

Oct. 16, 1970

Dear Dr. Hynek,

Thank you for letting me take a look at the manuscript of chapter 8 of your new book. I'd like to make a few running comments, just as they come to mind.

In the great controversy over UFO definitions I fear I'll have to side with Dr. Condon, because your definition has an unstated a priori assumption: that "unidentified" UFO's are actually, physically different than identified ones. I grant this may be true, but it's not good to start by assuming it. You have to grant that there's no conclusive evidence that "reliable witness" sightings cannot be just extremely infrequent misidentifications, so don't petrify that assumption into your definition.

Although kinematic considerations are of the utmost importance in recognizing "true UFO's", you write that "Due allowance, of course, must be made for possible illusory motion of a stationary light the absence of a frame of reference". How much allowance? How often? How large is the average allowance to be made? How large is the maximum? What is the standard deviation? (How much more frequent is the average than the maximum). Until these questions can be answered, you're standing on very soggy ground.

The list of reliable UFO witnesses compiled is very impressive, but don't confuse reliable with infallible. Instead of saying, "Air Traffic Controllers make no mistake", you should be asking, "How often should I expect an Air Traffic Controller to make a mistake?" Although we must obviously give more credence to several witnesses than only one, the "credence function" isn't linear as we might think. Instead it's probably logarithmic. Several witnesses who see the same thing are likely to be friends, having similar backgrounds. By the time investigators arrive, they've talked over the experience so thoroughly that any differences in perception or interpretation have been smoothed out. Also, don't make it sound as if we must choose between the witnesses being exactly correct, or being "mentally unstable, prone to silly judgements, or hoaxers". It's not that clear-cut. Even a highly reliable witness makes serious errors occasionally.

It is most unfortunate that you look down upon "the numbers game", for statistical procedures are necessary whenever any single item may be in error, but we are looking for general trends. Your statistical procedures are going to be highly misleading unless you try to gather up all UFO's reported in a given time interval (including the obvious ones of Venus and airplanes), and try to determine the ratio of really top cases to the trashy ones. Remember, not all noise has a signal buried under it. Suppose that an ALO Astronomy lab goes outside to measure the angular diameter of the moon. Most of them get about 30' for their measurement, but a group of three students, each highly reliable, gets $4\frac{1}{2}$ degrees. Do we conclude that for a brief moment the moon plunged toward the earth, reaching one-ninth its normal distance, and then jumped back again? No, we look at the over-all picture. While any single measurement may be misleading, on the whole, we get a correct picture. The same thing goes with UFO's, in all probability. A few observations may be misleading, but from examining the whole, we get a more proportioned picture.

What would constitute a "real job of investigation"? If a witness tells you all he knows, what more can be said about it? We must be careful not to pump the witness for information, as that's the fastest way to add inaccuracies into the system. If we have no direct physical evidence in any given case, our only information comes from the witnesses. So how do we go about an intense investigation? Do not, repeat, DO NOT forget that the reason medieval witch-confessions were usually so consistent is that they were all asked the same questions, out of the same witch-hunter's manual. Do you see what might happen if UFO witnesses were subjected to a lengthy "inquisition" to aid their memories?

I can explain each of the cases you wrote of, qualitatively, but I'm quite sure you wouldn't be satisfied with my "explanation". So instead let me put twelve high-sigma, high-C cases to you, to see if you can give a satisfactory explanation for each of them.

1. Thousands of reliable persons, including William, Count of Holland and King of the Romans, witnessed Albertus Magnus turn winter into summer for an afternoon on his estate in Germany in the thirteenth century.
2. Two thousand persons witnessed a demon flying about a sorcerer at his execution, and saw it make the gallows shake, with a sound of thunder. Lymoges, France, April 24, 1630.
3. In Warsaw, Poland, a basilisk (a snakelike serpent hatched from a hen's egg, whose breath is a deadly poison) killed several persons in the basement of an old building. The creature was removed from the building in full view of over two thousand persons. (1587)
4. Many reliable witnesses affirm that they have seen dragons. One was killed by a hunter near Rome on Oct. 27, 1660. It was a fearsome winged beast.
5. Isaac Schookius wrote a treatise in 1680 telling of several reliable witnesses who have seen satyrs in close encounters.
6. The famous "Daemon of Tedworth" made noises, threw things around for many months. It was witnessed by hundreds of persons, and affected animals. England, 1661.
7. Elizabeth Hill, 13, who was bewitched by Elizabeth Style, was seen by several reliable witnesses to rise 3 or 4 feet out of her chair. Stoke Trister, Somerset, 1664.
8. Florence Newton bewitched a girl who began to prodigiously vomit pins, nails, and wood in the presence of witnesses. The Bible was pulled from the girl's hands. The witch did prodigious feats in prison. The documentation for this case in the County of Corke in 1661 is far more complete and unassailable than for any UFO case I have ever heard of. Many prominent men over an extended period witnessed this incredible display of supernatural power.
9. In 1663 a Somersetshire witch named Julian Cox did impossible feats before witnesses, flew in a window, and affected animals by her presence.
10. Over seventy witches had seduced the children into diabolism in Mohra, Sweden, 1670. The children all told highly consistent stories, described the black mass in great detail.

