

ARE THERE WARNER BOOKS YOU WANT BUT CANNOT FIND IN YOUR LOCAL STORES?

You can get any WARNER BOOKS title in print. Simply send title and retail price, plus 50¢ per order and 20¢ per copy to cover mailing and handling costs for each book desired. New York State and California residents add applicable sales tax. Enclose check or money order only, no cash please, to: WARNER BOOKS, P.O. BOX 690, NEW YORK, N.Y. 10019



WARNER BOOKS

A Warner Communications Company

1980, 440 PAGINAS

It is the same with holes or marks on the ground, or with physical effects on a witness. How can we know what made them? Electromagnetic effects are essentially similar. The witness tells you that his car stopped or his lights went off or his radio buzzed and all you have is the witness's word.

One approach is to treat the body of witness reports and the investigative results as the problem to be studied. One can establish and test hypotheses about the reports and extract objective, verifiable data from conglomerate reports. This is objective because anybody can extract the same data. This was the concept behind Aimé Michel's map studies in which he looked for and found alignments of sightings. But the question immediately arises: What do the alignments mean? What are the chances that they could occur by chance? So we are soon back to a subjective interpretation anyway. David Saunders, Jacques Vallée, and others have studied UFOs with computers. The first step is to compile a computer catalog of sightings—the *Ufocat* now has something like eighty thousand entries, representing perhaps fifty thousand different sightings. Then you can ask the computer catalog what time of the day are UFOs most likely to be seen. What day of the week? What part of the country? What color are they? How fast do they go? I think this is a good approach.

Let's consider two rather oversimplified hypotheses. One hypothesis is that the reports are fraudulent; that is, the witnesses are deliberately telling lies. The contrary hypothesis is that the reports represent the truth as the witnesses understand it; that is, the witnesses are not telling deliberate lies. Obviously, the reports include both of these kinds of material, and the problem becomes how to distinguish and segregate the two. It may be impossible to do so in a totally objective and satisfying way, but human history has provided experiences upon which we can base some approaches.

Consider four ideas along these lines:

First: *Two or more witnesses are better than one, although a single witness is not without value.* If many witnesses are involved in a fraud it is likely that at least one will eventually expose the fraud. Furthermore, one

witness may observe details missed by another, so more data may be obtained. Multiple-witness cases are best.

Second: *It is valid to seek motives for lying or for perpetrating a hoax.* Will the witness expect to profit or to suffer by telling his or her story? One motive is always present: Many people apparently get a real ego boost from having successfully perpetrated a hoax. Thus it is always possible that a hoax has been perpetrated because the psychological reward for having gotten away with it can be a sufficient motive. Therefore, a motive is suggestive but far from conclusive unless the witness admits, or it can be demonstrated, that the motive actually led to the perpetration of the hoax.

Third: *"Gut feelings" about a witness are not without value, although they must be automatically suspect.* They have value because the mind is capable of integrating many facts and impressions to arrive at conclusions in a way that so far cannot be duplicated by any mechanical process. The origin of your "gut feeling" is in the sum total of your experience applied to the problem under question; this is the subtle thing we call intuition. It is the way we usually approach research anyway.

On the other hand, the mind may not possess all the pertinent facts; the mind may unduly emphasize or trust some facts at the expense of others; and the mind may make mistakes in logic. So we have to suspect our "gut feelings," but we must also realize that they have their uses. If we can outline a course of logical thought and the data that support it based upon our feelings, then we have made progress.

Fourth: *Certain physiological manifestations have been statistically associated with lying.* That is, lie detectors (polygraphs), stress-analysis machines, and the like sometimes can be used to investigate whether a witness is telling the truth or not. I think truth serum has not been used much in UFO investigations for several obvious reasons, but it might have a role. Hypnosis and perhaps other techniques also can be used, but the investigator must know the limitations of these approaches.

It is possible for a few persons to lie without ex-

hibiting stress, and this is another reason why multiple witnesses are valuable. At the same time, it is possible to exhibit stress (as when recalling a traumatic experience) without lying. So a positive response on a polygraph can be considered as evidence that a witness is lying or it can be considered evidence that he is not lying.

Travis Walton's experience illustrates this. He took a lie-detector test within several hours after he reappeared from his claimed UFO abduction near Heber, Arizona. You can say that he failed the test miserably because he showed so much stress. Or you can say the stress proves he had a truly traumatic experience. Some months later he took another test that didn't show the stress that would be indicative of lying.

