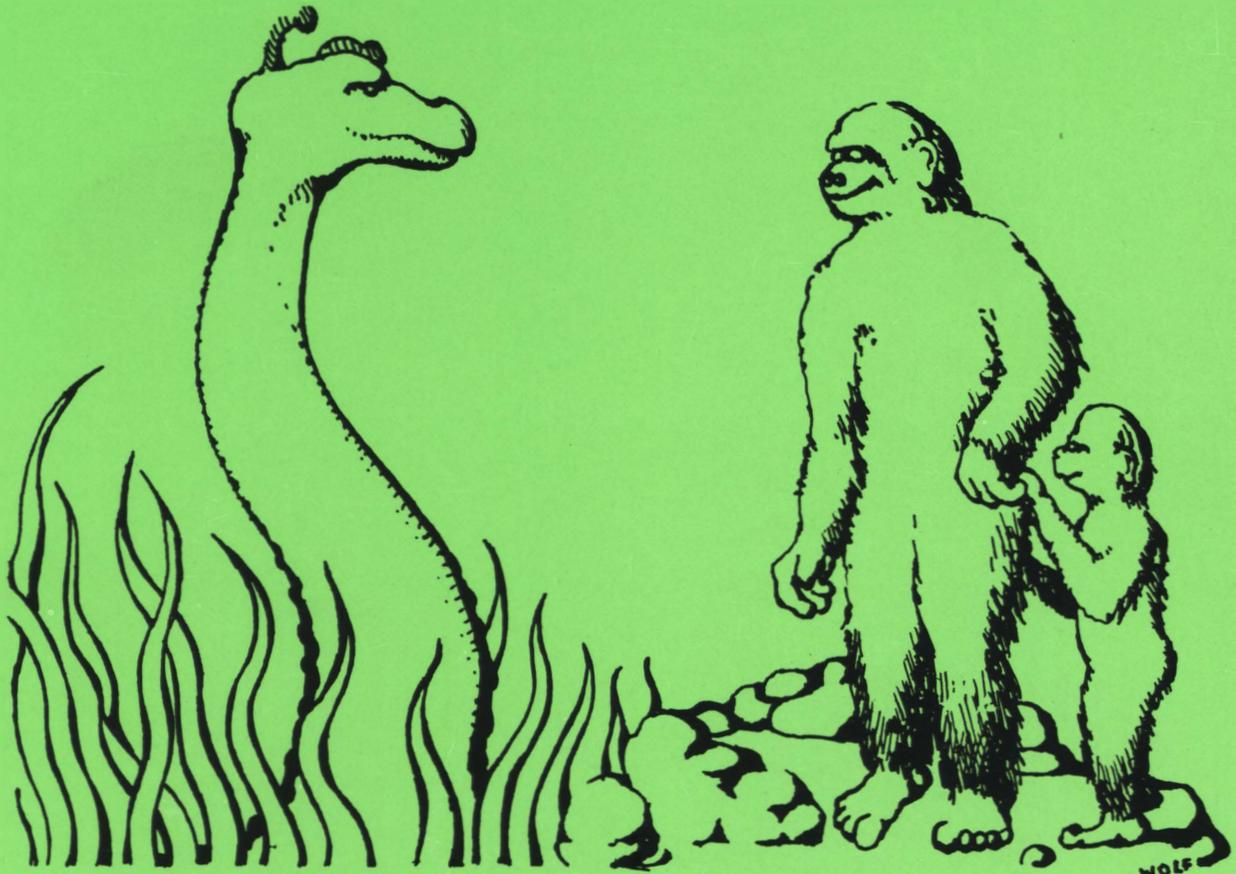


THE JOURNAL OF THE SOCIETY FOR THE INVESTIGATION OF THE UNEXPLAINED

PURSUIT

'SCIENCE IS THE PURSUIT OF THE UNEXPLAINED'



**FRESHWATER AND LAND
MONSTERS**

SOCIETY FOR THE INVESTIGATION OF THE UNEXPLAINED

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'SCIENCE IS THE PURSUIT OF THE UNEXPLAINED'

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PURSUIT®

THE JOURNAL OF THE SOCIETY
FOR THE INVESTIGATION OF THE UNEXPLAINED

FOUNDED BY IVAN T. SANDERSON

Devoted to the Investigation of "Things" that are Customarily Discounted

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EDITORIAL . . .

NO NEWS IS BAD NEWS —

The last fifteen years have seen a relentless deterioration of our American news media. There are fewer major city dailies, many of them now operated by large, impersonal chains, and they tend to devote most of their news pages to political gossip and meaningless statements by ineffectual authorities about inflated crises. Television, because of the nature of the medium itself, is able to present nothing but superficial coverage of major events. Even the smalltown dailies and country weeklies, once the mainstay for Fortean clipping collectors, now depend upon the wire services, syndicates and "boilerplate". Like their big city brethren, many small country papers have been swallowed up by big chains. Hard news is being replaced by "soft" news, even softheaded news.

The problem was compounded in the 1960s with the advent of the "New Journalism", which has reporters devoting more space to describing their own feelings on viewing an automobile accident than on the accident itself. The once-lofty Fourth Estate has been caught in a mudslide and has tumbled from the mountain to the murky swamp of bias. Rumors, controversy and opinions have seeped from the editorial pages to the front pages. The result is that fewer and fewer Fortean events are being noted in the press generally, and, often, they are either oversensationalized and badly reported, or they are accompanied by silly explanations or the poltical statements of self-styled experts.

All of this means that the task of uncovering and properly investigating new events is becoming increasingly difficult. A Sasquatch could conceivably stroll through Times Square, overturn a taxi, stomp a policeman into the pavement and fly off in a disc-shaped object without ever receiving notice in the New York press. If, however, our hairy friend should carry a picket sign and give a fiery political speech he might manage to make the six o'clock news.

The paranoids in our midst have been crying about a mythical censorship for years. But the only real censorship is inspired by pure apathy, on the part of the press and the public, not by some hidden governmental conspiracy. Today if a man is consumed completely by fire in his living room and nothing else is even singed, he is lucky to receive a one-line obituary, let alone full news coverage.

Certain kinds of Fortean tend to be ignored by the press simply because the local police ask newspaper reporters not to print some stories. For example, for years something very strange has been going on in cemeteries across the U.S. Huge tombstones, often weighing several tons, are being ripped from their very solid foundations and overturned. Heavy steel rods join the headstones to their bases, and in case after case these rods are snapped off like toothpicks. Local police usually believe they are dealing with "teenaged vandals" and ask reporters to keep the stories out of the paper until the culprits are apprehended. However, eight or ten big stones are often knocked over in neat rows, with no sign of footprints or tire tracks in the soft cemetery turf (it would take chains and a tractor or heavy truck to do this kind of damage). There was a wave of this kind of "vandalism" in several cemeteries in New York and New Jersey in February, 1976. Newspaper coverage was almost non-existent.

Modern Fortean are obliged to remain alert for rumors of such events, and to investigate them on their own. We can expect little help from local police or newspapers. In the not-distant future we may find ourselves entirely dependent on whispered hearsay "overheard in bar-rooms and pool halls!" All of us must learn to track down such stories to their original sources before we can hope to trail a wandering Bigfoot or wave our geiger counters around an alleged UFO landing site. Back fence gossip may lead to some truly interesting developments which, very likely, have been deliberately ignored by local newspapers or even suppressed by local police. Fortean everywhere must learn to rely on their own initiative. The day of the starry-eyed clipping collector and armchair researcher is fast coming to a close.

No news no longer means that there is no news!

— John A. Keel

PHYSICS (?)

THE ALSEP THAT RETURNED FROM THE DEAD by Curt Sutherly

Reports of anomalous behavior in NASA and Soviet space equipment have been a prime source of controversy for years. Early in the space-race NASA discovered that its orbiting satellites sometimes had a tendency to "vanish" mysteriously from orbit, only to reappear days or months later. Various items of technical equipment have been known to malfunction and then, strangely, to begin functioning again—sometimes better than before.

A case in point was recently reported in *Science News* (Vol. 109, No. 9) and goes something as follows:

During the Apollo series of lunar landings a number of "automatic isotope-powered instrument arrays known as ALSEPS" (Apollo Lunar Surface Experimental Packages), were left on the moon's surface for analysis of magnetic field changes, seismic changes and/or disruptions. Investigators at the Johnson Space Flight Center in Houston, Texas are reportedly baffled by what transpired with the package set down by Apollo 14 in 1971. On January 18, 1976, the ALSEP package in question ceased functioning "unaccountably." However, most intriguingly, it began working again on February 19, and it is operating better now than ever before—in fact it is performing a more complete job than that for which it was originally designed! How so? According to *Science News*, the ALSEP's receiver

had failed to operate over a year previously, leaving Johnson Space Center technicians unable to transmit information to the unit, although they were still able to receive data. Finally in January of this year the ALSEP seemed to "die" completely. When it came back to life on the indicated date, the receiver was once more functioning. In addition, the ALSEP's charged-particle detector which had been confined (intentionally) to nighttime operations is now working around the clock. This is better than planned; daytime operation had been avoided because of the equipment's inherent inability to function in the heat of the lunar day.

NASA engineers believed that the hot (400°F) temperatures during the lunar daylight periods caused the original shutdown. However, when it came back to life they changed their minds and decided that originally a relay had gotten jammed, and that the temperature variations turned the equipment back on.

What it comes down to is that no one really knows what happened, as *Science News* so adequately points out. It is one thing for a piece of equipment to "jam" for awhile and then restart. It is entirely another matter when a complex electronic device shuts down only to resume operating in an improved manner one month (32 days) later. There is, of course, one very interesting explanation (patently ignored by the scientists for perhaps obvious reasons); namely that someone (?) picked up the unit, tampered with it, and then later returned it to operation after making technological improvements.

This leaves only two questions: Who did the tampering — and why?

GEOLOGY

THE DODECATED GLOBE

by William H. Whamond
(continued from the April 1976 issue)

At about this time I received a copy of Dr. Fuller's latest book, *Synergetics*, The Macmillan Co., New York, which I had on order for almost a year. I was pleasantly surprised to find that he had been experimenting along the same lines although for entirely different reasons. He appeared to be concerned primarily with questions regarding the torsional and radial stability of his geodesic dome structures, using a model composed of rubber tires! He gives a clear demonstration of his extremely shrewd insight on "polarity" implications, which we shall return to later, and he also observes that a meshed gear train must contain an even number of gears or it will lock. Although many interesting aspects come to light in such bearing and gear analogies, I soon realized that they placed no restriction on an Icosa/Dodeca version of Sanderson's theories because vortices can't lock! A vortex is zero at its rim and increases toward the center. That is exactly the opposite to what occurs with a rigid flywheel or gear. So whatever direction we assume for our vortices, they can never "lock" with the others. Thus ball races inserted in each Icosa or Dodeca face would be a better representation of vortices. Gyroscopes may be even better.

By this time I felt that I had covered most of the issues raised by Sanderson's article, so I read it again to see if there was anything I had missed. I then came across Dr. Carstiou's comment that "all known vortices turn clockwise in the Northern Hemisphere and opposite in the Southern." I just couldn't wait to check this on my Icosa model (fig. 8). I was quite amazed to find that it all agreed. It also occurred to me that an interesting experiment in equipartitioning might be to spin a bathtub full of liquid (fig. 12). Would the liquid really creep around the bath rim against the direction of rotation? Or would the liquid equipartition into two oppositely circulating "planetary bodies"?

Another aspect of this equipartitioning notion is raised by asking whether the earth ever expanded or contracted, for example during the ice ages? Surely if the earth has heated or cooled it must have done so. And if there was any such historical expansion, would it not be likely that it would manifest itself as equipartitioning? After all, mud flats do dry out and crack in a sort of orthogonal equipartitioning mode.

It is well known that an orbiting satellite traces a sinusoidal track over the earth's surface if the orbit is not exactly over the equatorial great circle. See (fig. 13). We could therefore incline a satellite orbit so that it completely sweeps the tropics zone just as

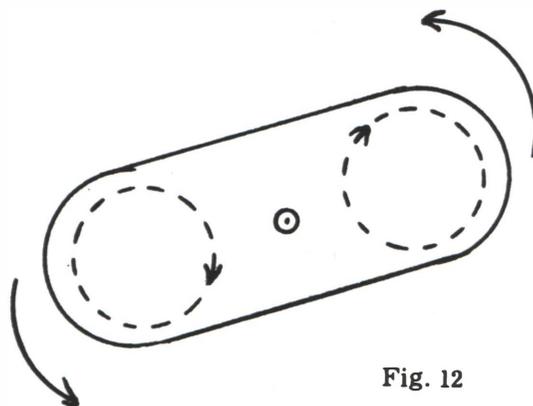


Fig. 12

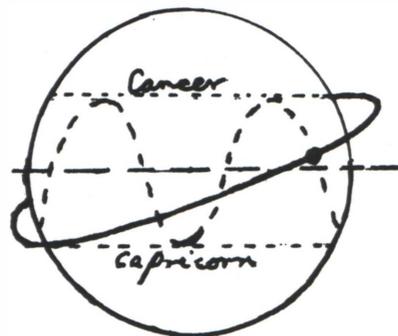


Fig. 13

the sun does. By selecting the proper orbital speed we could tailor the sinusoidal track to practically coincide with the sawtooth pattern of the "tropic 10 triangles. A sawtooth wave is a very close approximation to a sine wave, as any electrical engineer knows. See (fig. 14). Such a satellite, loaded with infrared, radio, magnetic, seismic and every other conceivable type of sensor would go a long way towards "laying" the Vile Vortices.

Shortly after realizing that a satellite's ground track could be "coincided" with the tropic 10 sawtooth I came across a book by the French scientist *Jaques Vallee, Challenge to Science — the UFO Enigma*, Ballantine Paperbacks, and my attention was caught by his figure number 14 on page 86. Vallee was concerned with a statistical analysis of UFO sightings along the line joining the two French towns of Bayonne and Vichy. It occurred to him to extend this line on the assumption that it was an arc of a great circle extending around the world. This great circle passed through a great many localities in which rather spectacular UFO sightings had been reported, including places in Spain, Argentina, Brazil and New Zealand. As soon as I saw the sinusoidal shape of the extended Bayonne-Vichy line, I suspected that it was the ground track of an orbiting device.