11. Dr. Tooker, chaplain to Queen Elizabeth I, and William Clowes, the Queen's surgeon, both strongly affirm the cures worked by the Queen by touching her subjects' hands. As you know, touching the sovereign could cure many diseases. Many thousands of persons were cured by various kings and queens in this manner.

12. Let me lump together the many, many thousands of miracles affirmed by Catholicism, each one an apparent violation of scientific laws. While some were seen only by a privileged few, others have been witnessed by thousands of reliable witnesses, such as the miracle at Fatima in 1917.

Now I really don't expect you to buy these twelve stories. I don't believe any of them. But you must be consistent in your premises. IF you believe UFO tales on the weight of testimony of unprepared witnesses, taken by surprise by a strange phenomenon, you must be equally ready to apply this criterion elsewhere. Of course, these witnesses are dead so they can't be interviewed, but many were interviewed in their lifetime by investigators exactly as you are doing. These investigators were careful to point out that vulgar stories are not to be ~~disregard~~ considered, only the careful testimony of reliable persons describing recent experiences.

So you can't accept your present investigative techniques, and still reject witchcraft out of hand. Unless you can come up with some really substantial reason why UFO's are somehow much better witnessed in this century than other phenomena in centuries past, you have a choice in either believing we have firmly established UFO's, miracles, witches, demons, ghosts, etc., or else that evidence supporting each of them is insufficient. But be consistent!

Bob Sheffer

NORTHWESTERN UNIVERSITY

Inter-Office Correspondence

DATE October 29, 1970

To Bob Schaeffer

FROM J. Allen Hynek, Chairman

DEPARTMENT

DEPARTMENT Astronomy

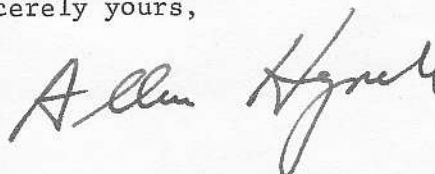
Dear Bob,

Thanks for your review of my chapter. However, we have a fundamental difference of viewpoint. I simply am not interested in studying noise and am willing to let sociologists worry about how many people mistake Venus for something else.

I do not believe that the statistical approach is valid in this problem, unless of course you want to study noise. I do not assume, as you do, that sightings made by highly competent witnesses represent the tail end of the distribution curve of misperceptions. The limits of misperception have not been established, and I imagine they are a rather complex function of personality and numbers of observers. That assumption emasculates and makes senseless any further work on the subject.

Perhaps I should restate the objectives of my book. Like Madame Curie, I am out to study "radium," not mountains of "pitchblende." If the radium does not exist, then no amount of distillation of the pitchblende will produce it. If however one operates on the assumption that the radium, though infinitesimally small, may indeed exist, then one does not statistically study the pitchblende but rather extracts from it the active ingredient and very properly throws the rest of the pitchblende in the dump. This is the problem as I conceive it. I am examining that residue of the pitchblende which now shows the greatest promise of yielding radium, so to speak. So, under your assumption, any serious study of the UFO subject is clearly a waste of time, unless you do want to study distribution curves which clearly do not interest me. On the other hand, your assumption certainly needs testing, and in order to accomplish that you should do some work to support it by facts; otherwise you are merely left holding a baggy assumption. The incontrovertible fact remains that I have read and studied thousands of reports, and interrogated hundreds of witnesses while you are still operating in the realm of theory. I do hope that you do considerable work to establish your assumptions because if it can be established, you will have done considerable service, and I will be the first to congratulate you. The problem here is certainly one of residues; either these residues belong to the same universe as do misperceptions, or they are different. We shall never know which is the case unless we work to find out.

Sincerely yours,



PHILIP J. KLASS
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WASHINGTON, D. C. 20024

November 29, 1970

Dear Bob:

Having spent all day, from early this morning until now (midnight), writing, interviewing, etc. the next issue of my Cooperative Apt. newspaper, I am too weary to discuss more than your recent correspondence and exchange with J. Allen H. about his book.

Clearly, if one were to give your letter and Hynek's reply to a wise old man and say that one of the authors was a PhD in science of some years and the other was a young student--and ask the sage to identify which was which, he would very quickly conclude that Sheaffer was the wise professor and Hynek was the naive student.

But if he were a truly wise, super-wise sage, he would correctly identify you as the student. For he would recognize that only youth would attempt to change another's basic commitment and long-held views in a single letter. For youth thinks that the views of another, since they theoretically can be changed in a split second, ought to be capable of change in at least a few moments or minutes. But in fact, changing a person's deeply held convictions can take a lifetime--without success--and recognition of this comes only with age and maturity--and bitter experience.

In reality, of course, Hynek in his deep seated egotism, could never publicly admit so gross an error in judgment as you seek to force him to admit. And in fact, whenever ANYONE gives you a paper, article, manuscript--whatever--and whenever he modestly says: "I'm really NOT much of a writer and I seek your comments"--what he REALLY IS ASKING FOR is your PRAISE--not your criticism.