It is certainly possible to fantasize under hypnosis. Remember the Bridey Murphy case of 1956? To prove reincarnation, a woman in Colorado was regressed hypnotically into an earlier life in Ireland. A reporter (William Barker) went to Ireland to verify the facts brought out under hypnosis. But journalists from the *Chicago American* investigated the neighborhood in Chicago where the woman grew up. They found many details relating to the stories she told under hypnosis. A neighbor's maiden name was Bridie Murphy, for example, and another neighbor had taught her to dance an Irish jig.

The recent study at Long Beach by A. H. Lawson and his co-workers indicates that people are indeed suggestible under hypnosis. When the hypnotist, having hypnotized you, says "Tell me your UFO story," you will tell a story whether you ever had an experience or not. This doesn't mean that we should eliminate hypnotic methods from UFO investigation. We just have to learn their limitations. Additional experiments need to be done.

Dr. James Harder suggests having a subject watch a movie, then two years later having him recall under hypnosis what happened in the movie. The investigator might introduce some suggestions to see how much could be distorted. The following suggestion might help: "You will only be able to tell me things that really happened; you will not be able to fantasize." Dr. Harder says he uses this suggestion in his hypnotic studies.

Expense is a bit of a problem. You need someone to foot the bills for polygraph tests and the like. An amateur investigator can't afford many of these techniques.

Speaking of lying, are the contactees liars? Certainly they tell us many things that are not true. Adamski told us that the other side of the moon was covered with rolling hills, trees, and little towns. As it turns out, it isn't and we all knew it wouldn't be anyway. But the untruths of contactees like Adamski could be due to the fact that they are the dupes of whatever intelligence may be controlling the UFO phenomenon. This also needs to be thought about and investigated.

How much faith can we put in what witnesses tell us?

Assuming we've weeded out the reports that are obviously fraudulent, what do we do with the reports that appear to be based on truths? What do these reports really represent? We can establish hypotheses about what the reports mean, and then we can try to test the hypotheses by comparing them further with the reports.

The first hypothesis is the one most UFO researchers and certainly all skeptics adopt: that the witness has misinterpreted some conventional phenomenon or object. There are many possible examples. The UFO may be the planet Venus or any other star or planet that appears to change color and move. Witnesses don't realize that all the stars move because the earth is turning, and when they see that a given celestial object changes position over the period of an hour they think they are watching a UFO. Although it really appears only as a point of light, a star or planet may seem to change shape, especially when seen through binoculars that aren't properly in focus.

Atmospheric phenomena include sun dogs, mirages and electrical phenomena such as ball lightning and corona discharge. Animal- or mineral-derived UFOs include birds, insects, airborne debris, meteors or fireballs, and the like.

An interesting story about a UFO that became an IFO involves two officers in Korea who were watching a plane flying overhead. As they watched, they saw a bright object begin to descend, apparently from the plane. They watched until it landed right at their feet. It was a little flake of paint! It couldn't have been from that airplane

because it would have taken much longer to descend. Often coincidence will interact with some natural event to lead a witness to think he is seeing something strange or extraterrestrial.

UFOs often are man-made objects such as weather or other balloons, rockets, aircraft, or reflections from aircraft, satellites, radio towers, taillights, headlights, and so on. In Logan, where I live, we are surrounded by mountains. At night people will call to tell me they are watching a light on the mountain where there shouldn't be any light because there is no road. But with a four-wheel-drive vehicle you can go places where there aren't roads, and that's what these lights often turn out to be. I've never seen one take off! I'd get excited if it would do something other than just be a light on the mountain!

No doubt some secret government developments have been reported as UFOs. However, the concept that UFOs (that are not fraudulent or misinterpretations) are being produced by some government is unacceptable to me simply because they go so far back into history, before governments were capable of producing such things.

Last but not least, a misinterpreted conventional phenomenon or object may be a deliberate hoax. Hot air gas balloons and other fake UFOs have fooled many people.

If you misinterpret some natural phenomenon this implies psychological cooperation on your part. Often the autokinetic effect plays a role.

The best UFO I've seen was in Tübingen, Germany. We were on sabbatical. My children came running into the bedroom to say, "Dad, we're watching this UFO out over Österberg." I grabbed my binoculars and my wife followed me into the children's bedroom. My three boys, my wife, and I all saw the same phenomenon. A multiple-witness account! We saw a brilliant light in the east move laterally and, to a lesser extent, up and down. It came toward us rapidly and went away from us rapidly. These features should remove it from the category of natural phenomenon, but in less than a minute I backed up against the bedroom doorjams and sighted the UFO against the window frame. When I did that it stopped moving and I recognized Venus!

