How to select significant UFO reports

By Jacques Vallee

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"Good" and "Bad" UFO reports

ALL writers on the subject of the UFO Phenomenon agree on one point: many reports refer to misinterpreted conventional objects. Others are the result of hallucination. Others, of hoax and prank. But exactly how many reports are significant? How do you go about finding them? How do you set criteria that will allow you to differentiate between a report which is representative of the problem under study and one which is not? Clearly, such criteria should be available before the data are used in order to test hypotheses.

Yet very little information is found in the literature on exactly how to select your sample. It seems that every UFO student uses his own judgment to make the choice: there is no standard scale by which to weigh UFO information; the definition of the line between "good" and "bad" reports is left to the person who studies the report. Thus, it is not surprising that many cases held very highly by certain writers are completely disregarded by others. Most UFO studies thus generate confusion instead of clarification.

The statistics

From the down-to-earth figures published by the local "UFO hobby club" to the most sophisticated, expensive surveys, statistics on UFOs are insufficient or biased. They do not describe selection effects, sources of information are not revealed and no reliability scale is given. The celebrated Project Bluebook Report (known as "Report 14") which sums up the U.S. Air Force investigations prior to 1952 is an extreme case: it considers all reports without rejecting even the most obvious misinterpretations. This view is tenable if one decides from the start that all reports *must* refer to conventional objects. But the claim that a novel phenomenon (if indeed some unknown cause is responsible for a certain percentage of the reports) can be extracted from the conventional effects through such an analysis is, in the view of this writer, untenable. We believe the scientific way to process these data is to divide the problem into two parts.

Rejecting obvious errors

In the first part of our study, we consider *all the reports* generated by the public, from *all available sources* (rumour, newspapers, UFO publications, official files) and we study them one at a time, trying to explain them in terms of conventional objects. If we succeed, good. We file away the case for later statistical study, since it is of (minor) interest to keep track of exactly how many meteors, clouds or refuelling operations are mistaken as flying saucers. If we find absolutely no explanation for the case, we do not simply brand it "unidentified" and file it away with the others, because there we have an element *in the nucleus* of the phenomenon we are precisely trying to study, when others, being identified, have already lost their appeal to us.

But what about intermediate cases, when a conventional interpretation, although possible under extreme conditions, does not represent satisfactorily all the observed details? Such reports, as we well know, are numerous. If the UFO phenomenon is unconventional in nature, a certain percentage of these average cases is "signal", not "noise". But how can we extract it? How can we find its meaning and decipher the message it contains? This is our second problem.

Analysis of the residue

When all identified cases have been thrown out we are left with only 10 per cent to maybe 40 per cent of our original sample, depending on the period, the country, the source we consider. This collection of remaining cases *must contain the UFO Phenomenon if it exists as an unconventional, objective agent in the generation of reports.* Then, by studying the properties of this sample, and by watching its reaction to certain bad treatments we might inflict upon it, like a chemist trying to determine the nature of a certain compound, we should be able to determine if it behaves like a collection of reports of mistaken conventional objects, or if it reacts in a completely unexpected way, thus demonstrating that indeed a novel phenomenon of unprecedented character has been

found. The same study will yield as a by-product the properties which characterize this new phenomenon, thus suggesting a body of meaningful hypotheses.

For this residue to be useful the "concentration" in non-significant cases must be low. We believe that efficient screening of such cases (that may have resisted our attempts at identification made in the first part of the study, possibly because of conflicting data or insufficient information) is effected by the coding procedure that we have used since 1961 in various digital computer applications. This we call "*Behavioral Classification System*" because it is based primarily on the reported behaviour of the flying objects described rather than on such details as the shape, speed, altitude, colour, which are more likely to be forgotten or distorted. (2, 3). If such a system is used, there is no ambiguity on what we call the UFO phenomenon: it is the set of reports that have been selected by the procedure we have just described. Its main appeal to the scientific mind is that the choice no longer depends on intuitive, subjective, personal ideas about which is a "good" or a "bad" report, but on a set of criteria that can be explicitly defined and, therefore, are liable to mechanization.