Fig. 14

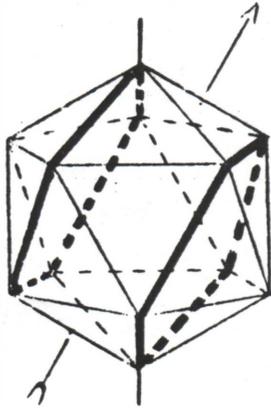
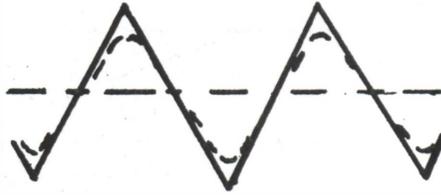
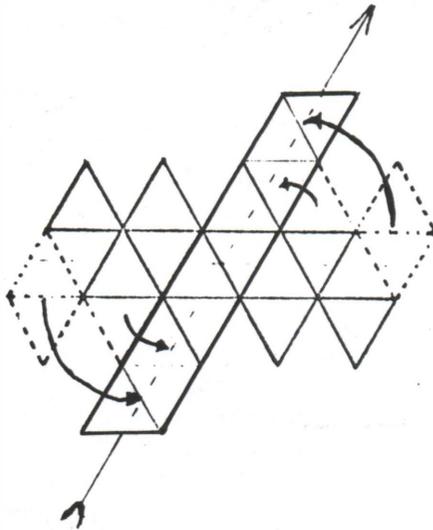


Fig. 15

Fig. 16



I immediately consulted the Icosa, and sure enough, a continuous straight (great circle) belt of 10 triangles could be set right across Spain, Brazil, Argentina, New Zealand, Papua, and back to Bayonne-Vichy. The 10 triangle belt underlying such an orbit is shown in (fig. 15) and unfolds to the Icosa layout of (fig. 16). The conclusion is inescapable: Vallee's extended Bayonne-Vichy line is consistent with the hypothesis of a space vehicle orbiting over this 10 triangle belt and dropping scout craft under its orbital course. These two examples (figures 13 and 15) should suffice to show the merits of the Icosa in orbital investigations. Just as with Dr. Fuller's maps, the above "Icosa Orbit Plotter" has an uncanny knack of revealing hitherto unsuspected relationships, such as that France, Spain, Brazil, Argentina, New Zealand and Papua all lie on a great circle course. On a Mercator map there is no way that this could be easily noticed or rapidly calculated.

When I first informed SITU of my investigations and preliminary conclusions, they responded by sending me a copy of a somewhat similar report published in the Russian publication *Sputnik*. See *Pursuit* for April 1975. This article seemed to represent an independent confirmation of Sanderson's theories and my own work, and it had the interesting difference that it was based on a study of sociological and archeological data rather than an analysis of anomalous events or geometry. But the most obvious difference was that the Russian researchers did not claim only 12 anomalous foci, one per Dodeca facet or one per Icosa vertex, but they seemed to be claiming the existence of one anomalous foci for every Icosa facet, every Dodeca facet, and every intersection of the Dodeca/Icosa dual grid. This amounts to 62 anomalous foci, but whether all 62 are to be considered of equal strength or importance is not made clear.

The most important discovery arose quite accidentally when I belatedly noticed that the Dodeca and Icosa grids intersected everywhere at right angles. Although I had been studying the Dodeca and the Icosa separately, I had never thought of studying them in combination until the Russian article showed them superimposed. Even then I probably would not have noticed this right angle property had the Russians not shown their Dodeca grid in heavier lines than the Icosa grid. Now, this perpendicularity, or orthogonality, is a basic cornerstone of science. In common practice all graphs are laid out in this manner, as for example a graph of temperature versus time in a medical chart, in that the two factors being measured are graphically presented at right angles to one another. In hydrodynamics and aerodynamics the pressure fronts are always perpendicular to the flow streamlines. In the mathematical theory of complex variables such mutually orthogonal quantities are called conjugate functions. In other words the pressure fronts and streamlines are conjugate functions of each other. On terrain maps lines of equal elevation are usually shown. The conjugate function of these lines is not often shown, but it represents the water seepage lines, or lines of steepest descent. Radial rays from a point are conjugate functions of a family of concentric circles. The rays can then be used to represent gravity force and the gravitational equipotential lines, respectively. Ellipses and hyperbolas are conjugate functions, and so on.

Due to the Russian Dodeca/Icosa superposition (fig. 17) we have accidentally discovered that the Dodeca grid and the Icosa grid are conjugate functions, and that this occurs on a sphere rather than on the usual flat surface. This important fact that duals are automatically conjugate functions is not mentioned in any of the references that I have consulted in this research. Presumably, therefore, this key relationship has not been generally realized by those who are interested in geodesics. I presume that it holds true for the other Platonic duals as well. This feature should facilitate stress analysis in geodesic dome structures or geologic tectonic plates, and it will enable any point on a sphere to be located

with any desired degree of precision. If we number the pentagons from 1 to 12, and the triangles from 1 to 20, then a point within, say, pentagon #7 and triangle #13 could have coordinates such as 7.532/13.428, somewhat in the same manner as the military grid system. Note also that the three pentagons of (fig. 17) form 1/4 of the entire Dodeca. Hence a set of four such sheets would provide a map of the entire globe, and a set of 12 pentagon sheets would provide a very accurate world atlas.

If the Russians intend dealing with all of the 62 foci, there may be simpler ways of pinpointing them than by a Dodeca/Icosa dual. For instance, if we take an Icosa spherical triangle and split it in three along its medians we get three half diamonds (fig. 18). This is 1 1/2 diamonds per Icosa triangle, and since there are 20 such triangles per Icosa, we have a total of 30 equal diamonds, forming a complete globe. Dr. Fuller calls this 30 equal diamond globe a Triacon. Each faceted diamond would touch four of the Russian's 62 foci and center a fifth (fig. 19). Finally, it is possible to split each diamond facet on its short axis to end up with 60 equal and almost equilateral triangles (fig. 20). Unfortunately, this is just two short of the Russian's 62 foci, otherwise such a triangle could be centered over each focus. In the illustration, the percentages represent portions of sphere radius. It may be worth pointing out here that there is yet another way of mapping Sanderson's 12 Vile Vortices, namely, using a truncated Icosa, or an Icosa with the corners lopped off. If you fit a hexagon into each of the 20 Icosa triangles, then the Tropic 10 belt will appear as 10 hexagons, nested together in the offset manner shown in (fig. 21). These ten hexagons and their enclosing triangles therefore divide the equatorial great circle into a 10 sided figure, or decagon (fig. 22). It can be proved by simple arithmetic that the proportions of a decagon incorporate the "mysterious" golden ratio which so fascinated the ancients.

From the golden ratio it is not too difficult to prove that each hexagon side is 41 1/4% of the globe's radius, and that each Icosa triangle's side is 23.61% greater than the globe's radius. Note that (fig. 21) in the process of fitting the hexagons into the triangles, the triangles had their corners lopped off. As each triangle corner lies on a vertex of the Icosa, there are five triangle corners meeting at each vertex (figures 1 and 2). These five lopped off corners join together to form a pentagon at each vertex. We therefore have the hexagon-pentagon "football" consisting of 20 hexagon and 12 pentagon figures almost equal in size. Hence, once Sanderson's 12 Vile Vortices have been more accurately located, we could locate each one by a colored pentagon much smaller than the one shown in (fig. 1) to indicate "danger zone" and cover the "safe and sane" remainder of the globe by the 20 hexagons!

In sum, if one could cut out a 1/20th portion (an Icosa quadrant) from the globe and file its curved face flat, one would end up with something like (fig. 23), which is almost a tetrahedron. A tetrahedron is

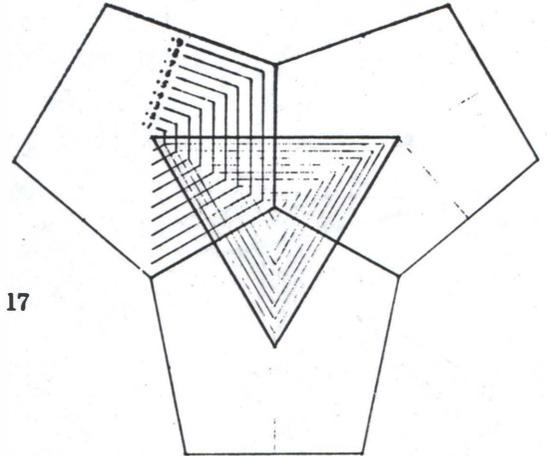


Fig. 17

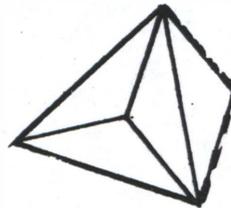


Fig. 18

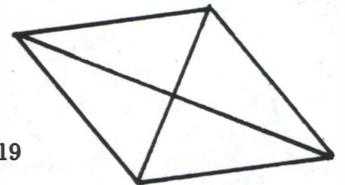


Fig. 19

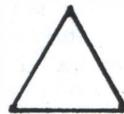


Fig. 20



Fig. 21

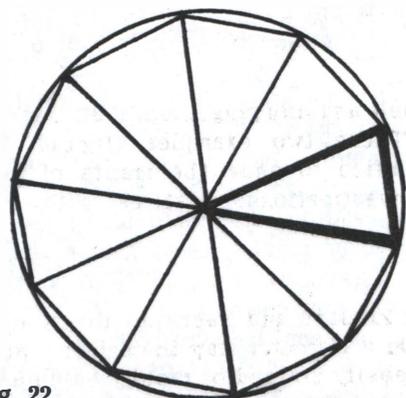


Fig. 22

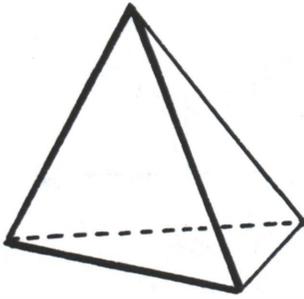


Fig. 23

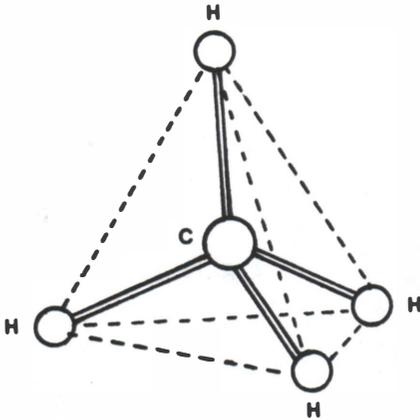


Fig. 24

the first Platonic solid having four equal triangular facets. In effect, the tetrahedron is an omni-triangulated pyramid. It is well known to engineers that a triangle is the most rigid structure. It cannot collapse or squash or fold like a rectangle. Dr. Fuller, for instance, is the most enthusiastic about the properties of the tetrahedron and believes it to be a form of what he calls the "basic building blocks of the universe." Nature often makes use of the tetrahedron as for instance in the methane molecule (fig. 24).

So now we discover each Icosa triangle, or anomalous foci, is practically a tetrahedron. It has three edges 5% longer than the other three and is as close to nature's most rigid structure as it can be, while still being capable of fitting into a sphere. That is quite a feat of design. Nature is full of surprises. Perhaps, then, there is something to the notion of equipartitioning. Perhaps the equipartitioning is on the basis of greatest rigidity or most rigid packing, or some similar process of maximizing the tendency toward rigidity that is characteristic of the tetrahedron?

As previously remarked, one of the greatest drawbacks to realizing the implications of Sanderson's theories has been the lack of any kind of drawings or illustrations accompanying his articles. The other difficulty arises from the confusion caused by the unusual omni-directional symmetry of a sphere. For instance, Sanderson mentions 36° four times, but he is talking about four entirely unrelated angles which just happen to be equal by mere coincidence. Then he mentions " $23\frac{1}{2}^\circ$ to 25° " several times while referring to four different angles, only two of which have any

apparent connection with one another. While discussing the Tropic 10 triangles Sanderson says "Each pair of vertexes in the Southern Hemisphere is spread 36° each way from the nearest north vertex." Now, 36° is half of 72° and he had just been saying that both Southern vertexes were 72° from the nearest north vertex. So he probably was referring to surface angles of 72° and 36° . However, the more usual way to pinpoint the separation of two vertices on the same latitude would be to give their longitudinal separation, which is a central angle. Although this misled me, it produced a fortunate result. I thought, "his surface angle can't equal his central angle unless he has a tetrahedron." When I investigated this notion I discovered the actual surface angle was 60° and the central angle was $63^\circ 26' 4''$, not 72° . Just to add to the confusion, each of the Tropic 10 triangles makes an equatorial intercept of 36° centrally (fig. 22) to form an equatorial decagon.

As regards Sanderson's mention of $23\frac{1}{2}^\circ$ to 25° we can identify two of these at once. Moreover, they are interconnected. The earth's tilt is $23\frac{1}{2}^\circ$ (as he mentions) and so when the poles tilt $23\frac{1}{2}^\circ$ either way, the equator must tilt the same amount, thus putting the sun $23\frac{1}{2}^\circ$ either way of the equator, namely, to the limits of the tropics which are known as Cancer and Capricorn (fig. 1). Sanderson's mention that the anomalous foci are inclined at 25° to the equator is consistent with the idea of the Tropic 10 vortices "having their outermost edges" dragged around by the sun. It may be that the circular "circulations" of (fig. 8) should be stretched to become ellipses swept back 25° from the sun's path. But what about the polar foci? It would then have to become an ellipse whose axis rotated once every 24 hours. However, besides the Earth's $23\frac{1}{2}^\circ$ tilt, there is known to be a certain wobble or nutation. If this wobble is an ellipse, rather than a circle, it could explain this ellipse shape and its 25° inclination. Any TV technician knows that if he feeds two sine waves into a TV tube at right angles he sees a circle if the waves are equal but an ellipse if the waves are unequal in strength. This proves that two unequal vibrations at right angles to each other will produce an elliptical wobble whose inclination angle depends on how much the vibrations are out of phase. If someone can supply precise data on whether the earth's wobble is elliptical, and how much so, it may provide a clue to the charted elliptical shape of the anomalous foci. If said wobble is elliptical, does its phase angle equal 25° ? Hence, does the nodding (nutation) become reflected into all of the ten other vertices, more or less like standing waves of "panel flutter" which can be seen on an aircraft's wing, or in Chladni's figures? There is yet another possibility. As the sun does its seasonal wandering between the limits of Cancer and Capricorn it traces out a lazy sine wave just like any other satellite (fig. 13). Now, what angle does the sun make with the Equator while crossing it? Could it perchance be 25° ?

