An Editorial!

UFOs and Paraphysics

A match made in the heavens? Or not?

The term paraphysics has been greatly maligned over the decades; of that there can be no doubt. In the meantime, the science of paraphysics has become a popular dumping ground for all types of phenomena, whether real or not, that do not 'seem' to fit the present paradigm of "normal" science. Without rendering any prior judgment on the claims of ufologists, there is no evidence that UFO phenomena are paraphysical. On the other hand, there is no evidence that UFOs are not paraphysical in nature. This raises the question, where do UFOs fit in science? This question has been asked over and over and led to bitter debate in some quarters, by scientists and laymen alike, with no answers forthcoming. What is needed is a sober, non-biased and reasonable approach to the UFO problem by the scientific community (as well as support by the government/military establishment).

The first step in this process would be to determine what UFOs really are? In this respect, there are several possibilities. UFOs could be attributed to (1) mass hysteria, (2) hallucinations, (3) misidentified physical objects, (4) the product of overactive imaginations, (5) purely fraudulent attempts to deceive a gullible public, (6) psychic visions or communications, or (7) real physical objects. A large number of UFO sightings can be classified as options (1), (2), (3) or (4) without any hesitation. However, there have been too many sightings by reputable and capable people to assume that all or even the majority of sightings are not real. There are also too many multiple sightings as well as sightings by reputable observers to assume that the sightings are a conspiracy to defraud the public. It is therefore unreasonable to wantonly assume the highly unlikely possibility that such reputable witnesses are either lying or have been duped by some unknown sinister forces for some unknown reason. So, option (5) is not viable as an explanation for the remaining majority of sightings. When these first five options are eliminated, along with the sightings that they represent, there still exists a specific 'hard core' of documented sightings that seem to be real and represent some type of natural phenomena. That leaves only (6) and (7) as possibilities.

As far as paraphysics is concerned, if UFOs turn out to be psychic visions, impressions or communications, in other words if UFOs have a paranormal basis, then they would certainly qualify as a legitimate subject of study under the banner of paraphysics. Under these circumstances, a whole new set of questions would need to be raised regarding the origin of the psychic impressions and communications as well as the mode of the transmission of such signals. However, even if we include the possibility of a

psychic connection in some of the remaining number of sightings or assume that only a small number of the sightings are psychic in origin, we are still left with that pernicious 'hard core' of sightings, which indicate a real physical explanation of the UFO phenomena. These last sightings form the bits of data from which the scientific community must come to some conclusion regarding the authenticity of the phenomena. And, believe it or not, some very respectable scientists are beginning to look seriously at the data and the UFO problem.

Members of the sometimes overly conservative scientific community have long claimed that there is no "physical evidence" of UFOs. The only evidence of UFOs that they have seen fit to consider for review is anecdotal which renders it difficult if not impossible to accept any explanation other than options (1) through (5). These skeptics and nay Sayers have validated their views in the eyes of scientists and deflected criticism by stating that they and/or the scientific community would seriously consider the UFO question if and when valid "physical evidence" was ever provided. Yet there does not 'seem' to be any "physical evidence" that meets the unspecified criteria of validity that the skeptics claim and the scientific community is still fairly silent on the matter. At least there has been no rush to investigate these phenomena, although there has been growing concern at the staying power, strength and number of the claimed sightings.

There is also some alarm at the growing number of 'abduction' claims. At the very least, the 'abduction' claims constitute a real problem, whether they are true or not, because real people are experiencing psychological trauma due to their recollections of the claimed incidents. However, these claims fall within the realm of psychology and psychotherapy rather than physics and paraphysics.

The general perception in the scientific community is that, if UFO reports pose a scientific problem at all, it has more to do with psychology and the science of perception than with physical science. Indeed, most reports simply comprise narrative accounts of what someone saw or thought he saw in the sky. Sometimes the reports involve more than one witness, and sometimes an event is witnessed from two or more different locations. However, the fact is that physical scientists cannot get involved in the UFO problem unless there is physical evidence. (Sturrock, page 5)

At best, physical scientists could only add some credence to claims of abduction if they could validate the physical existence of UFOs and establish the fact that UFOs are intelligently controlled vehicles that are not of this world. Otherwise, physical scientists should stay out of the abduction controversy for the time being.