An automated decision procedure

To the individual researcher or student of UFOs, it is of interest to have a set of simple tests ready for use when a report comes in, to weigh its degree of significance. Certainly, if UFO groups and specialized magazines used such a system, we would not see so many exploding meteors described at length (even, sometimes, in the pages of this very REVIEW) as "mystery spacecraft with satellites", and we would not be similarly bothered with far-reaching pseudo-scientific hypotheses entirely based on a couple of obvious mistakes which should have been caught at a very early stage.

The result would be, I think, a definite gain in clarity in the serious study of UFOs and a more lasting attention on the part of many professional scientists, who are perfectly willing to believe that intelligent life exists elsewhere in the universe, but are discouraged from a study of UFO phenomena when they read in specialized magazines report after report of obvious atmospheric or man-made objects grossly mistaken as "spacecraft from other planets"! These serious readers will, with some reason, consider that their intelligence is insulted by such magazines. The number of artificial satellites that are mistaken every night and find a place in UFO reviews under the headline "mystery light" (when identification is such a straightforward operation) is certainly distressing.

But there is a third reason for introducing such a system of selection. It concerns the official centres where UFO reports are processed in great number, such as the U.S. Air Force Foreign Technology Division in Dayton Ohio. There, a dozen or more reports arrive every week, most of them worthless in times of low UFO activity. They come from Air Force bases all over the world and describe at length the sightings. Transmission of such long messages is expensive; if the report is insignificant, the sending of a three- or four-page description of the report is merely a waste of money. Such a system as we describe here would eliminate these high processing costs: a series of about thirty tests, which can generally be answered by "yes" or "no", suffice to separate the reports which deserve further study from obvious mistakes. If such a system was used, manpower as well as transmission time would be saved. Investigators could spend all their time studying the significant cases, too often neglected or investigated too late because of delays in processing of the report. And production of up-to-date statistical analyses would not be an expensive operation, but a matter of routine.