Sanderson's fourth mention of a $23\frac{1}{2}^\circ$ to 25° angle

is completely incomprehensible. He says that if you poke a knitting needle into a Northern vertice and on through the earth's center it comes out "23½° away from" the corresponding Southern vertice. This is absolutely impossible, as is obvious from figures (2) and (3). Anything spearing a Northern vertex and the globe or Icosa center will come out right on a Southern vertice. It simply can't shift 23½°. Has Sanderson been misquoted, or was he intending to refer to some other angle? Remember that this "72° triangulation" was Sanderson's idea, not mine. I only pointed out that it was an Icosa. This is not a case of my Icosa theory not quite fitting Sanderson's angles. So what was Sanderson trying to say by his above, seemingly nonsensical statement?

Sanderson's fourth mention of 36° is a strange discrepancy for someone whose own background is geography, but at least there seems to be a plausible explanation. He is very emphatic that the centers of his alleged Vile Vortices lie on latitudes of 36° North and South. He mentions said 36° North and South several times. Now as is obvious from (fig. 1) the vertices of any "72° triangulated" system such as Sanderson proposes must lie on 26½° North and South, not 36° North and South, a 9½° discrepancy. Although Sanderson is emphatic in quoting 36°, he then goes on to contradict this by saying that Bermuda is the apex of the so-called Bermuda Triangle. This implies that his Vile Vortex centers in this triangle are well below the Bermuda apex, which is about 36°. In short, his Vortice is well below 36°. He shows the same 36° and below 36° ambiguity when dealing with the Devil's Sea area South of Japan. If we check (fig. 1) we see that the furthest north our Tropic 10 triangles reach is about 32° North, which is a triangle-side and pentagon-side intersection. The Russians, incidentally, claim that this one is indeed an anomalous focus. On the other hand, since 9½° is about ¼ of 36°, this 9½° discrepancy may merely suggest that

each Icosa triangle should be further sub-divided to provide about three further equipartitionings per Icosa Triangle, for a total of about 60 as the Russian article suggests.

Sanderson himself readily recognized the uncertainty inherent in trying to accurately locate what World War II Operations Research specialists called a "probability locus." Certainly 32° North seems close enough to his 36° figure. It is also obvious that we should not go overboard on the Icosa model. For the present it is merely a guide and not a gospel. It is quite possible that the Tropic 10 triangles actually are elongated in the north-south direction beyond the theoretical 26.5° limits to as far as 36°, as Sanderson believed, somewhat ambiguously. That would mean that the Tropic 10 belt would be 72° wide instead of 53° wide. Note that the actual Tropics are 47° wide, so that Sanderson's hypothesized 72° band is 25° wider than the actual tropics.

There seems to be some evidence to support Sanderson's belief that the Tropic 10 Vile Vortices may occur outside of the actual Tropics by as much as the 9½° he suggests, i.e., to 36° North and South. For if the model of (fig. 8) is reasonably correct, the sun's wanderings across the Tropic zone would periodically bring it directly over the North or South rows of the Tropic 10 vertices. On such occasions the stirring action of the sun's drag would tend to augment circulation eddies beyond the Tropic vertices, but could not generate eddies right under itself. Also in (fig. 8), as previously mentioned, there exist about each of the Tropic 10 vertices five triangles whose circulations are all in the same direction except for one, giving a net circulation of 4-1=3, and said majority of 4 are all located to the same side of the equator. This implies that the center of gravity of the circulations about the Tropic 10 vertices actually falls a bit polewards from the Icosa's theoretical vertex locations at 26½° North and South. END

NOTICE

MEMBERSHIP DIRECTORY

A great deal of time and expense has gone into putting together what was to be this year's Membership Directory. Unfortunately, however, we have received word that last year's Directory has been misused. Faced with a number of (friendly) complaints from members, we have decided to discontinue the Directory at the present time. We regret having to take this course of action, especially in light of efforts put forth by those members (particularly Martin Wiegler and Albena Zwerver) in charge of compiling and preparing the Directory for mailing.

Although we feel we cannot publish the present Membership Directory, we hope to be able to do so at some future date. Members who contributed financially to this year's Directory are asked to write to us if they would like their donation returned. Money not refunded will be used for ongoing investigations.

We request emphatically that our members report immediately to our office any misuse, in their opinion, of our Membership Directory, specifically contacts by mail or phone they find personally objectionable or in any way detrimental to SITU.

BIOLOGY

FRESH WATER MONSTERS

I. HOMING IN ON NESSIE

Pursuit has followed the developments at Loch Ness for many years, and it is with a great deal of satisfaction that we can now bring our membership up-to-date on the latest information about the 1975 American studies at the loch. The following report is excerpted from *Technology Review*, March/April 1976, published by the Alumni Association of the Massachusetts Institute of Technology, and printed here with the permission of that journal. The article in *Technology Review* comprises the world's first complete report of this recent investigation. Readers of *Pursuit* are encouraged to obtain the full article, with photographs in color, by sending \$1.00 to: "Ness," *Technology Review*, Room E19-430, M.I.T., Cambridge, Mass. 02139.

SEARCH FOR THE LOCH NESS MONSTER

by
Robert H. Rines,
Academy of Applied Science
Charles W. Wyckoff,
Applied Photo Sciences, Inc.
Harold E. Edgerton, M.I.T.
Martin Klein, Klein Associates, Inc.

Loch Ness in northern Scotland is the largest freshwater lake in volume in Great Britain, and the third largest in Europe. Although it is only about 24 miles long and a mile or so wide, it more than compensates for this small surface area with its remarkable depth, a maximum reported at 975 feet, and 700 feet over much of its length.

Even before the Highlands of Scotland were introduced to the outside world at the beginning of the Middle Ages, there were legends of large aquatic creatures in the lochs. The legend of the water horse or kelpie was widely believed, and still persists today. This creature was said to occupy lonely lochs and to lure weary travelers to their death.

News of a monster in the loch was first widely disseminated in 1933 with the publication of several newspaper stories following completion of an auto roadway along the western shore. Since then the monster has been a more or less regular phenomenon, with literally hundreds of reputable sightings by laymen and scientists alike. Over the 50 years or so of modern sightings, descriptions of the monster have remained consistent. The creature is usually said to total about 20 feet long and possess one or two humps and a long, slender neck topped by a small head. Several observers have reported protuberances from the head, which has been described as bony and angular. The creature swims rapidly, submerges and surfaces creating a definite wake as it moves.

Verified photographs and motion pictures of the phenomenon (particularly the motion picture obtained by British aeronautical engineer Tim Dinsdale) agree well with sighting reports: they show humps, and in one case, what appears to be a slender neck and head protruding from the water.

Since the advent of sonar, numerous records have been made by fishermen, biologists and engineers of large, moving objects traveling underwater in the loch. These objects showed up as individual, large traces, readily distinguishable from the more fragmented echoes obtained from fish schools or water bubbles.

Thus, Loch Ness has a long history of reputable, consistent sightings, much of it compiled by the British Loch Ness Investigation bureau, and modern techniques have yielded some physical evidence of large aquatic animals. It was this extensive network of circumstantial data that led the Academy of Applied Science to begin investigations in the loch in cooperation with the Bureau.

The Academy, founded in 1963, consists of about 350 members, devoted to supporting unusual areas of research, and promoting interaction among scientists, inventors and industrialists.

The first Academy expedition to the loch, in 1970, attempted to confirm earlier sonar contacts with large loch creatures. Using a high-frequency, side-scan sonar designed by author Klein, several contacts were made. The most successful of these was the detection of something large passing through the sonar beam while the apparatus was attached to a pier in Urquhart Bay. About 15 minutes later, and then another ten minutes later, similar targets at further distances were detected. These objects were about 10 to 50 times larger than the fish detected many times before in the sonar beam and had a parallel-track characteristic appearance. These were definitely moving, solid objects coming in and out of the beam.

THE CAMERA-STROBE SYSTEM

In 1972 the Academy's expedition added a camera-strobe light system developed by author Edgerton for the National Geographic Society to photograph underwater life. While Dr. Edgerton was not present at lochside, he assisted in both preparing the equipment and analyzing and critiquing the data.

The film for the 1972 expedition was Kodachrome II, with an ASA of 25. This film allowed the system to photograph at about 10-foot distances in the water of the loch. In 1975, a better range was obtained through the use of high-speed Ektachrome tungsten-type film, with an ASA of 125. The tungsten type, or "in-door," film was used because, despite the daylight-quality of the strobe flash, the water acted as a yellow filter, which effectively "warmed" the color of the strobe flash to more nearly simulate tungsten light.

For the 1975 expedition, the previously described camera-strobe unit was used as a backup, and the primary camera was linked to the sonar system such that only the presence of a large object in the sonar beam would trigger the camera.

The peat-stained waters of the loch imposed severe constraints on the photographic system. The attenuation of light in the murky waters, in combination with the aperture of the camera lens and the speed of the film, precludes photographs at any distance greater than about 30 feet.

The attenuation of light by the water did, however, have its positive side. From various calibration measurements, it was known how much optical density would be evidenced on the exposed film for a given distance of a photographed object from the camera-strobe system. To find out how far an unknown object was from the camera, one simply compared the optical density of the object with the known-distance object.

SIDE-SCAN AND OTHER SONARS

The sonar system used in 1970 was a Klein Associates HYDROSCAN side-scan sonar which used a frequency of 50

kiloHertz and a pulse length of 0.1 milliseconds, with five pulses emitted per second. In 1972 and 1975, a Raytheon Model DE 725C echo sounder was used which emitted a very short pulse at 200 kiloHertz.

Like the camera-strobe system, side-scan sonar has had an extensive history of use underwater. Usually towed behind a ship, it has been used in such applications as locating sunken ships and mapping the ocean-bottom in offshore oil exploration.

In the Loch Ness application, the aim was to detect and measure a large, moving object. So the sonar was mounted on a stationary platform placed on the sloping loch bottom, and the beam aimed horizontally out into the loch. This operating mode made the side-scan sonar a powerful tool for producing clear evidence of a moving creature, for there is no question that an object entering the stationary beam is in motion.

Sonar also readily discriminates between collections of small objects such as fish schools and large, solid objects. The former show up as collections of many, small tracings, while the latter show up as solid, black tracings on the recorder. After the many hours author Klein spent monitoring the loch, and from experience in other waters of the world, he found it possible to distinguish large objects from collections of small ones.

WHERE TO LOOK

The chances of a creature coming into camera range during the brief periods of the expeditions were quite small, considering the size of the loch and the apparent relative scarcity of sightings.

To increase the chances of observing the creature, Dr. Jan-Olaf Willums, formerly of M.I.T., performed a computer study to determine the best spot for study. Dr. Willums based his study on 258 reliable accounts of sightings between 1961 and 1970. These were collected by the Loch Ness Investigation Bureau. His correlations of the physical parameters of the sightings agree well with past experience. Eighty-four per cent of all sightings occurred during times of very calm surface conditions, and most of these sightings occurred during June, July, and August.

But the most important finding was that certain areas of the loch appeared far more productive than others in terms of sightings, at least on the basis of these data. Over half of the sightings occurred near river mouths and bays with active water movement, and Urquhart Bay alone was responsible for 57 of the 258 sightings.

THE 1972 EXPEDITION

The water the night of August 8 was flat and calm as the Academy and Bureau investigators waited on board boats in the bay — one boat serving the sonar equipment, and one serving the strobe and camera equipment. About 1:00 in the morning the team suddenly began to see the same kinds of characteristic sonar traces obtained in 1970. (A personal note: if primitive instincts are any sign, there was something ominous in the loch that night; the hair went up on the backs of their necks.) As we discovered later, nothing intersected the camera beam at this time, which is understandable — the object could have been above or below the camera and light beam.

Then, about 40 minutes later, salmon were seen jumping away from something in the loch and this flight was also seen on the sonar. At the same time a large object came back into the beam, and a bit later still a second object of similar size. These objects were separated by about 12 feet; they were, indeed, distinct objects. During this period photographs were obtained of what was in the beam.

Because of the murkiness of the water, the photographs obtained that night appear to be quite vague. However, when computer-enhanced, there appeared in two pictures the images of a flipper, and, in the third picture, two blobs. [See: "Loch Ness 1972 — The Rines/Edgerton Picture," by Tim Dinsdale, *Pursuit*, Vol. 7, No. 2, April, 1974.]

In order to appear in focus with this fixed-focus, 10-mm. lens, operating at $f/1.8$, the flipper cannot be closer than about four feet from the lens and would appear to be out of focus and would very definitely be even more fuzzy.

At this point we should, perhaps, say a few words about the process of computer enhancement. This technique has proven to be a reliable tool and a standard research technique in a variety of scientific disciplines. It has been used to clarify images from space probes, in forensics to help identify fingerprints, and in medical research to classify human chromosomes. The computer can make mathematical judgments only to enhance those patterns already evident on the photograph; it cannot create patterns where there are none.

THE 1975 EXPEDITION

The next successful expedition, in June, 1975, incorporated a number of new techniques into another camera-strobe system, to remedy some of the technical problems in the 1972 expedition. As noted earlier, we also switched to a more sensitive film for all photography.

The severe backscatter from the particulate matter in the water was reduced by putting about five feet between the strobe light and the camera. To give our camera-strobe system a longer active life in the loch, we also included a new triggering system in which the system was attached to the sonar through a computer constructed by United States Scientific Instruments. Only when an object with a cross-section of four to five feet entered the beam, at a distance of less than 40 feet, would the camera begin taking pictures.

As a backup system in the 1975 expedition, the 1972 apparatus was used, again separating the camera and light to minimize backscatter.