I have worked with engineers and scientists who volunteered that they were terrible writers, hated to write...and after our interview, if I chanced to show them my article, invariably they would suggest adding, or deleting a comma, or changing a sentence structure. The fact is that when we get our ideas down on paper--they become even less susceptible to change than when they are somewhat fluid in our heads.

So what Hynek really wanted from you was: "Dr. Hynek, that is superb. Your logic is unassailable and your style is impeccable." Then, to show that you had really read it "critically," you might have added: "However, there is one place where I think you should have used 'that' instead of 'which'." (Since everyone makes that kind of mistake, he could freely have conceded that he was never very good in grammar. And he would have marked you as a very perceptive young man with a keen logical mind. Instead, today, I'm sure that Hynek is convinced that your thinking is really quite fuzzy.)

Incidentally, if it is not too late, perhaps you could suggest a better title for his book: "ALLEN IN WONDERLAND"

When one engages in intellectual debate, one really ought to choose one's objective. If you desire to change the other guys viewpoint, you must be willing to settle for a small increment of change--initially. If, on the other hand, you want to confront him, embarrass him, or bait him (as I so often do with 02), then use the no holds barred approach. Now while you approached Hynek diplomatically (where I respond to 02 with the gross exaggerations he loves to use), still to have accepted your criticism would have forced Hynek to break with his public stance for the past 5 years or so on UFOs. And to admit that one of his students had seen the light before he had. This was too much to ask or hope for. But out of this, hopefully, you have gained some useful insight into the immobility of man's viewpoint.

Regards,



erally is so shocked and suprised that careful sequential observation and reporting are impossible. The skillful interrogator can, of course, extract details from the reporters that they had noticed only incompletely or had believed to be irrelevant. Most people faced with witnessing a sudden and shocking automobile accident do not go about methodically making measurements, checking times, durations, length of skid marks, condition of the weather, and other related evidence. However, in retelling the incident to a competent interrogator the latter can deduce and extract through calm and adroit questioning a surprising amount of information from the witness.

By contrast, very frequently air force investigators, imbued with the official philosophy that UFOs are delusions, make only a perfunctory interrogation (why spend time on something that is meaningless in the first place?).

Still, there exist UFO reports that are coherent, sequential narrative accounts of these strange human experiences. Largely because there has been no mechanism for bringing these reports to general attention, they seem to be far too strange to be believed. They don't fit the established *conceptual framework* of modern physical science. It is about as difficult to put oneself into a "belief framework" and accept a host of UFO reports as having described actual events as, for example, it would have been for Newton to have accepted the basic concepts of quantum mechanics.

Yet the strangeness of UFO reports does fall into fairly definite patterns. The "strangeness-spread" of UFO reports is quite limited. We do not, for instance, receive reports of dinosaurs seen flying upside down, Unidentified Sailing Objects, or strange objects that burrow into the ground.

A critic of the UFO scene once remarked, ". . . unexplained sightings do not constitute evidence in favor of flying saucers any more than they constitute evidence in favor of flying pink elephants." What he failed to realize was that the strangeness spectrum of UFO reports is so narrow that not only have flying pink elephants *never* been reported but a *definite pattern* of strange "craft" has. If UFOs indeed are figments of the imagination, it is strange that the

imaginations of those who report UFOs from over the world should be so restricted.

Precisely because the spectrum of reports of strange sightings is narrow can they be studied. If each strange report was unique and their totality ran the gamut of all conceivable strange accounts, scientific investigation of such a chaotic panoply would be impossible. Scientific study presupposes data patterns and a measure of repeatability, and by and large, UFO reports lend themselves to classification within their domains of strangeness. It is these we shall pursue.

Turning, then, to the *content* of UFO reports, let us assume that we have eliminated all those reports which do not fit the definition of UFO as used earlier; that is, the dross from the original mass of "raw" reports—all reports that *can* be explained with good reason as balloons, aircraft, meteors, etc. (Such reports represent the "garbage" in the problem. If we incorporate that in our studies, the computerage adage, "Garbage in—garbage out," will surely apply. This has been the trap that UFO investigations in the past have not been able to avoid.*)

In terms of scientific study, the only significant UFO reports are, as we have seen, UFO reports that remain puzzling *after* competent investigation has been conducted. Only these can be termed reports of UFOs. The stimulus for these reports is truly unknown—that is, the reporters have passed a reliability screening, and the known possible stimuli have passed a physical explanation screening. Thousands of such reports exist; there are about 700 acknowledged cases in Blue Book files alone, and many others are contained in the files of UFO organizations and private investigators.

Each such screened report demands an answer to two

* Many critics maintain that all UFO reports are garbage. Since a large portion of the original, unfiltered reports are clearly the result of misperception, critics say that investigation in depth would reveal that the entire body of UFO phenomena can be so characterized. Such arguments assume that all UFO reports belong to the same statistical population and that the deviants, the truly interesting UFO reports, are merely extremes in that population. One might with equal justice say while plotting the variation in sizes of oranges that watermelons are merely "the tail end of the distribution curve" of the sizes of oranges.