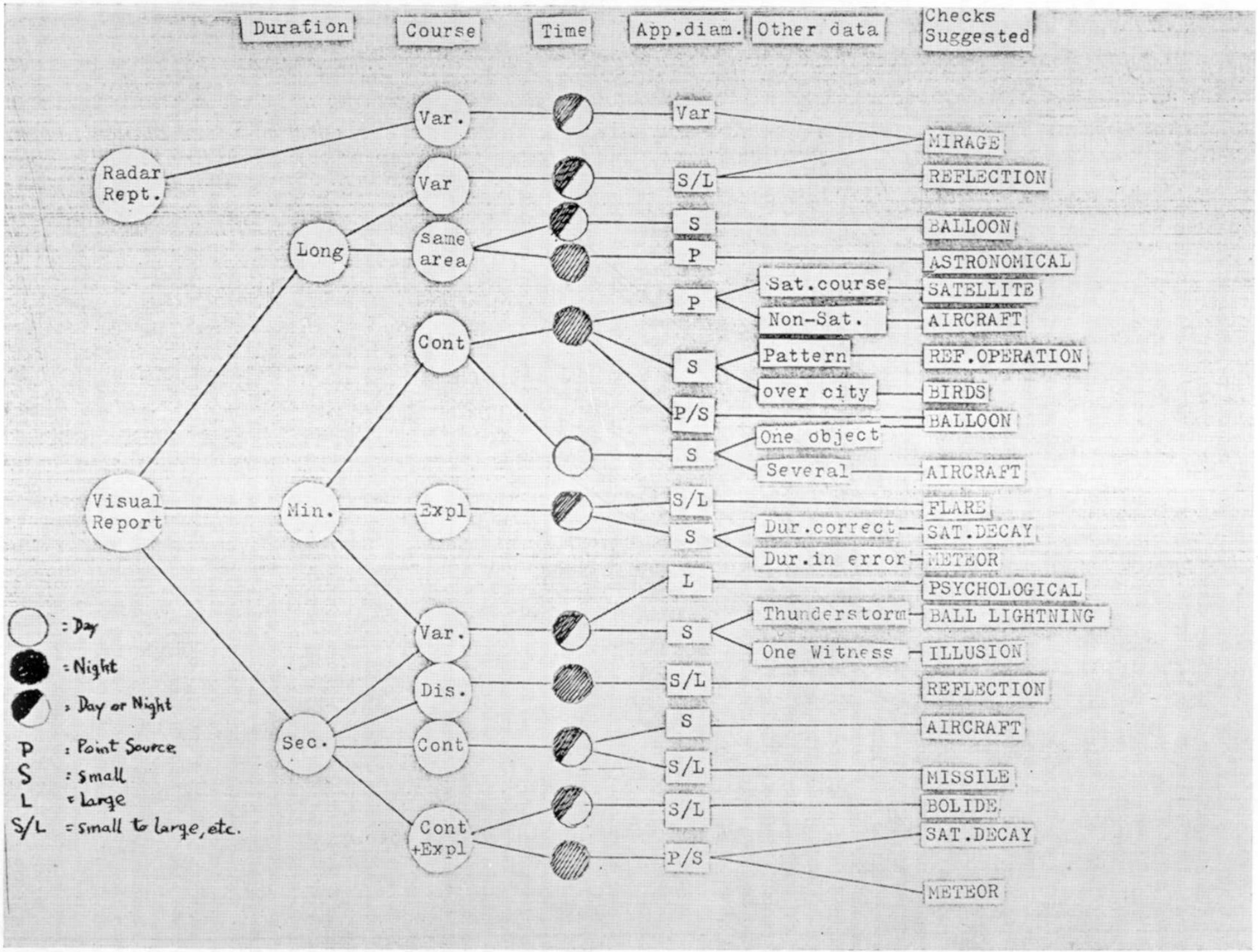
In time of crisis, when the investigating office is flooded under hundreds of reports, this system would quickly dispose of non-significant cases and present a clear picture of the unrolling of the wave.

A series of simple tests

On page 17 is a diagram which presumes the logical questions that must be asked when analyzing a UFO report. The suggested hypothesis is *not an explanation of the report;* it is only the indication of a conventional effect which is often found mistaken in reports of a given type, and should, therefore, be tested. For example, if an unusual formation of lights is seen flying above a city, at night, the objects having a small apparent diameter and a continuous course, we should make sure that these objects were not simply migrating birds, etc. In other words, we should justify each sighting we keep as representative of the UFO Phenomenon by stating why it *could not* refer to some conventional object. Our diagram is a guide for the identification of obvious mistakes which have no place in a catalogue of UFO sightings.

The first question asked is that of duration. It is the most critical of all. An object which is seen for a fraction of a second cannot be reliably described by the human eye, no matter the training or experience of the witness. We will classify the sightings in three categories: very short, where duration is expressed in seconds; short, when it is expressed in minutes; and long.

Next consider the course of the object: it can be continuous, variable, discontinuous, or the object may have been seen exploding: to all these cases will correspond different possible inter-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METEOR
PSYCHOLOGICAL
BALL LIGHTNING
ILLUSION
REFLECTION
AIRCRAFT
MISSILE
BOLIDE
SAT.DECAY
METEOR
: Day
: Night
: Day or Night
P : Point Source
S : Small
L : Large
S/L : Small to large, etc.

pretations.

The third question is that of the time of day, and the fourth that of the apparent diameter (S for small, L for large, P for point-source). By "small" we mean the apparent diameter of the head of a match held at arm's length, by "large" we mean the apparent diameter of the moon, or greater.

Under "other data" we have listed a few additional questions which should be answered before the case can be completely classified. In certain cases, the investigator will need help from specialists in the field of artificial satellites, meteorology or radar. UFO groups, if they do not have such specialists among their members, should either try to contact local civilian scientists, or should ask for information from local observatories or official stations. Satellites schedules, for example, can be obtained from a number of reliable amateurs as well as from official tracking-stations. Meteorological information—temperature inversion, wind directions at various altitudes, etc.,–which is such an important element in the analysis of a UFO sighting, can be obtained by phone from local airports or newspapers.