The sonar record did show large objects near the camera but we later discovered that the main camera had been blocked by silt stirred up from the mud bottom. We know the silt was stirred up by the animal, because divers confirmed that the camera was clean after it was put on the bottom. Fortunately, however, the auxiliary camera functioned properly and in one 24-hour period provided the pictures.

The photograph [Fig. 1] taken about 4:32 a.m. on June 20, shows what appears to be upper torso, neck, and head of the "creature". The body surface is dappled.

According to the densitometer measurements and the light-cone measurements mentioned earlier, the picture shows that the body was about 25 feet from the camera and extends from the bottom of the frame about one-quarter way into the frame. The neck would not be fully illuminated in such a position, but one could assume that the lit upper portion of the frame is connected to the lower portion.

As we interpret it, the neck portion of the object extends forward about ten feet, so the head would be only about 15 feet away from the camera, casting a shadow on the neck portion. Adding the length of the neck segment to the 8-foot body segment, one obtains a total length of about 18 feet, and the body probably extends for a considerable distance beyond the boundary frame of the picture. The torso is about 6 feet across.

The most likely interpretation [of the "head" photograph, Fig. 2], it seems to us, is that it is of the head of a creature, with bilateral symmetry indicated, in half profile, with the nostrils and open mouth at the right, and several horn-like projections at the

top. The object was about five feet from the camera, so it was illuminated only by scattered light outside the strobe beam and not the beam itself. Measurements indicate the "neck" to be about one-and-one-half feet thick, the "mouth" nine inches long and five inches wide, and the horn on the central ridge six inches long. There are two projections from the head, one before the "eye" on the near side, and the other, presumably, before the "eye" on the invisible far side. These projections are about ten inches apart. (Interestingly, this last measurement agrees well with the measurement of the distance between the tips of two projections producing parallel wakes photographed moving along the loch by Carol Rines, one day during the 1975 expedition. Photographs taken through a Questar telescope showed the wakes to move for a considerable distance along the loch, remaining parallel all the while.)

Because the entire "head" and details of its connections to the "neck" are not in the picture, it is impossible to make an accurate calculation of its size, but an estimation would be of about two feet long.

TENTATIVE CONCLUSION: AQUATIC CREATURES

Taken together, at the very least the 1972 and 1975 photographs, and the sonar evidence, agree well with one another and with past evidence that there is a species of large aquatic creature in Loch Ness. The 1975 body and neck resemble one of the objects in the 1972 series.

Although we make no claim to being expert zoologists, we

can find no combination of phenomena that account for these data as well as the simple explanation that a large creature inhabits the loch. Not even the experts have offered a plausible alternative explanation, in our view. In addition, there have been other investigations which suggest that the loch is capable of supporting a breeding population of such animals, and that physiological adaptation to the cold loch waters is quite feasible for a wide variety of candidate species.

In any case many scientists have at least now agreed that these phenomena bear further investigation [see *scientists' statements following*]; further expeditions will soon be underway, and we hope better data will follow shortly.

Because of the strong indications our evidence gives of the existence of this large aquatic creature, Sir Peter Scott has taken the lead in bestowing the scientific name *Nessiteras rhombopteryx* upon it, so that it may be eligible for protective legislation. *Nessiteras* is a composite word combining the name of the loch with the Greek word *teras*, genitive *teratos*, which means marvel or wonder. The specific name *rhombopteryx* is a combination of the Greek *rhombos*, a diamond or lozenge shape, and the Greek *pteryx* meaning fin or wing. Thus, the name is consistent with the data we have on the size of the animal and the shape of its flipper.

We are told that it is clearly unsatisfactory, from a zoological point of view, to base a name on photographs rather than on the remains of an animal, or at least some part of it. However, description from an illustration is permitted by the International Code of Zoological Nomenclature, and the procedure seems justified by the need to enact legislation to prevent decimation of what might well be a small population of animals.

SCIENTISTS ON THE LOCH NESS PHOTOS

The following are excerpts from statements by various experts, after having examined the 1972 and 1975 evidence on the Loch Ness phenomenon.

"Sonar experts interpret the smaller objects as fish and the larger objects as animate objects in the 20- to 30-foot size range. I concur with this interpretation and further suggest that these are fish and the recently described *Nessiteras rhombopteryx*, previously known as the Loch Ness monsters."

—George R. Zug, Ph.D.
Curator, Division of Reptiles and Amphibians
Smithsonian Institution
Washington, D.C.

"I personally find them [the photographs] extremely intriguing and sufficiently suggestive of a large aquatic animal to both urge and recommend that, in the future, more intensive investigations similar to the type that you have pioneered in the past be undertaken in the loch."

—A. W. Crompton
Professor of Biology
Director of the Museum of
Comparative Zoology
Harvard University
Cambridge, Massachusetts

"—We believe that none of the (1975) photographs is sufficiently informative to prove the existence, far less the identity, of a large living animal, therefore any comment on the photographs can only be speculative. The most that can be done would be to assess the probability of any interpretation being correct.

"With regard to the photographs taken in 1972 (one of which

has been published in *The Photographic Journal*), Dr. Zug of the United States National Museum of Natural History, has said that 'computer enhancement of one frame produces a flipper-like object.' We cannot disagree with this comment, but the information in this photograph is insufficient to enable us to attempt even the broadest identification.

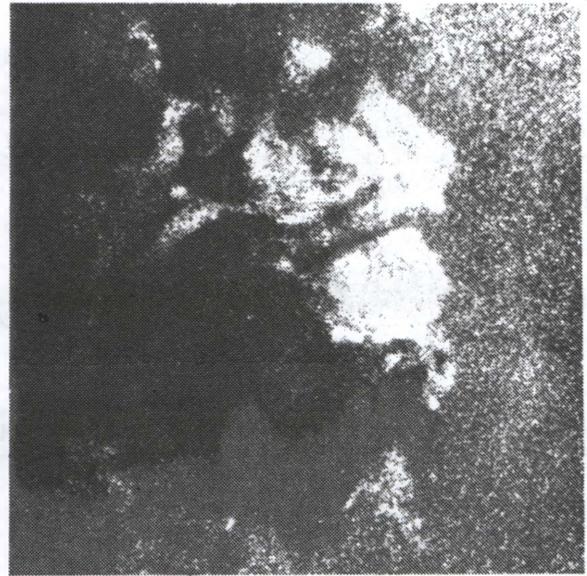
"Photographs . . . marked 'head' and 'neck'; this probably should be interpreted as two objects since there is no trace of an image connecting the 'head' and 'neck'. If it were all one object the strength of the images of 'head' and 'neck' would be incompatible with the complete absence of an image of a connecting structure. We have no obvious interpretation. If indeed it were a single object, it would have a shape suggestive of an elasmosaur, but the outline is very blurred and conceivably various floating objects could assume this form."

(With the exception of the "head" photograph the museum scientists could not find the suggestion of an animal in the other 1975 pictures.)

—J.G. Sheals, Keeper of Zoology
G.B. Corbet, Deputy Keeper of Zoology
P.H. Greenwood, Fish Section,
Department of Zoology
H.W. Ball, Keeper of Palaeontology
A.J. Charig, Curator of Fossil Reptiles
Natural History Museum, London

" . . . I am satisfied that there is sufficient weight of evidence to support that there is an unexplained phenomenon of considerable interest in Loch Ness; the evidence suggests the presence of large aquatic animals."

—Christopher McGowan, Ph.D.
Associate Curator
Department of Vertebrate Paleontology
Royal Ontario Museum
Toronto, Canada



Left: Fig. 1

Above: Fig. 2

Photos courtesy of, and copyrighted by
Academy of Applied Science, Boston, Mass.

II. SCIENTIFIC METHOD ... OR MADNESS?

By James M. Breece, III

"In nearly all matters the human mind has a strong tendency to judge in the light of its own experience and prejudices rather than on the evidence presented."

— Beveridge

They weren't supposed to happen, those monsters in the lake. Phantom humps and long-necked wraiths were to be excellent manifestations of mass hallucination: people seeing what they wanted to see — not what was really there. There weren't supposed to be any *real* monsters — flesh and blood creatures that could be captured on film, computer enhanced, and seen to be unmistakably real. They are a heretical, vicious gauntlet hurled in the face of the scientific Establishment and in direct violation of its edict: The creatures in the lake *cannot* exist.

From the very beginning of the problem, the Establishment has sent its heralds to decry the stories of honest folk. Mark the utterings of E.G. Boulenger, Director of the aquarium at the London Zoo, who in 1933 began the onslaught: "The case of the Loch Ness Monster is worthy of our consideration if only because it presents a striking example of mass hallucination...."

And concerning the Hugh Gray photograph, J.R. Norman of the British Museum slays the evidence: "The possibilities leveled down to the object being a bottlenosed whale, one of the larger species of shark, or just mere wreckage." Ambiguities are weapons too. Also from the British Museum, a W.T. Calman stated that scientists dealt only with specimens and that he wouldn't believe in the Loch Ness Monster until he had a specimen. Of course the British Museum was not about to form an expedition to obtain one. To deny the problem further, Sir Arthur Keith proclaimed that the Loch Ness problem was one for a psychologist — people were seeing what they wanted to see — and, after all, if there had been a monster in the loch all this time, science would have known about it. Sir Arthur was quickly backed up by another Sir Arthur — Sir Arthur Smith-Woodward — who claimed that the theories in favor of the monster being a prehistoric reptile were all wrong due to the fact that no fossils had been found of such a creature in any strata higher than mesozoic. (He should have searched in the bottom of the loch.)

It should be noted here that, much to the chagrin of the scientific community, both of these Sir Arthurs were experts on "Piltdown man," a skull supposedly of a sub-man found in the south of England and causing quite a stir. However, in 1953 the skull was proved to be a hoax, and the poor Sir Arthurs had championed the wrong cause.

Despite these and other valiant onslaughts by the knights of science, the monster persisted. New and better assaults were

mounted and the Establishment sent in the reserves armed with splendidous *a priori* pronouncements. Behold W.R. Gregory, bearing the shield of the American Museum of Natural History, who managed to harass the monster of the loch armed only with tourist-trade postcards from Inverness, and an article in *Natural History* in which he refused to even mention any of the reports made by eyewitnesses.

ENTER JAMES RITCHIE

But, as magnificent as this feat was, the greatest champion of *a priori* had to be the ex-curator of the natural history department of the Royal Scottish Museum, James Ritchie.

Now Ritchie, it seems, took himself down to the edge of Loch Ness to get at the bottom of the problem. After one complete morning of arduous and dedicated scientific observation, he decided that since he had seen nothing, no one had seen anything (or, at best, had not recognized some common object for what it really was). He said so in a note to *Nature* in 1933. Later he wrote again in *Nature* implying that the photograph taken by Mr. Hugh Gray depicted no animal at all, but that there was little doubt that it was a photo of a large grey seal. The next year a remarkable sighting took place.

Ritchie seized upon the report of the sighting printed in the *Scotsman* and, with butcher knife in hand, proceeded to write again to *Nature*. He so unscientifically disregarded the true report that one begins to wonder whether or not he would have recognized Nessie if she had swam up to him on the banks of the loch and kissed him on the cheek.

After all these sticks and stones (and many, many more) have pelted poor Nessie, it is no small wonder that research at the loch has persisted, and yet such people as Dinsdale, Wichell, Whyte, Tucker, Rines, and Mackall continuously do battle with the forces of the Establishment. They expect to win the battle in the end because they believe the monster exists and its credibility is assured. One hopes that, now that the "dirty work" is done, these dedicated people will not be brushed aside while Establishment troops occupy the loch. Already some members of Parliament are trying for measures to protect Nessie against "expeditions of underwater harpoonists." Reported in the British press, "Hector Munro, an opposition Conservative, intends to ask the House of Commons this week what legal provisions exist to protect large reptiles in Loch Ness." The Establishment is making inroads where it dared not go before.

OPPOSITION CONTINUES

The battle is not over yet, by any means, even though the war is almost won. As the evidence piles up for Nessie so does the opposition. In 1968, Professor D.G. Tucker of Birmingham University used his digital sonar at Loch Ness. His results indicated the presence of either two very large animals or shoals of fish. Fishery biologists consulted about the objects could not determine what kind of fish they might have been, and the high rate of ascent and descent of the objects suggested that they were not fish at all. Professor Tucker was answered for his troubles with a bald-faced lie appearing, once again, in that august periodical, *Nature*.

It reported in December 1968 that "there is little reason to take seriously the claims of Dr. Braithwait and Professor Tucker to have found a monster." The article goes on to point out that the Professor's digital sonar had been tested at a place called Lowestoft and had been found to be defective. *Neither Professor Tucker nor the digital sonar device had ever been near Lowestoft.*

Members of the Academy of Applied Science in Boston managed to take the remarkable photograph showing a flipper of a large creature in the loch in 1972. The photos, as are the latest, were computer enhanced for clarity by NASA, and the scientific Establishment ignored them completely (probably no mean honor for the Academy.)

Why does the Establishment vent its spleen on persons dedicated to solving a scientific problem in a scientific way? The Establishment supposedly adheres to the principles of the scientific method which, according to Webster, is "principles and procedures for the systematic pursuit of knowledge involving recognition and formulation of a problem, the collection of data through observation and experiment, and the formulation and testing of hypotheses."

The Establishment has arbitrarily thrown the scientific method out the window by refusing to admit that there is a problem at all. Why has it taken this stand? W.I.B. Beveridge, in his *The Art of Scientific Investigation*, states that, "If the ideas are too revolutionary ... depart too far from reigning theories and cannot be fitted into the current body of knowledge, they will not be acceptable," and "Innovations are often opposed because they are too disturbing to entrenched authority and vested interests in the widest sense of that term." And yet he goes on to plead that the body of knowledge can only grow where knowledge is accepted and outdated ideas are constantly replaced by new.

There are probably good psychological reasons for members of the Establishment to act the way they do. Somehow they seem to feel threatened by the Loch Ness problem, and by the Abominable Snowman/Bigfoot/Sasquatch problem, and by the UFO problem, etc. Could it be that the majority of the scientific community is suffering from acute paranoia? When you catch a scientist alone, buy him a few drinks and close the curtains so no one can hear; he will agree, more than not, that it would be fascinating to do research at Loch Ness, or The Dalles, or wherever a good challenge awaits. But, put this same scientist outdoors again and he either clams up or joins the opposition. Fear then draws him back into the fold of the Establishment. He is afraid for his livelihood and his professional credibility. Healthy fears, those. His superiors are probably just as afraid as he is and so, right on up the ladder until somewhere, someone sets the policies. And that someone is probably afraid that he will lose his funding if he appears foolish ("Better to be safe than sorry").