The frightening fact is that there is an 'a priori' rush to judgment against the possible existence of UFOs and outright bias against serious UFO studies which are unscientific in themselves. This has been described elsewhere as a "downward spiral" which affects the judgment of scientists.

There is also a kind of non-linear downward spiral. Scientists are both very busy and put off by the appearance of much of ufology. As a result most scientists never look at UFO evidence, which leads to their conclusion that there is no evidence.

Given the proper environment this could presumably be turned into a favorable upward non-linearity: Given "evidence of evidence", credibly, soberly presented, the interest of scientists can be piqued, which would presumably lead to the "discovery" by scientists that there is evidence. (Haisch, 3)

In some cases, the "physical evidence" that has been produced has been categorically labeled as fraudulent, inconsequential, insufficient, misidentified, misinterpreted or misrepresented without the credible scientific analysis that such evidence would normally seem to warrant. Disagreement on the validity of the small amount of "physical evidence" that has come forward only leads to questions of what criteria investigators, both proponents and critics, are using to evaluate and identify the "physical evidence."

Whatever the case may be, "physical evidence" is available, albeit very scant, and some scientists are beginning to take a serious look at it. In particular, a special four-day workshop was recently held (October 1997) to consider the "physical evidence" that is presently available and its implications. This conference on the "Physical Evidence Related to UFO Reports" was chaired by Peter A. Sturrock and moderated by D.E. Pritchard and Harold E. Puthoff. A number of scientists and investigators attended the workshop and reached some interesting and significant conclusions. The abstract for the resulting report on the workshop is quite informative.

A review panel was composed of nine scientists of diverse expertise and interests. The panel offered comments and criticisms concerning the investigations that were presented, and also prepared a summary of their overall response, with the following key elements:

- Concerning the case material presented by the investigators, the panel
 concluded that a few reported incidents may have involved rare but
 significant phenomena such as electrical activity, but there was no
 convincing evidence pointing to unknown physical processes or to the
 involvement of extraterrestrial intelligence.
- The panel nevertheless concluded that it would be valuable to carefully evaluate UFO reports since, whenever there are unexplained observations, there is the possibility that scientists will learn something new by studying these observations.
- However, to be credible, such evaluations must take place with a spirit of
 objectivity and a willingness to evaluate rival hypotheses.
- The best prospect for achieving a meaningful evaluation of relevant hypotheses is likely to come from the examination of physical evidence.
- The chances of a significant advance are considered to be greater now than at the time of the Colorado Project that led to the Condon Report thirty years ago, because of advances in scientific knowledge and technical capabilities, and in view of the example of a modest but effective UFO research project provided by the French space agency CNES. (Sturrock, 1)

The report has been published in the Journal of Scientific Exploration and is also available over the Internet. This paper should be read by anyone concerned with the UFO controversy, whether they are pro, con or just mildly acquainted with the issues. Sturrock further states that the UFO "problem will be resolved only by extensive and open professional scientific investigation, and that an essential prerequisite of such research is

that more scientists acquire an interest in the topic." (Sturrock, 2) He is most assuredly correct in that prognosis.

The conclusions of the workshop panel are also quite interesting and illuminating. Although the "physical evidence" presented at the conference was inconclusive and "unlikely to elucidate the cause or causes of the reports" of UFOs, the panel did suggest that there was enough substance to the evidence that was presented to imply that more evidence, "scientifically acquired and analyzed," could shed light on the UFO problem. More specifically, the panel listed their observations and conclusions.

The panel concluded that further analysis of the evidence presented at the workshop is unlikely to elucidate the cause or causes of the reports. However, the panel considers that new data, scientifically acquired and analyzed (especially of well documented, recurrent events), could yield useful information. In this case, physical scientists would have an opportunity to contribute to the resolution of the UFO problem.