Such a system of systematic checking should be used *before* a reported object is labelled as a "UFO". It is true that no absolute rule can be used in all cases; the procedure we describe here *leaves the final estimate of the report to the investigator's judgment*, but it forces him to consider possibilities that might otherwise have been neglected, ignored or overlooked. We believe that the use of a standardized system of this type would eliminate many misunderstandings, simplify the work of UFO researchers and generally result in considerable clarification.

NOTES

(1) Sanders, Jacqueline: *Project Bluebook special report: a feminine viewpoint*. The Saucerian Review, Jan. 1956, p. 34.

(2) Vallée, J. *How to codify and classify UFO sightings*, FSR (Sept./Oct. 1963)

(3) Vallée, J. *The analysis of UFO activity:* a scientific approach to be published.

Canberra incident

THE Federal Capital of Australia, Canberra, featured in the UFO news on July 15, a day when nearby Tidbinbilla tracking station was playing an important part in the hook-up between Earth, Mariner IV and Mars.

The first hint of a UFO which we received on this side of the world was in a small item in the *Daily Mail* of July 16. This told how six air control officers saw a mysterious glowing object hovering at 5,000 ft. near Canberra airport on July 15. The object disappeared when a R.A.A.F. aircraft went up to investigate.

At first this appeared to be just a run-of-the-mill incident, but what really aroused our interest was a B B.C. news item on the *Light Programme* at 5.30 p.m. on July 16. The item was devoted to news of the Mariner IV picture transmissions from the region of Mars, which were just beginning to come in, when the news reader suddenly mentioned the Canberra UFO and added that **while the object was in sight, reception of the signals from Mariner was affected.** The inclusion of this item, which was omitted from subsequent bulletins, was reported to the FLYING SAUCER REVIEW by Mr. Nigel Sagar a former R.A.F. officer, of Croxley, Herts. We are indebted to reader Sagar for his help. No reason has as yet been given by the B.B.C. for the omission of the startling information from later bulletins, both radio and TV, and we have received no confirmation from any other source that the report was correct.

Within a few days there came hotfoot from Mrs. J. Magee in Australia, a batch of news reports relating to the incident. There is certainly a lively interest in UFOs in the "Down Under" press. In *The Australian* of July 16 we read that:

"An unidentified flying object was sighted over Canberra Airport yesterday morning. And that put it in a position to eavesdrop on Tidbinbilla.

"It was described as a metallic silvery object, hovering in the sky to the north-east at an elevation of between 20 to 30 degrees.

"Air traffic control staff in the main control tower spotted the visitor about 11 a.m.

"The officer-in-charge of Civil Aviation at the airport, Mr. A. B. Lindeman, saw it, too. So did Flight-Lieutenant Weston, the R.A.A.F. Base Operations Officer. But the first was an air-traffic controller, Mr. Tom Lindsey. He was scanning the sky to the north-east looking for a light aircraft due in from Bankstown.

"Mr. Lindeman said there were definitely no civil aircraft in the area at the time."

It should be noted that the control officers thought there must be a "reasonable" explanation, and sure enough, it was only a matter of hours before one was found. An old friend reared her beautiful head, as may be seen from a revealing piece carried by the Australian *Sun* of July 16:

"A mysterious glowing object seen in the sky from Canberra Airport yesterday may have been the reflection of the planet Venus, said Dr. B. E. Westerlund, of Mt. Stromlo Observatory.

"Dr. Westerlund said that in a haze and suitable atmosphere conditions, Venus could have appeared as a white opaque object. The shimmering noticed could have been caused by the haze lifting.

"Mr. T. Miller, another Mt. Stromlo astronomer, said the object was unlikely to be an illusion or a mirage as more than one trained observer had seen it.