Perhaps the proven existence of Nessie will usher in a new era of scientific enlightenment, but I doubt it. There will be other wars to fight. The Establishment is striving just as hard against Bigfoot, and UFOs will continue to feel the onslaught for many years to come. But perhaps its teeth will be dulled a little when one can say, "But look what you said about the Loch Ness monster — you were wrong then, you might be wrong now."

No, they weren't supposed to happen, those monsters in the lake.

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III. THE POHENEGAMOOK CREATURE

By Michael Bradley

Since the latter part of the nineteenth century there have been frequent reports of a large, unidentified animal in the waters of an obscure Canadian lake. Sightings were so intense in 1958, that the Canadian government reacted by sending a team of scientists to the area. Although they failed to develop conclusive evidence proving the existence of the creature, at least one of them, Dr. Vadim Vladikov, later expressed his conviction that it was real.

Lake Pohénégamook is seven miles long by about a mile wide. It is some 300 miles east of Montreal in fairly rugged, hilly "Shick-shock Mountains" that eventually form the spine of the Gaspé Peninsula. Three lakes more or less march into the Gaspé Peninsula: Pohénégamook, Témiscouata and Matapédia ... in that order from west to east. Anything that would exist in the smallest lake, Pohénégamook, would likely also be found in the other two since their fauna is in every respect identical.

At Pohénégamook, as at Loch Ness, we basically have two categories of sightings: long necks projecting from the water; and, more commonly, "backs" which are invariably compared to "overturned boats" proceeding across the water. In addition, at both Pohénégamook and Loch Ness there are one or two rare reports of the creature near the water but ashore.

Also, and perhaps this is significant in view of the Cree Indian legends which follow, at both Loch Ness and Lake Pohénégamook there was a "flap" of sightings during road construction around the lakes (circa 1930 for Loch Ness, circa 1957-58 for Pohénégamook).

FIRST SIGHTING

The first sighting of Pohénégamook's monster took place sometime before 1900 when Alex Belanger, the respected owner of a local saw mill, saw what he described as a "huge fish," only partially submerged, going across the lake. In 1922, Alfred Levasseu claimed to have seen the back of some submerged creature which resembled an "overturned boat."

Cyprien St-Pierre, who was 93 years old in 1974, saw the monster in 1892 and described it as a huge "fish" with a bump on its back which jumped completely out of the water.

Leo Ouellette saw the monster while fishing on the lake in mid-May, 1968 when "I saw a big dark mass surface near me. I saw only its back, but it seemed to me that it had two humps ... I was so afraid I never want to see anything like it again." Ouellette's monster was, by interview, about 20 feet in length as far as he could judge.

Mrs. Phillippe Gagné saw the monster in May, 1958: "I accompanied my husband fishing...when I spotted, some fifteen feet from the boat, the head of a fish as big as a pumpkin. This was about four o'clock in the afternoon. As I watched it, the head went underwater, followed by a body about fifteen feet long. A splash of water went ten feet in the air. About twenty-five feet away the fish surfaced briefly before going once more under water. It all happened so quickly that my husband and I couldn't see what it looked like."

Omer Sirois, Eudore Simard, Wilbrod Théberge and Jean Guy Lepage (all of St-Eleuthère) claim to have seen "a long neck with a horn" projecting from the lake at various times between 1957 and 1969.

In 1957-58, while a road was being constructed around the lake, monster sightings increased into what could be called a "flap". The question of the monster, which the villagers had nick-named "Ponik", was raised in Quebec's National Assembly (parliament) with the demand that the government

should do something about the situation. Accordingly, in October, 1958, government biologist, Dr. Vadim Vladikov, and his assistant, Marcel Shields, were dispatched to Lake Pohénégamook with the object of harpooning "Ponik". They were unsuccessful in this undertaking, but, according to the press of the time (*L'Action Catholique*, *Le Soleil*, *Samedi-Dimanche*), Vladikov did conclude that some sort of large and unknown creature did exist in the lake.

After the failure of Vladikov's harpooning attempt, the government extended the 1958 fishing season on Lake Pohénégamook to give local sport and commercial fishermen (from Lake Témiscouata) a chance to capture "Ponik".

THE GOVERNMENT SEARCHES

The official Quebec Government biological survey team which was sent to Lake Pohénégamook in July, 1958, was met by a deputation of villagers headed by the priest of the largest (of two) lakeside villages, St-Eleuthère. This priest, the Abbé Leopold Plante, and his flock had assumed that the government biological team had come to Lake Pohénégamook for the express purpose of catching or killing the monster which had been reported in the lake since 1874. The biological survey team, which had not come to catch the monster, of course, thought that the villagers were somewhat insane, but were forced into trawling for the monster with herring nets by irate villagers.

The above represents the gist of a somewhat lighthearted official report submitted by biologists Leon Trenblay, Jean Brousseau and Roger Le Jeune. They referred to the episode with the villagers as "le farce du monstre" and related also that the villagers believed Lake Pohénégamook to be bottomless. No good description of the alleged monster is given in this official report, but the biologists refer to the villagers having claimed to have seen the monster's "back, horn and tail."

It wasn't much to go on, but on December 18-19, 1974, I went to Lake Pohénégamook and sought out eyewitnesses. A rather amazing story emerged, none of which is referred to in the official file in Quebec City.

I talked with Abbé Plante who claimed to have seen the monster several times, the last time in 1957. He saw a "back" like an overturned boat (un cannot reverse) proceeding across the lake. This "back" was, in his estimation, about 25 feet long, and grayish in colour and looked a bit "slimy."

Abbé Plante put me onto several other eyewitnesses and promised to send me newspaper clippings about the monster. He said that "the first reports" by villagers occasionally described the monster *out of the water* and sunning on shore at the north (uninhabited) end of the lake. According to Plante, one of his flock reported that he had seen a creature with *four flippers* so sunning itself.

In January, 1975, while I was in the Gaspé Peninsula, Abbé Plante sent his collection of newspaper clippings. These clippings revealed that Gaston Pinchaud, of the neighboring village of Estcourt, claims to have seen the monster in 1972 at the south end of the lake. Pinchaud is the mayor of Estcourt. He, too, saw only a large "back" of a grayish colour going across the lake.

The correlation of these flaps with road-building activity would seem to support Holliday's view (*The Great Orm of Loch Ness*) that these creatures are disturbed by the vibrations of heavy equipment and blasting associated with road construction.

Apropos of this, inquiries to Dr. Remy Savard, a consulting anthropologist with the James Bay Development Corp., elicited the information that various Quebec Amerindians have legends incorporating a huge lake creature. This creature is mentioned along with known forms in zoological-catalogue type myths. The Cree of north-central Quebec, style this huge lake creature "Mantouche," according to Dr. Savard, and they associate its

appearance with the calm days and distant thunder of August. This association with distant thunder would apparently be another correlation of monster sightings with low-frequency vibrations. Unfortunately, Dr. Savard's field of interest is "mythology" rather than zoology. He could not tell me whether the same or other Cree traditions include a description of the "Mantouche."

IV. FLATHEAD LAKE MONSTER UPDATE

by Tim Church

Quite a few new pieces of information have popped up since the initial report on Flathead Lake, Montana was published in the October, 1975 issue of *Pursuit*. Most of this is new, but some corrections of the earlier information must be made:

1) I stated that the largest fish known in the lake were salmon weighing around 5 lbs., but I overlooked the presence of Mackinaw trout which go up to 40 lbs.

2) I reported the salmon spawning season as running from November through December, whereas it starts in October.

3) The sturgeon found dead in Wisconsin was in Rainbow Lake, near Waupaca, not in Lake Winnebago. (Further information would be welcomed.)

THE NEW INFORMATION

1954 — Carl Ahlgren, former legislator and Admiral of the Montana Navy (?) said that while he was ice fishing, a sturgeon poked its snout up through a hole. Startled, Ahlgren looked around and guess what he saw protruding from another hole 14 feet away? Why, the tail of course! If that isn't a fishy story, I don't know what is!

August 21, 1961 — A boatload of fishermen said they were circled by a "monster" while fishing near Bigfork. It left when another boat approached.

1961 — A waterskier said that when she fell, a huge fish "many feet long" jumped out beside her. It was suggested that this was a Mackinaw trout, which seems likely.

Spring, 1961 — Mr. and Mrs. Leo Howell, reported seeing a fish of tremendous size cavorting off the east shore, north of Skiddo Bay.

Early Summer, 1961 — About a dozen people reported seeing a "long black object" swimming past Finley Point into the main lake.

Summer, 1961 — A California car screeched to a halt in the middle of a bridge which crosses Flathead River near Polson. The people scrambled out to watch a strange black object, 15 feet long, moving against the current into the lake. At that moment a Polson resident stopped and also observed the disappearing creature. One of the California people asked, "What on Earth do you have in this lake?" (What indeed!)

September, 1963 — Two Polson teachers, Miss Heather McLeod and Mrs. Genevieve Parratt reported seeing a "dark gray object with three humps," swimming through shallow water on the east shore. They watched for about five minutes as the creature swam away with a rhythmic, undulating motion. Only about 10 feet of its length was visible.

July 11, 1964 — An anonymous woman reported to the papers that at 9 a.m. in front of the Queen's Court Motel she had watched a long gray object swim past, 100 yards offshore. The same day other people described a similar creature in a small bay.

Unfortunately I was unable to accomplish much in the way of interviewing witnesses last summer. About the only thing I did was to drive around the lake. Doing so I realized that camera surveillance was "out", because the lake is just too big. Possibly certain areas could be covered, but I feel the evidence at this point would not justify the effort.

Some friends keep saying that they have heard that Flathead Lake is connected to other lakes by an underground passage, but I know of no evidence to support this connection. They also added that they had heard of divers who refused to dive in the lake after seeing huge forms swim past them underwater. And finally, I heard of the existence of a photograph of a long, dark shadow gliding beneath the Polson Bridge. I will try to obtain copies.

I confess to an inability to draw a conclusion from this jumble of reports. The existence of sturgeon in the lake is something I favor, but then why is only one, and a dubious one at that, said to have been caught?

Sources

Missoulian, Missoula, Montana, July 25, 1964, Sept. 6, 1964, Sept. 13, 1963.

Great Falls Tribune, Great Falls, Montana, March 31, 1963, Feb. 12, 1959.

V. MEANWHILE IN ITALY — THE GORO MONSTER

By Edoardo Russo

Although it can not properly be classified as a traditional sea serpent or fresh water monster, Italy's howling canal creature deserves a place among those piscatorial oddities. In June, 1975, Maurizio Trombini was hoeing his tomato plants on his farm near Goro, just across the Po River from Venice, when something rustled in the plants and strolled past the surprised farmer. Quickly labeled "the Goro Monster" by the press, the creature became a major celebrity in Italy during that long, hot summer.

Sr. Trombini described it as a large snake with legs three meters long, and as thick as a dog. It was over ten feet long with "an ugly and mean dangling tongue." Sergeant Starchelli, commander of the local police station, took Trombini's excited report seriously and sent a telegram to higher officials in Ferrara. Police and soldiers were soon trampling the tomato plants and measuring strange tracks some twenty centimeters wide.

The Goro Monster has been seen several times in previous years and apparently resembles a mutated multi-legged centipede. At night it has been heard to utter a cry similar to the howl of a wolf. Local citizens claim that it first came from Venice, while well-informed "experts" ("Who are these 'experts'?" both Fort and Sanderson used to gamble) have seized upon the obvious explanation: the creature is obviously a crocodile which escaped from a zoo, acclimatized itself to the canals, and obviously enjoys foraging among tomato plants.

References: *La Stampa*, Turin, Italy, June 28 and 29, 1975.

VI. AND IN AFRICA — NESSIE JUNIOR?

by Jan-Ove Sundberg

Another "freakish creature" had his picture published in *The Daily News*, Tanzania, Africa, on May 28, 1975. It appeared to be a roundish lump of animal matter. The caption described it thusly: "This is the strange creature which was caught recently by fishermen at Kilwa Masoko. It has two legs with toes, two arms with five fingers on each and two eyes, one of which glows at night. It also has a small horn, an ear, a hump and a toothless mouth with a large tongue." Dr. Tumaini Mcharo of the Serengeti Research Institute in Arusha was investigating at last report.

SITU has not yet obtained a copy of the photograph, but from the description of the head, this creature has simply got to be Nessie's cousin!

LAND MONSTERS

I. RECENT EVIDENCE OF THE YETI, AN UNKNOWN PRIMATE, FROM THE HIMALAYAS

by Edward W. Cronin, Jr.

ABSTRACT: On December 17, 1972, the author, accompanied by Dr. Howard Emery and two Sherpa assistants, made camp on a completely clear snowfield atop a ridge at an elevation of 12,200 feet in the Himalayas of eastern Nepal. On the morning of the 18th, a set of tracks was discovered in the snow indicating that a large creature had walked through the camp during the night; these spoor are not referable to any known fauna of the Himalayas; these spoor closely match those recorded by earlier observers in the Himalayas and attributed to the yeti; these spoor suggest a creature using bipedal locomotion and with a foot morphologically similar to Gorilla gorilla. Based on the imprints left in the snow, a hypothetical reconstruction of the creature's foot is made and compared to the feet of known Himalayan large mammals.

INTRODUCTION

For the past two hundred years, reports of the yeti, or Abominable Snowman, have come out of the Himalayas suggesting the existence of an unknown primate hidden by the steep topography and inaccessibility of the mountains (Howard-Bury, 1922; Dyhrenfurth, 1959; Tschernesky, 1960; Tcherine, 1970). A composite description of the yeti can be constructed based on the various eye-witness sightings and photographs of footprints: Its body is stocky, ape-like in shape, and about 5 ¼ to 6 ½ feet tall, covered with short, coarse hair, reddish brown or greyish brown in color; the hair is longest on the shoulders. The head has a pointed crown indicating a marked sagittal crest. Small ears lie close to the head; the face is hairless and rather flat; the jaw is robust, the teeth are quite large although fangs are not present, and the mouth is wide. The arms are long, reaching almost to the knees. There is no tail. The creature walks primarily on two, rather than four feet, i.e., using bipedal locomotion. Its foot is large, some 12 ½" long by 7 ½" wide, with the heel nearly as broad as the forepart of the sole. The great toe, or hallux, is exceptionally large, with the second toe the longest and relatively thin, while the remaining three toes are short, stubby, and united towards their base. The hallux is separated from the second toe in such a way as to suggest an opposable condition similar to that of known apes (Pongidae). Sanderson (1960) provides a thorough review and analysis of such reports, and they need not be further discussed.