The panel made the following observations:

- The UFO problem is not a simple one, and it is unlikely that there is any simple universal answer.
- Whenever there are unexplained observations, there is the possibility that scientists will learn something new by studying those observations.
- Studies should concentrate on cases which include as much independent physical evidence as possible and strong witness testimony.
- Some form of formal regular contact between the UFO community and physical scientists could be productive.
- It is desirable that there be institutional support for research in this area.
- The GEPAN/SEPRA project of CNES (Centre National d'Études Spatiales the National Center for Space Research) in France (see Appendix 1) has since 1977 provided a valuable model for a modest but effective organization for collecting and analyzing UFO observations and related data.
- Reflecting on evidence presented at the workshop that some witnesses of UFO events have suffered radiation-type injuries, the panel draws the attention of the medical community to a possible health risk associated with UFO events.

The panel also reviewed some of the conclusions advanced in 1968 by Dr. Edward U. Condon, director of the Colorado Project. He asserted that "nothing has come from the study of UFOs in the past 21 years that has added to scientific knowledge," and that "further extensive study of UFOs probably cannot be justified in the expectation that science will be advanced thereby." While agreeing with the first conclusion and its extension to the present, the panel considers that there always exists the possibility that investigation of an unexplained phenomenon may lead to an advance in scientific knowledge. (Sturrock, 4)

It is quite refreshing to know that scientists are finally taking an objective look at this growing and obstinate problem. These are not the first scientists to consider the legitimacy of scientific interest in the UFO problem, but this workshop was the first high-level meeting to openly discuss the "physical evidence" and conclude that further study is warranted in the name of science.

Another scientist, the astronomer Bernard Haisch, has further concluded that UFO research will not enter the mainstream of science until a clear mandate of the American people creates an atmosphere that would allow the government to dedicate funds to the task.

If the American people truly want the UFO problem officially investigated, the government will do that by and by. That does not automatically mean NASA of course. Many appearances to the contrary, UFO's may have nothing to do with outer space as astronomers view the universe. (Haisch, 2 of 5)

There is no doubt that the American public is interested in UFOs, but how that interest is translated into good science and political initiative is open to debate.

The public climate is in fact more and more receptive to new ideas and is certainly keenly interested in the possibility of other intelligent life in the universe, including the possibility of evidence for such right here under our noses. It is conceivable that this could be turned into a public mandate for government-sponsored UFO research. But that can only happen if ufologists can somehow follow the successful example of the astronomical community.

This is difficult. Ph.D.'s are not conferred by respected institutions as they are in astrophysics. But there are things that can be done to start the process. Genuinely scholarly papers can be written, which the Journal of Scientific Exploration would consider, for example. Note that I am not trying to solicit papers; the Journal is highly selective and turns down more articles than are accepted. Journal articles are one way to interest mainstream scientists. In fact, eliciting the interest of mainstream scientists is a key factor in raising the level of UFO respectability. This is extremely difficult in the present environment of disarray, but this could change.

Although they seem necessary to the scientific process, "genuine scholarly papers" that consider the UFO question are difficult to find as well as evaluate when they are found. For many scientists, becoming involved in UFO research is just too risky a venture under the present conditions, so there are no experts in the field and no educational programs to train experts. This deficiency has created a vacuum in the study of UFOs that has been filled to a large part by non-scientific drivel. The field of "ufology" is unfortunately swamped by trivia, mythology, misinformation, poor science if it is science at all, and every imaginable form of bias, all of which adversely influence the public and alienate the scientific community. But we have still not answered, although we are closer to answering, the central question with which we are now dealing: What role do physics and/or paraphysics play in the future investigation of UFOs?

This question cannot be answered with any absolute certainty in the present atmosphere of prejudice, bias and misinformation that exists within the community of scientists and scholars as well as general society. The question is actually no different than that asked earlier regarding what criteria investigators use to judge the "physical evidence" that is available. Both, as do all questions relating to the scientific study of UFOs, have to maneuver through a minefield of popular myths and superstitions surrounding the UFO problem before they can move forward to good science.

What may surprise most people is that the commonly held belief that science and the laws of physics deny the possibility of UFOs from other planets and star systems is no more than a myth. There is NOTHING in "normal" physics that would either preclude or deny the possibility that ETs exist and are visiting (or have visited) our little planet, let alone anything in paraphysics that would support such false conclusions. Statistical analyses indicate that there should be millions of stars in our galaxy with planetary systems that might harbor life. We are only now reaching a high enough state of technological advancement and expertise to actually detect and observe these planetary systems and confirm this possibility. So it is far too early to throw in the towel and state that such visitations are impossible. Under these circumstances, there are no logical or reasonable arguments against the possibility of aliens visiting our world. All science can say with any authority is that such visitations are highly improbable. Yet even this opinion is based upon our present state of scientific knowledge. Any new advances in science, and especially physics, would increase the probability that intelligent beings at the same or higher level of intelligence could be visiting us, and science is continually progressing to new heights.