We had experienced the autokinetic effect, in which if you stare at a single point of light in a totally dark room with no reference points, the light will appear to move around. Nobody knows exactly why this is so, but it is a psychological effect that is easily repeatable. We had concentrated so intently on Venus that we mentally blocked out all reference points, although many were readily available to us. When I consciously forced myself to consider a reference point the effect stopped. Venus apparently came toward us and went away from us because of a thin layer of clouds that were changing in intensity. When it got dim it appeared to retreat; when it got bright it appeared to come close.

Clearly, psychology plays a role in every UFO sighting. This is one of those outer shells that Jacques Vallée talks about—there is what actually happens and there is what the witness perceives as happening. Size and distance estimates are critical; I've had witnesses tell me that Venus was about a mile away and perhaps twenty feet in diameter!

I have read that UFOs are afterimages. When you look at a bright light for a while and then look away, you see the afterimage. This is due to faded pigment on the retina of your eye. But I've never known an afterimage to be the explanation for a UFO. We all see afterimages all of the time, and we disregard them at the subconscious level unless we consciously make ourselves aware of them.

The phenomenon of attention-perception is always important. We see what we want or expect to see. When I was a teenage scout leader in Mill Creek Canyon many years ago, several of us were walking down the road in the middle of the night and we saw a bear one hundred yards or more ahead of us. We were frightened. We didn't know what to do, whether to go back or to try to pass the bear. We kept going, nonetheless, and the "bear" turned out to be a large post! Under the circumstances we were predisposed to see a bear because we had been talking about bears earlier. And this is what happened to my children in Tübingen. I had just become interested in UFOs and I had been telling my wife about UFOs while my three boys sat in the back seat of the car taking it all in.

The second hypothesis is that the witness has experienced some purely psychological phenomenon. We've

seen that psychology always plays a role in UFO observations, but is a psychological aberration ever the total explanation without some physical reality such as an after-image or the autokinetic effect to help generate the illusion? In other words, are some UFOs genuine visions or hallucinations or vivid dreams?

I think the answer is probably yes, in some cases.

A woman called from Salt Lake City to tell me of an abduction experience she thought she had had when she was eleven years old. I interviewed her under hypnosis. She remembered entering the UFO, seeing the instrument panels and so on, but when I tried to get her to tell me what time of day it was, she was unable to look into her memory, even under hypnosis, to see if it was light or dark. Nor could she tell what time of year it was. After taking her through the experience I asked what had happened next. Well, she was entering the kitchen of her home and everybody was having breakfast. It is impossible to prove these things one way or the other but to me that was a good indication that she probably had had an extremely vivid dream just before she woke up and went to breakfast.

I think a psychological explanation is unsatisfactory when multiple witnesses are involved, although nobody knows much about mass hallucinations. When radar and photographs are involved, I think psychology cannot be the answer.

If multiple witnesses all have the same hallucination, then we can suspect that some extrahuman or extraterrestrial intelligence is generating the illusion. That is a fascinating idea. Remember the Pascagoula case, where the two fishermen saw a brilliant UFO and were taken inside? There was a road not far away with cars traveling on it and there was a drawbridge booth with an operator sitting in it, facing in the right direction; and apparently none of them saw the UFO. I don't doubt that Hickson and Parker had an extremely moving experience, but it seems conceivable that they were experiencing some kind of "group hallucination." Such a thing is almost as mysterious as a UFO from Zeta Reticuli!

That leaves two hypotheses. One: The witness has actually seen (not just imagined) the product of an extra-

terrestrial intelligence, perhaps an extraterrestrial machine or something produced by the extraterrestrial machine such as a three-dimensional holograph. Two: The witness has seen the product of an extrahuman but nonetheless earthly kind of intelligence. John Keel has talked about his "elementals" from another dimension; angels or devils might be considered; time travelers from the past or future are other possibilities.

There certainly is evidence for a physical, tangible reality but there are many troubling aspects—interactions with the witnesses, displays, etc. I became most disturbed, perhaps, when I encountered the elements of partially fulfilled prophecies, prophecies made through contactees which seemed to work out in some ways but really did not.

All this speculation leads us back to the original question: Can science solve the UFO mystery? I think that my conclusion, at least today, is that science probably cannot. Science cannot disprove that the UFOs are extraterrestrial or extrahuman. And if the UFOs are being directed by some truly superhuman intelligence, then science probably cannot prove their origin either, because obtaining proof would be dependent upon the will of that superintelligence. We are left then with our intuition—which is what we had to begin with.