From October, 1972, through March, 1975, I have been working in the Himalayas as chief scientist of the Arun Valley Wildlife Expedition. This interdisciplinary expedition conducted the first ecological survey of the remote Arun Valley located in far eastern Nepal; new species were discovered in several taxa, numerous distributional records were established, while significant ecological and behavioral data were gathered on selected species. Since reports of the yeti came from this area in the past (Ward, 1970), the expedition devoted special efforts to gathering new evidence on the yeti, and collecting background data on known mammals that would be serviceable in an evaluation of such evidence.

METHODS

Photographic documentation and measurements were regularly made of the spoor, especially footprints, of large mammals frequenting the upper elevations, above 9,000 feet, where there is an annual covering of snow, and the high-altitude zone, above 14,500 feet, where there is a perennial covering of snow. Plaster casts were made of the footprints in the snow of suspected yeti prints and of the footprints of several large mammals, including the Himalayan Black Bear (*Selenarctos thibetanus*), and the Snow Leopard (*Panthera uncia*). Possible variations produced in such prints by different snow conditions, terrain, and activities of the animal (running, walking, etc.) were noted.

NEW EVIDENCE

In December, 1972, Dr. Howard Emery, expedition physician and parasitologist, Mr. Jeffery McNeely, expedition co-leader and mammalogist, and I decided to make a trip to the high-altitude areas around Kongmaa Mountain to investigate the winter conditions of the ecosystem and search for yeti prints. We left base camp in the Kasuwa Khola on the 14th. Although the weather was excellent, with a clear sky, warm sun, and little wind, an earlier snowstorm had deposited several feet of loose snow that made trekking difficult. By the 16th, our porters refused to continue, and McNeely accompanied them back towards base camp. Emery and I, assisted by two Sherpas, continued on to Kongmaa, on the 17th reaching an elevation of 12,200 feet along a ridge connecting to the peak.

At about 1600 hours, we found a depression on the ridge that was suitable for a camp (27°43' N; 87°16' E) in that there was a flat place for the tents. The area was small, less than half an acre, and was a completely clear snowfield untouched by animal prints. The slopes on the north side of the ridge descended to c. 7000 feet on the Kasuwa River; the slopes were quite steep, varying between 15 and 40 degrees. We made camp, pitching two tents about 60 feet apart at one end of the depression. We had dinner around an open fire at the other end, and retired just after dark (c. 1800 hours) to our tents. The evening was calm with a clear sky.

In the morning, Emery climbed out of our tent at c. 0540 hours, and walking away from the tent, noticed unusual footprints beside the trail that we had made from the tents to the cooking fire. I immediately climbed out and joined him; there was a remarkable series of footprints which the Sherpas identified as yeti prints. I examined the series carefully and, judging by the direction of the toes on the footprints, it appeared that during the night a creature had approached our camp by coming up the north slope, had proceeded directly between the tents, and then had crossed out onto the south slope.

I investigated the tracks on the north slope first, and then could see large punch holes in the snow where the creature had ascended; because the north slope was covered with very deep snow (a function, in part, of the angle of the sun), the prints were confused and the deep holes revealed no details. I followed the prints down the slope for several hundred yards, and could see the track continuing down towards the river. The heavy snow made walking impossible, and at times, I was forced to crawl or hang onto the vegetation to stabilize myself. I was impressed with the strength the creature displayed in coming directly up the slope. There was a dense growth of rhododendron bushes (c. 3-10 feet tall) on the slope which was buried by the snow. I noticed where the creature had stepped carefully on top of individual branches, using the displacement ability of the branches to support his weight above the snow (we have recorded bears and snow leopards using the same method). The creature was obviously well-adapted to travelling in Himalayan terrain.

I returned to the top of the ridge where, because of the snow conditions, most of the prints were distinct and well-defined. The top of the ridge had been previously exposed to the sun in such a way that the snow had melted to form a thin layer of crystalline snow on top of a hard crust; in addition, the prevailing winds from earlier days had cleared all loose snow. Thus, the prints revealed the details of the toes and the general morphology of the foot. The prints measured approximately $8\frac{1}{2}$ " by $4\frac{3}{4}$ " (mean $8.6 + .3$ inches long by $4.7 + .4$ inches wide). The stride (distance between individual prints) was quite short (mean $21 + 8$ inches) and it appeared that the creature had used a slow shuffling walk along this section. The prints displayed a short but large opposable hallux, an asymmetrical arrangement of the four remaining digits, and a broad, rounded heel.

We made a full photographic record of the prints (in both black-and-white and color transparencies) prior to the sun hitting them. We sent word with one of the Sherpas down to McNeely, who later came up with the supplies to make plaster casts of the prints.

We then examined the prints which continued onto the south slope where increased exposure to the sun had melted most of the snow. We attempted to follow the track, but lost it on the bare ground and rock. Farther up the ridge towards Kongmaa, what appeared to be the prints made by the same creature crossed back onto the top of the ridge from the south slope. The ridge at this point was covered with low bushes which enabled snow to accumulate, and the prints were again punch holes in the snow revealing little detail. This series of tracks crossed back and forth across the top of the ridge several times before disappearing on the south slope. We attempted to follow the prints onto the south slope a second time, but again, the trail was confused by intermittent patches of bare ground.

It was apparent to us that the creature which had made the prints was far stronger than any of us, and it was futile to attempt to follow it under the conditions of the slope and snow covering. Indeed, just to cover the distance the creature had travelled in coming up the north slope during the night would have taken us an entire day, if not two days. We investigated the possibility of a hoax perpetrated by our Sherpas, but discounted it after realizing that the Sherpas were not strong enough nor had they had the time to make the full length of prints that we could see from the top of the ridge. During the following three days, we kept careful watch for the possible reappearance of the creature and searched neighboring areas for additional prints, but there were no further developments. During the remaining 13 months of the Arun Valley Wildlife Expedition, we made several research trips to different areas to gather more evidence about the yeti, but they were unsuccessful and this was the only encounter we had with valid yeti prints.

ANALYSIS OF THE FOOTPRINTS

The footprints that we discovered in the early morning of the 18th were remarkable in their similarity to a footprint photographed by Eric Shipton and Michael Ward during the 1951 Mt. Everest Reconnaissance (Shipton, 1955). That photographed footprint has since become the "type-specimen" for yeti prints as it is exceptionally clear and distinct. The principle difference between our prints and Shipton's is size, our's being somewhat smaller. This difference could easily be accounted for by an immature creature or possibly a female (sexual dimorphism is not uncommon among Pongidae).

Like Shipton's print, our prints are not referable to any known animal of the Himalayas. Suggestions for identifying yeti prints range from bears, langur monkeys, snow leopards, wolves, and eagles to the wandering yogi. Such confusion is possible because some prints (reported by earlier authors) were in fact so old, exposed to melting by the sun, wind erosion,

or distortion in soft snow, that it is difficult to reach any decision. We know that our prints were made on the night of the 17th. We photographed them before sunrise; there was little wind (estimated less than c. 5 knots/hour) when we went to sleep. In examining our own footprints made the afternoon before with our own fresh footprints made on the morning of the 18th, we saw little distortion or erosion. Consequently, the creature's prints, like Shipton's, were fresh and made on a thin layer of crystalline snow so that specific comparisons of the yeti prints and known mammal prints are possible.

Figure 2 illustrates a reconstruction of the creature's foot based on the photographs of the footprints we discovered at our camp. The hallux is set down to the side in a manner similar to the foot of *Gorilla gorilla* (Figure 3) and thus is too short and too opposable to permit confusion with the human foot (Figure 1); although many of the local hill tribe people seldom wear shoes and thus often have splayed toes, their hallux is never as short relative to the other toes as displayed in the reconstruction. In comparison with monkey prints, such as the Langur Monkey (*Presbytis entellus*; Figure 4) which is known to frequent areas up to 12,000 feet in the Himalayas, the foot is too small and the entire musculature is different; the width/length ratio of a langur foot is approximately 25% while that of the creature's foot is more than 50%, making even a giant langur foot too narrow to be considered. Hypotheses that entertain the possibilities of snow leopards or wolves (which have nearly rounded prints), and eagles (which have four narrow toes in a palmate structure) are ludicrous.

Bears, because of their size, habits, and habitat, are the most likely candidates. There are three species of bear known to inhabit the Himalayas, and one, the Himalayan Black Bear (Figure 5, forefoot; Figure 6, hindfoot) is a frequent visitor to the areas around Kongmaa Mountain. During the expedition's stay in the Arun Valley, we encountered numerous bear prints which the local villagers would occasionally identify as yeti prints. Bears often walk by placing their hindfoot on the print of the forefoot thereby distorting individual prints and permitting villagers to mistake the actual shape of the bear's feet. However, in even a short series, bear prints invariably show the equally sized, symmetrical arrangement of the toes typical of the group. Our creature's prints, by comparison, show distinctly larger and smaller toes, arranged in a characteristic asymmetrical pattern. Further, bear prints have a narrow, drawn-out heel, and usually include impressions of the claws, neither of which were evident in our series of yeti prints.

The arrangement of the creature's prints demonstrated a left-right-left-right pattern, without overlapping, that indicates bipedal progression. There was no indication that more than two appendages were used at any one time to make the entire series of tracks. Although numerous authors (see also, Reynolds, 1967; Hagen, 1961) have concluded that the yeti walks on two feet, bipedalism seems to have aroused the greatest controversy and source of disbelief among yeti sceptics.

Bipedalism is often thought by the uninformed to be unique in man among primates, but it is actually by no means rare among apes. Gibbons, for example, are habitually bipedal in walking, and all other apes are capable of bipedalism at times. Adriaan Kortlandt (1962) found that chimpanzees he was studying walked bipedally for 10-15% of the distance they covered. Dr. Sydney Britton found that the captive chimpanzees he was studying walked bipedally when there was snow on the ground. George Schaller (1964) reported that gorillas frequently walked bipedally when the vegetation was wet, presumably to keep themselves dry. Nor is bipedalism a recent adaptation of the apes; according to Pilbeam and Simons (1965), "the Miocene apes and their Oligocene ancestors probably showed a high degree of trunk erectness and doubtless spent much time walking or running bipedally either in trees or on the ground." In

careful analysis, it not only seems possible, but altogether likely that an ape who frequents the high snows of the Himalayas would be using bipedal locomotion.

The creature that made the prints weighed less than or equal to the weight of an average man. Comparison of the depth of my own footprints (I weighed approximately 185 lbs., including winter clothing and boots) to that of the creature's footprints indicated that my prints were slightly deeper and suggested that this individual weighed c. 165 lbs. This estimate is based on the assumption that there was little change in the ability of the snow to bear weight between the time the creature made its prints and when we compared my prints.

The circumstances of the creature's visit support the often considered hypothesis that the yeti is nocturnal. This seems probable as many large mammals, such as certain elephant populations in South Asia, have adapted to nocturnal activity because of disturbance by man. The circumstances also indicate that the creature displayed some curiosity behavior (not unlikely, if it was indeed an immature). It appeared that the creature approached our camp by following a natural spur up the ridge to cross from the Barun to the Kasuwa River valleys at a point which would enable it to avoid the heavier snows further up the ridge. Although it is possible that the creature saw our camp during the first hour of darkness on the 17th, it seems more plausible that it did not know our camp was there until it was almost upon it; the point at which it first reached the top of the ridge was some 20-30 yards east of our camp. However, rather than turn back, or cross the ridge at that point, the creature made a detour west along the top of the ridge towards our camp and eventually passed directly between the tents. The tracks of the creature support the hypothesis that the yeti frequents the forested regions, using the snow-laden passes only to cross from one area to the next. The tracks came from the heavily forested valley of the Barun; the track did not appear to go in the direction of the higher snowfields, but rather, appeared to cross the ridge and continue towards the forests of the Kasuwa.

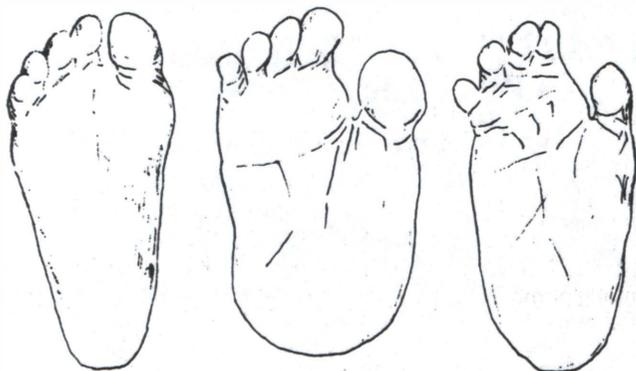
SUMMARY

The creature that visited our camp on the night of December 17, 1972, provided us with the opportunity to carefully document and analyze a series of tracks that are not referable to

any known animals of the Himalayas, and are definitely yeti prints in that they closely match prints recorded by Shipton and attributed to the yeti. Their resemblance to Shipton's print (discovered 21 years before and a long distance from our camp) indicates a uniformity of data suggesting the existence of an unknown anthropoid alive in the Himalayas, while undermining the possibility that yeti reports are the product of a predisposition to interpret varied data or a general hoax.

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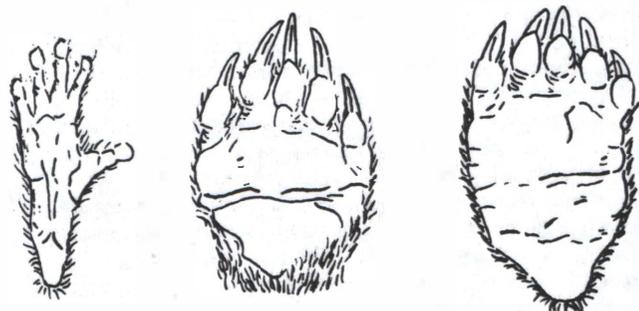
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Figure 1: Human foot

Figure 2: Reconstruction of yeti foot discovered in the morning of December 18, 1972.