Once the existence of other planetary systems is established beyond a reasonable shadow of a doubt, there is absolutely no reason to believe that our planet alone could develop life, given normal evolutionary processes. No true scientist would deny the possibility of life other than life on our earth. There is nothing special about our planet that would warrant the preposterous presumption that life could only evolve on the earth. Science is so sure that life exists elsewhere that it is undertaking a vast search for life elsewhere in our galaxy and the universe. All science needs is the simplest confirmation that some form of life exists elsewhere and the whole perspective of the scientific community will change. Given evidence that the simplest forms of life exist elsewhere, simple evolution would imply that intelligent beings would eventually evolve on planets other than the earth.

We have absolutely no moral or scientific right to assume that humans alone represent the only intelligent life, or even the only life, in the universe! More than four centuries ago, Copernicus dealt the first serious blow to the geocentric view of the universe. His heliocentric theory of the cosmos soon evolved into the heliocentric star system, our solar system, adrift in a vast sea of stars with no obvious center. In 1600, the Inquisition burned Giordano Bruno at the stake for taking the Copernican hypothesis to its logical conclusion and preaching that there were other stars with planetary systems, other earths populated with beings and thus other Messiahs. Yet today, we still live in a culture that assumes an "egocentric" universe with our intelligence at the center. Our culture might not burn Bruno at the stake today for his anti-establishment claims, but he would certainly be ostracized for making similar statements, even if he did not couch them in religious terms. Humans no longer believe in either the geocentric or heliocentric universe, but we still suffer from the rampant and virulent disease of "egocentrism" that plagued our intellectual ancestors.

Unfortunately, science helps to perpetuate these myths and the "egocentric" nature of humans by not openly accepting the existence of life and intelligence elsewhere

without ironclad, irrevocable and undeniable proof while silently and privately accepting that same possibility. Science's overwhelming demand for incontrovertible proof and validation is not well understood outside of the scientific, academic and scholarly sections of society. So, non-scientists could easily interpret the silence of scientists on the UFO issue as an affirmation of human "egocentrism," even while science awaits and actively searches for proof that humans are not the only intelligent beings in the universe. To counter this absurdity, science should more openly and forcefully convince the public non-scientific sector of society of the very high probability of intelligent life elsewhere and help destroy the human "egocentrism" that plagues human culture. Science needs to better publicize its views and educate the public on this as well as other matters of immediate importance.

A simple yet lethal form of this "egocentrism" still plagues science in general, and physics in particular. Given the high probability that intelligent life forms exist elsewhere in our galaxy and universe, scientists find it extremely difficult (if not impossible) to accept the possibility that these intelligent beings "are" visiting or "could have" visited our planet because travel through the vast reaches of space is limited by special relativity and the speed of light. In other words, it is very unlikely that aliens could be visiting earth because a similar trip would be extremely difficult to us, given our present state of science and technology. But the point is that even we could make such a trip to nearby stars using our present technologies. There are certainly technical, biological and social complications with such a possibility, but our present laws of physics do not presently prohibit our traveling to distant worlds. Such trips would be socially unacceptable because astronauts would travel at high speeds approaching light speed and undergo time dilation. When they returned to the earth, their relatives and friends would be long dead while they would have aged very little. This seems far too great a sacrifice for our society to condone.

On the other hand, many technical problems exist. These include supplying the vast amounts of energy necessary to make the trip at such high speeds as well as the long periods of time spent in space and the great expense of such an undertaking, but these problems are not insurmountable. In other words, it is not FEASIBLE for us to attempt a trip to the nearest star system, but it is POSSIBLE, so we assume that no other intelligent species would make the attempt to come to our planet. Too many people mistake "NOT FEASIBLE" for "IMPOSSIBLE." We mistakenly assume that our concerns as well as our scientific and technological deficiencies would be just as important and significant to other beings. This bias is the result of our own "egocentrism." What we hold important is not necessarily what other beings would hold important. So perhaps intelligent aliens would deem it important enough to make the sacrifice and visit us even if their science and technology were only as advanced as our present science and technology. And this is not even taking into account the greatest of our "egocentric' foibles.