Figure 3: Foot of *Gorilla gorilla*

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6.

Figure 4: Foot of Langur Monkey (*Presbytis entellus*)Figure 5: Forefoot of Himalayan Black Bear (*Selenarctos thibetanus*)Figure 6: Hindfoot of Himalayan Black Bear (*Selenarctos thibetanus*)

(All Figures drawn by the author, Edward W. Cronin, Jr.)

II. BIGFOOT, HOMO NOCTURNIS, UPDATE FOR 1976

by Peter Byrne

At the Bigfoot Information Center in The Dalles, Oregon, full time work on the Bigfoot phenomenon, now in its sixth year, progresses. So far 1976 has produced a fair amount of new evidence in the form of footprints, sightings (two) and historical background. The most interesting sighting was one reported in March. This sighting occurred south of The Dalles, where a woman and her two sons reportedly saw a large, dark creature climbing a boulder on the face of a steep hillside. Researchers were at the area within two hours of the sighting, where they employed night vision apparatus to scan the area in darkness. A dawn search was carried out on the following day. No definite evidence was discovered at the site.

Two sets of footprints (containing from 400 to 500 prints in each set) were found in north central Washington. Photographs of these prints suggest that they are valid Bigfoot tracks, although the original prints were not fresh enough when examined by our researchers, to be positively identified. A credibility rating of 6/10 was given. (The credibility rating scale used is 1/10. High ratings are in the 7 to 8 area, moderate in the 4 to 6 range, and the lowest rating is 1.)

Many people now know about the work which is in progress, and the aims which are the peaceful (non violent) solution of the Bigfoot question by a find that will provide conclusive proof of existence, to be followed at once by protective legislation (in the US and Canada), long-term behavioral studies and, in time, communication with the creatures.

METHODS

The Geo Time Pattern Method is a system that is used to determine the feasibility and potentiality of applying physical search to contained areas of probable habitat. It is, basically, a computerized form of study, the results of which indicate the most likely geographical areas for temporary habitat and the most likely time that the area may be used, as temporary habitat, by one of the giant primates. It is a method which has now been in use by Bigfoot researchers for about one year; it took more than four years of study before any usable results could be obtained. It is a method which holds much promise for the future, for it clearly indicates that these elusive giants do pass through certain geographic areas in regular time patterns.

The PR (public relations) Method is a system which, in effect, invites the general public to join in the search. The purpose of the system is to establish relations with a large segment of the general public whose work or play takes them on a fairly regular schedule into the general habitat of the primates. People are asked to write or call if they see or hear anything that looks as though it might relate to the phenomenon. In return they are promised that all reports will always be investigated regardless of how flimsy they may seem, and that complete confidentiality will be given to all persons making such reports. A long time ago it was realized that one major problem was the time gap that existed between an incident taking place or being discovered,

and the report of the incident to researchers. The PR Method of research was begun to bridge this gap and (it is hoped) to eventually eliminate it. To date it has been working with ever increasing success.

This year for the first time we are accepting offers of volunteer work from suitable candidates throughout the US and Canada, in the hope that we may increase our strength from the present four to eight or ten people in the coming Summer months.

The mystery of Bigfoot is not one that is going to be solved in a few days. It is one that may yet take years of patient study and research, and for those who may find discouragement in this, we say look to men like Tim Dinsdale at Loch Ness (now in his sixteenth year of research there), and to decades of endurance, patience and determination which lie behind many of the great finds of history.

III. QUEBEC SASQUATCHES, A BRIEF NOTE

By Michael Bradley

Ivan T. Sanderson's *Abominable Snowmen, Legend Come to Life* refers tantalizingly to three reports of Quebec Sasquatches, but few details were available, and the principals of the reports demand anonymity.

Dr. Remy Savard states that both the Cree and the Montagnais Amerindians have traditions of a Sasquatch-like creature which inhabits north-central Quebec. According to the Montagnais, there are two types: the *Mistabew* which are "good," and the *Atchen* which are "bad tempered." These two varieties apparently differ physically as well as emotionally, but again, Dr. Savard could give no descriptive information.

Chief Kirby (Iroquois) of the Cagnawauga Reserve near Montreal, and Richard Wood (another Iroquois leader, but not a chief) both claim to know of this Sasquatch-like creature although they could give me no Iroquois name for it. According to Wood, his grandmother saw one of these animals in north-central Quebec in the 1920s.

IV. THE KALIMANTAN MONSTER

A LITTLE SOMETHING FOR EVERYBODY

By Jan-Ove Sundberg

In November, 1975, the Indonesian news agency Antara reported the capture of an unusual animal in the jungle of Kalimantan. The creature was described as resembling a tiger, a bird, a goat and an elephant, and was being kept in a prison in Tengarong. Its goat-like legs were tipped with chicken-like claws while the body was similar to a tiger's, the neck was like that of a lion, and the ears seemed cow-like. It was also said to have a goatee like a billygoat's. No further information has been forthcoming and no scientist has yet identified it.

NOTICE

All manuscripts or correspondence pertaining to manuscripts submitted for consideration for *Pursuit* must be sent to Headquarters and not directly to individual members of the Editorial Committee. Please enclose a self-addressed stamped envelope if you wish your manuscript returned if it is not published; if published, the manuscript will become the property of SITU.

UFOLOGY

MAN-MADE UFOS?

by John A. Keel

Could some flying saucers be the product of good old American know-how? That question has been bounced back and forth like a volleyball since the first great UFO wave of 1947. In the early 1950's a young man named James Moseley leaped to prominence in the emerging field of Ufology by claiming that UFOs were of terrestrial origin. Later, no less an authority than Dr. Leon Davidson, a scientist who had worked on the atom bomb and other highly classified government projects, publicly accused the Central Intelligence Agency of creating the flying saucer hysteria as a clever propaganda device to cover-up certain intelligence activities. In 1967 *Tass*, the official Soviet news agency, issued a widely published news story claiming that the C.I.A. was behind the rising number of UFO sightings in the Soviet Union. Other top researchers, scholars, and scientists have also blamed the flying saucer mess on the C.I.A. over the years.

Is there any hard information to support this seemingly silly notion? Believe it or not, such information exists . . . and in vast quantity. There is very solid evidence that some earthly organization, worldwide in scope and heavily financed, is deeply involved in the UFO mystery and has been for a great many years, going all the way back to the rash of phantom "dirigibles" seen in 1897. Members of this organization have ruthlessly conspired to keep certain aspects of the phenomenon secret while deliberately distributing false information designed to convince the public — and some governments — that all flying saucers are spaceships from some distant planet.

This may be very difficult to swallow at first, particularly if you belong to the younger generation who have been raised on a diet of comic books, movies, and radio and television programs all advocating the extraterrestrial theory. A massive brainwashing program has been underway in all media ever since the late Allen Dulles managed to make the C.I.A. virtually autonomous in 1950 and, through some clever bureaucratic manipulations, succeeded in expanding its budget to the present-day estimated 6 to 8 billion dollars per year. You can launch a lot of saucers, or propaganda, with all those billions in your pocket. You can create the illusion of the existence of flying saucers without trying to build a single one.

THE PHONY REPORTS

Much has been written about the mysterious men who have appeared at UFO sites and given investigators false information about government research. On another level, actual officials working in government have deliberately "leaked" false UFO stories to newspapermen and writers. On still another level, many of the "classics" of Ufology never happened at all. Civilian UFO investigators received letters and phone calls describing events that never happened, and they published the reports without checking further. If they had tried to track down some of those correspondents for further details they would have discovered the alleged witnesses didn't even exist!

Over the years we have received many such reports, some of them very cleverly contrived and far beyond the ability of the average practical joker or even the average UFO buff. These hoaxes occurred on a massive scale worldwide in the 1960's. Some were so ingenious and so complex they simply had to be the work of a very well-financed organization. Various UFO journals around the world are still enthusiastically publishing these fictitious reports.

It all boils down to a single sobering fact: *somebody somewhere wants the belief in flying saucers to gain universal currency.* Someone has been working hard, and spending a great deal of money, to get the whole world to believe in the existence of flying saucers.

And they are succeeding!

HOW REAL IS REAL?

The historical record proves that disc-shaped aerial objects have been seen for thousands of years and are not unique to our own time. In 1896-97, and again in 1909-1914, cigar-shaped objects haunted the world's skies. There was no C.I.A. in those days, yet there were all kinds of mystery men identified with the phenomenon; strange "Foreigners" who visited UFO sites, took photographs, and on occasion even spread false evidence to confuse the situation. There were also many false "dirigible" stories planted in newspapers by unconfirmed letters and phone calls. Our mysterious organization was already hard at work.

When the modern period began in 1947, most of the objects reported were dazzling aerial lights and eerie green "fireballs," not mechanical objects. This trend has continued. Sightings of things that appeared to be metallic craft are still rare. But reports of such craft, based upon anonymous letters, unsubstantiated newspaper clippings, and leaks from official sources abound. UFO landing reports are also more numerous on paper than they are in reality. Dr. Davidson perceived this when he speculated that the early post-1947 landing reports were the products of a rumor factory. He concluded the C.I.A. was running that operation.

The contactee phenomenon began in the early 1950's when men like George Adamski, Daniel Fry, and Truman Bethurum claimed chance encounters with grounded UFOs in remote areas. Dr. Davidson speculated, correctly, that hypnotism, drugs, and the brainwashing techniques of modern psychological warfare played a vital role in these contacts. However, the amateur ufologists of that period were so concerned with proving the reality of flying saucers that they ignored the ludicrous contact stories or campaigned vigorously to discredit them. The only ones who attempted psychological studies of the witnesses were officers of the U.S. Air Force. (Some contactees were whisked away briefly to hospitals for thorough examinations by qualified psychiatric and psy-war experts.)

Cults of belief sprang up around some contactees, particularly George Adamski, and they became outer-space evangelists, spreading the sophomoric philosophies of the alleged space people to assorted mystics and people prepared to believe almost anything.

It became obvious to Davidson and a few others that the phenomenon could be split into two parts: the aerial sightings which have been continuous for centuries, and the contactee reports which were a new wrinkle and seemed to be serving some hidden purpose. It is probable that someone in the Air Force or some other branch of the government reached the same conclusion. *The aerial phenomena were being used by somebody to create a lore about visitors from other planets. Through hypnosis and other techniques, contactees were being created to act as propagandists for this myth. The apparent purpose of this tactic was to disguise the true nature of the aerial phenomenon and keep their terrestrial origin secret.*

Dr. Davidson believed that the C.I.A. saw the ploy as a fool-proof system for circulating their own propaganda. For example, according to Davidson, the 1950 contactees re-

peated warnings about our nuclear tests and this eventually led to the nuclear test ban treaty.

THE MEN IN BLACK

Well-dressed, olive-skinned gentlemen with Oriental features played an important role in the 1896 "dirigible" wave in San Francisco. Similar "agents" cropped up in the news stories about the UFO waves of the early 1900's. There were more "Men In Black" stories during the 1947 wave. These mystery men, representatives of our hypothetical Organization, busied themselves throughout the 1950's. They threatened witnesses, posed as U.S. Air Force officers, confused and even discredited investigators, and collected pieces of metal and artifacts that had accidentally fallen into the hands of innocent people. They seemed to be primarily concerned with artifacts of earthly metals which would prove the earthly origin of the objects.

Whoever they are, these MIBs are more efficient than our own bumbling C.I.A. They have appeared in almost every country on earth and they have been enormously successful. Today almost no one believes that the UFOs are terrestrial in origin. The extraterrestrial concept has swept the planet and been universally accepted by authors, scientists, military leaders, and even astronauts. The great propaganda effort has paid off handsomely.

There are clues, however, that someone in the U. S. government was not fooled by the outer-space ploy. In 1952, the C.I.A.-sponsored Robertson Panel ordered the Air Force to "debunk" flying saucers and combat the propaganda being spread by the UFO-believers. The result was open warfare between the UFO fans and the Air Force. At the same time, another kind of war broke out.

THE SECRET WAR

The Air Force's anti-UFO stance did not stop the new waves of flying saucers, nor did it curb the sinister activities of the Men in Black. By 1968 it became clear to a few of the more thorough civilian UFO investigators that more than one mysterious Organization was engaged in the UFO maze. *It seemed that two or more groups were busily using the UFO phenomenon to serve their own ends, and that these groups were in open conflict with each other.*

Was the C.I.A. operating on a hidden level, hypnotizing and drugging people in the name of the Space People to spread some propaganda of their own? If so, another group was using

the same tactics, often selecting police officers and security guards as their victims. Men who worked near secret military installations were lapsing into unconsciousness and later recalling fanciful experiences with flying saucers. At the same time, diversionary "contacts" were set up in the same areas. A few random farmers, housewives, and teenagers underwent similar brainwashing episodes, received extensive publicity and diverted attention from the police and security guards. Some of these cases may have caused paranoia in official intelligence circles.

Under deep hypnosis administered by skilled specialists, some contactees contradicted their own memories of flights in UFOs. Instead, their subconscious minds recalled being taken into ordinary trucks and vans where they were injected with needles, exposed to flashing lights and given post-hypnotic suggestions. Some were held for days while the treatment continued. The truck would move to another point some distance from the contact point before releasing them.

In short, these innocent people were kidnapped illegally by apparently normal human beings using vehicles made in Detroit. But they were made to believe that they had been taken aboard a flying saucer by weird alien beings. They remembered the drug injections as "blood tests." They were victims of the perfect crime!

We can only speculate on the real reasons underlying these manipulations. These things have been happening for years, they are costly, and must require large numbers of trained operators. Thus far they have been getting away with it because the press and the public have accepted the flying saucer stories and looked no further.

Each new UFO wave has produced further "evidence," not of extraterrestrial origin but of a concentrated psychological warfare campaign being conducted in an extremely sophisticated manner. Since only a small percentage of the victims ever surface publicly it is possible that many thousands of people have been covertly processed by these phantom brainwashers in the past thirty years, most of them retaining no memory whatsoever of the experience, or remembering only the flying saucer fictions planted in their minds.