Many scientists automatically assume that our "physics" is the most advanced science in the universe when they assume that intelligent alien beings would be subject to limitations such as the speed of light as we are. In other words, scientists assume that aliens have only advanced scientifically as far as we have when they argue that it is

impossible for aliens to visit us. These assumptions are made subconsciously, without the scientists' conscious knowledge, and thus reflect the subtle influence of "egocentrism" on those scientists. Even our own science progresses and it can be expected that we will someday find a way around the barrier posed by the speed of light. Our hopes of traveling at speeds beyond the speed of light, at "warp" speeds, can be found in almost all science fiction stories. Although these hopes are just "science fiction" at present, we can still speculate that our science will someday advance to the point where we can travel quickly and efficiently enough to other planets to warrant making such trips. So why do we deny that possibility to other intelligent beings whose civilizations and cultures could be millions of years older than our own?

By imposing our own present level of science, or perhaps our lack of further advances in science (and our stupidity), on other intelligent beings which could well be far more advanced than us, we humans are committing the gravest and most serious act of the human "egocentrism" that could be imagined. It is only the bias of our human "egocentrism" that keeps us from realizing that other intelligent beings could be visiting us at this very time in our history. Our present physical laws do not prohibit visitations by aliens, they only make them more difficult and less probable, while the fact that older races of aliens could have developed more advanced physics and even a paraphysics would seemingly increase the probability that they are here.

It is at this point that we have finally returned to the relationship between UFOs and paraphysics. If intelligent beings, not from this earth, are indeed visiting our little green and blue planet, then it is likely that they are using vehicles based on technologies and advanced sciences that could be considered paraphysical, well 'beyond' our 'normal' physics. It is this possibility that makes the study of UFOs interesting to the physicist and the paraphysicist alike: The possibility of advancing our science and knowledge through contact with more advanced intelligent beings. It would not be necessary for more advanced civilizations to teach us their paraphysics, although it would be extremely helpful. Just the knowledge that our present limits on science are not absolute, would act to enhance our knowledge and advance our search for an explanation of physical reality.

If UFOs are real and they are extraterrestrial vehicles, they automatically become the subject of physical and paraphysical study. If they are real, they will also deal a deathblow to our "egocentrism," so some of us are all the more willing to deny them at any and all costs, even if that denial renders science hypocritical. We must acknowledge that

Even if the UFO phenomenon should turn out to be deeper than we imagine, even should it prove to transcend science as we know it, the scientific approach is the only feasible way in the real, political, economic, technological world we live in to give us some chance to control our dealings with this phenomenon, rather than letting the phenomenon entirely control us... if such it is. (Haisch, 4)

Unfortunately, this likelihood has not yet developed because physical scientists have yet to recognize that any convincing evidence of UFOs exists, let alone whether UFOs exist. That is why meetings and seminars at the level of the workshop on "Physical Evidence"

Related to UFO Reports" are so important. Such meetings represent a means of dispelling the general view of the scientific community as well as the popular myth that the UFO problem is not of concern to physical scientists because of the lack of "physical evidence." The possible existence of UFOs which might be vehicles controlled by intelligent non-human beings alone should warrant serious investigation of the UFO problem by the scientific community as a whole. The possibility of new knowledge and understanding of the nature of reality, which is the goal of physics and paraphysics, should be enough to pique the interest of scientists and open the field of 'ufology' to greater scientific scrutiny.

BIBLIOGRAPHY

Bernard Haisch. "UFO's and Mainstream Science." The Mufon UFO Journal, 335 (March 1996): 14-16. Also available at http://www.jse.com/haisch/ufo.html.

Peter A. Sturrock, *et al.* "Physical Evidence Related to UFO Reports," The Proceedings of a Workshop Held at the Pocantico Conference Center, Tarrytown, New York, September 29 - October 4, 1997. *Journal Scientific Exploration*, 12 (1998). Also available at http://www.jse.com/ufo reports/Sturrock/toc.html

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