Who are the members of these undercover Organizations? They are probably people just like ourselves. They could be cultists obeying orders from some elusive source. Or they could be a composite of all the ancient myths, hiding behind some perfectly legal religion or well-known society.

Dr. Davidson saw only part of the picture. The rest of the answer may be so bizarre that not even the most imaginative writer could resolve it.

SYMPOSIUM

Comments and Opinions

ANATOMY OF A BORE

"The Piri Re'is (sic) map stands out as proof that Earth was surveyed by a spacecraft thousands of years ago."

—Donald E. Keyhoe, *Aliens From Space* (1973)

Turn to any of the "ancient astronaut" books on your shelf, or Berlitz's *The Bermuda Triangle*, and locate one of the innumerable reproductions of the famous Piri Reis map. You will note that the entire left-hand margin is covered with Turkish writing. This notation, penned by Admiral Piri Re'is himself, states:

"This section explains the way the map was prepared. Such a map is not owned by anybody at this time. I personally drew and prepared this map. In preparing this map I made use of about twenty old charts and eight

Mappa Mundis; that is of the charts . . . prepared at the time of Alexander the Great and in which the whole inhabited world was shown; of the chart of the West Indies; and of the new maps made by four Portugese containing the Indian and Chinese countries geometrically represented on them. I also studied the chart that Columbus drew for the west. Putting all these materials together in a common scale I produced the present map."

The story of the rediscovery of Admiral Piri Re'is' handiwork is now well-known to all Fortean. But how did this crude, largely inaccurate depiction of the western world ever work its way into the ufological lore and assume such importance to the ancient astronaut theorists? Was it derived from standard maps available in the sixteenth century as the Admiral claimed, or was it traced from maps drawn by some long lost ancient

civilization? Did mysterious spacemen from antiquity leave us this peculiar legacy?

There is actually little doubt that the map was the product of the Turkish cartographer and if he had access to earlier charts drawn by wandering astronauts why was his work so inaccurate? What happened to those very important originals?

The notion that the Piri Re'is map was the product of an "aerial survey" began as a joke, a chance tongue-in-cheek remark by Captain Arlington Mallery. Plucked out of context by the UFO enthusiasts, it was quoted and requoted until it became a "fact".

Captain Mallery, an avid student of archaeological anomalies, came across the map in the National Archives in Washington, D.C. when he asked to view all their pre-Columbian maps of the New World. (There are many such maps.) He was trying to find the maps used by Columbus on his voyage. Columbus' brother was a cartographer and had access to all the best charts of that period. The famous revolt of Columbus' crew, history tells us, was inspired when the sailors became convinced that Chris didn't have the intelligence to interpret his charts. The search for these maps obsessed Captain Mallery. Intrigued by the odd grid system on the Piri Re'is map, he made a preliminary study and found the coastlines of North and South America were represented with small accuracies and major errors. But the map would have been accurate enough to guide a ship across the Atlantic. Of course, the Piri Re'is map was drawn after Columbus had made his trip, and used charts drawn by the Italian and the others who had followed him.

In 1956, Mallery was interviewed on a Washington, D.C. radio station. In the course of a discussion about his research he described how certain parts of the document seemed to match the latest maps produced by modern surveys. How, he was asked, was such accuracy possible in a sixteenth century chart? Mallery shrugged and jocularly suggested "an aerial survey". The legend was born.

The press picked up the comment, noting that "a famous authority" had declared that ancient maps had been made by a mysterious "aerial survey". The little UFO magazines of the period seized the story with delight and preserved it for posterity by mimeograph, photostat and photo-offset. Frank Edwards, Donald Keyhoe and their followers blindly accepted the Piri Re'is map as evidence of an early visit from extraterrestrials. No one bothered to visit the National Archives to view the ancient documents. Nor, apparently, did anyone drop into a library to read the books that had been published on the matter by distinguished scholars. The myth snowballed from a single newspaper clipping and as late as 1973, Donald Keyhoe was still quoting the same now-dated material.

Professor Charles Hapgood carried out his monumental study of the Piri Re'is map and other ancient charts in the 1960's. But his effort was in vain. Pamphleteers all over the world were grinding out stacks of publications in every language, all based on the 1956 clipping. When Erich Von Däniken assembled his first *Chariots of the Gods* he borrowed from those sources. Like Keyhoe, he had obviously never heard of — or at least, had never read — Hapgood's *Maps of the Ancient Sea Kings*. Hapgood did not consider the "aerial survey" concept because it was unnecessary.

Mapmaking is an ancient and respected art. The pyramids of Egypt could not have been laid out as they are without reasonably accurate topographical maps. The Phoenicians, and even the Vikings, had to use some form of maps for their extensive sea voyages. Alexander's armies (circa 323 B.C.) mapped their way across the known world. It is possible that some tiny ship hauled a hardy crew to the edge of Antarctica in ancient times, eventually returning with a crude map of the icebound coastline. Imaginative cartographers of the Middle Ages drew this "Terra Incognita" as a roughly circular mass, not because

they had an ancient aerial survey on hand but because such a form was logical.

Suppose a modern ship crossing the Bermuda Triangle should be caught in a Time Warp and catapulted five thousand years into the past. Would the people of that distant time be able to read and utilize the charts found on the ship's bridge? Probably not. Your own wife, educated in the Twentieth Century, may have trouble interpreting a comparatively simple modern road map and guiding you successfully to Yellowstone Park. Does it seem plausible that beings from a distant planet, products of an advanced technology, would leave us samples of an aerial survey so simplistic that a man of 500 B.C. could understand and copy them? Not very likely.

From the late 1940's to the mid-1960's the narrow ufological field was dominated by presumption rather than logical deduction. The basic nature of evidence was misunderstood by the flying saucer advocates and they spent those years grappling with straws. They claimed the Piri Re'is map as their own. When Von Däniken's books captured the popular imagination, archaeologists and scientists around the world grumbled in their beards, grabbed their crayons and wrote vituperous critiques of the Swiss author's revisionist theories. Many of them made the same error of the UFO-philes. They ignored Professor Hapgood and denounced the Piri Re'is map. Anyone who expressed an interest in the map was obviously a crackpot believer in extraterrestrial intelligences. Mallery never claimed this. Nor did Hapgood. There was no "aerial survey" in ancient times. If there was, there is absolutely no existing evidence of it.

From Mallery to Keyhoe to Von Däniken has been a long and circuitous path linked by a yellowing newspaper clipping based upon a mischievous statement uttered in an unguarded moment. Like so many of the briar-strewn paths in the UFO lore, it leads to another dead end.

—Editor

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BURYING THE HATCHET

The British did some rather mean things to us in 1776, but they more than compensated for it all in 1940 when they prevented the funny little man with the mustache from landing his Panzers on Plymouth Rock. Now our Fortean friends in the British Isles are struggling with a multitude of troubles ranging from Mad Bombers to the rapidly shrinking pound sterling. Unless they receive aid from the Colonies (that's us), two of the best publications in the world may join the old *Sulphur Queen* and be lost in a vile vortex.

Most members of this Society are probably familiar with the *Flying Saucer Review*, the Cadillac of UFO publications with a very productive twenty-five year history. In recent months this beautifully printed journal has been beset by so many woes that it almost seems as if the notorious MIB have been at work. It costs \$9.00 per year (\$13.00 via air mail), appears bi-monthly, and is well-worth our fullest support. The address is: FSR Publications, Ltd., West Malling, Maidstone, Kent, England.

The other effort, *The News*, published by Robert Richard, has already been mentioned in these pages. Its' name is being changed to *Fortean Times* and it is the only publication in the world that keeps up with the many Fortean events which are constantly occurring. An average issue runs 28 pages of fine print and is chock full of challenging news items and information. Mr. Rickard reports that this circulation has dipped to a miserable 140 subscribers despite an extensive advertising campaign in British publications. This excellent bi-monthly needs and deserves our support. It costs \$6.00 per year. Address: Robert JM Richard, Post Office Stores, Aldermaston, Berks. RG7 4LJ, England.

AT LAST!

Early issues of *Pursuit* are now available for those members who have been writing to us asking when we would have out-of-print back issues available. We now have Vol. 1, nos. 3 and 4, Vol. 2, nos. 1 - 4, and Vol. 3, nos. 1 - 4. These issues will be the same price (\$2.00) as all our other issues, although they do not have a cover as this would have necessitated a higher price to cover the limited printing. Order now before these issues are gone, too. Or write for our new back issue order form for the latest information.

We have received a number of complaints from members who have not gotten their *Pursuit*. Although we have been somewhat behind due to illness on the part of the Staff, it is not entirely our fault: the Post Office must bear some of the blame. We would like to apologize to our members, however, for the delays that do occur. We are doing our best to answer letters promptly and to make sure membership cards and *Pursuit* gets out as quickly as possible.

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Member #1777 is interested in hearing from any other members doing research in the ley system as it might apply to North America. Interested members please write member #1777, c/o SITU.

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Member #1052 is interested in contacting any member who may be researching material concerning aviation pioneers in or around the state of Texas who attempted flight prior to the 1903 flight of the Wright Brothers. These aviation incidents will be included in a proposed book to be entitled *Texas Airships*, and the chapters would carry the byline of the researcher.

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Member #1052 also would like to know if any members have in their possession any newspaper articles, etc., regarding reported sightings of sea serpents, primarily those occurring in the northern eastern coast region of the U.S. and Canada — and especially those sightings reported during the 19th and 20th centuries. Reports from *The New York Times* and from *Bernard Heuvelman's* book, *In the Wake of the Sea Serpents* are not wanted, but any reports from obscure local coastal newspapers are most welcome. Send info to #1052, c/o SITU.

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Member #279 has been doing research on "spook light" phenomena and feels that he is close to an answer as to the energy source involved. He is interested in hearing from any members who have had an experience with any of these "spook lights" or knowledge of anyone else's experiences. Interested members should write to: member #279, c/o headquarters, and we will forward the mail.

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It is hoped that members noticed an appreciable difference in the address label on this issue of *Pursuit*. Since our membership is increasing, we have found it necessary to purchase an addressing machine. This should help get our journal in the mails faster and should be much easier on your Postmaster's eyes as well. We have taken a chance that our members may help us pay for the machine. Those wishing to contribute please send their check to SITU and mark the envelope: Mailing Department. A receipt and a thank-you note will tell you that we have received the check. And thanks in advance.

UFO & FORTEAN BOOKS

SITU member Loren E. Gross has completed his latest work, *Charles Fort, The Fortean Society, & Unidentified Flying Objects*, a survey of the early years of the UFO phenomenon. According to Gross, only 500 copies have been printed, and they will be sold on a first come, first served basis. The price is two dollars per copy, and they may be ordered from: Loren E. Gross, 38675 Paseo Padre No.305, Fremont, CA 94536.

Mr. Gross also mentions that any new orders for his previous two booklets, *The UFO Wave of 1896*, and *The Mystery of the Ghost Rockets*, should be sent to: The Center for UFO Studies, 924 Chicago Avenue, Evanston, Ill. 60202.

A fourth booklet on UFO history is now in preparation. To be completed by the summer of 1979, it will be called: *The UFO Mystery: 1948-1951*.

We are told to be on the lookout after August 1 for a new paperback authored by SITU members Loren Coleman and Jerome Clark. The title of the book will be *Creatures of the Borderland*.

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BIGFOOT EXPEDITIONS

SITU member William F. Beamer has organized Bigfoot expeditions for hikers, backpackers and naturalists and trackers searching for Bigfoot in southwestern Oregon and northwestern California. The 22 day wilderness expeditions search an area containing rare plants, 360 bird species and 87 mammal species — the latter hopefully including our elusive large, hairy monsters.

Intermediate and advanced teams of 4 to 16 explorers will depart all year. Beamer's non-profit group has been advertising nationally since March of this year. SITU members and friends are invited to send \$3 for a detailed catalog to: BEAMER EXPEDITIONS, Dept. P1, P.O. Box 285, Canoga Park, CA 91305.

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Starting July 1, 1976 we are asking new and re-newing members outside the U.S. to include an additional \$2.50 for postage with their \$10.00 annual membership dues. Overseas airmail requests will be an additional \$5.00.

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INVESTIGATIONS

Robert E. Jones is no longer a member of the Governing Board or in any way connected with the SITU investigative team. Mr. Jones has been dismissed from the Board for refusing to turn in to HQ information and materials acquired during the period in which he participated in SITU's Bigfoot related investigations. We must inform our readers that we cannot guarantee the authenticity of any reports of sightings obtained by Mr. Jones.

T-SHIRTS!

SITU now offers its members the chance to own a unique T-Shirt, 100% cotton (white with blue lettering only). The price is \$4.00 each. When ordering, please specify size (S,M,L,XL) and add \$1.00 for postage and handling. Allow ample time for delivery.

BOOK REVIEWS

Uri by Andrija Puharich; Bantam Books, New York, 1975; 250 pages; \$1.95.

The Magic of Uri Geller by The Amazing Randi; Ballantine Books, New York; 308 pages; \$1.75.

A few years ago at an International Symposium of Parapsychologists in Prague, attended by most of the world's leading psychical researchers, the Soviet delegation introduced a "ringer"; a man who performed the standard nightclub blindfold act. The assembled scientists were awed and the man's act became the sensation of the convention. Later, when some members of the audience were informed that it was all a fake (the secret is easily obtainable for a few dollars in any magic store) they were outraged and disbelieving. Outraged not at the Russians but at those who dared expose it as a simple magic trick.

Scientists in general, and parapsychologists in particular, have long had a reputation for naivete and gullibility. Over the years many slick con artists and mischievous amateur magicians have succeeded in baffling and exciting some of the biggest names in psychical research. For some reason, the stubborn scientists have never learned their lesson and they have never applied what should be an inviolable rule: A professional conjuror should be present at every laboratory test of alleged psychics and mediums.

When Uri Geller first appeared on the psychic scene professional and amateur magicians everywhere chortled with glee. It was obvious from the outset that the handsome young Israeli was using mundane tricks and simple sleight-of-hand to accomplish most — if not all — of his mind boggling feats. He is a consummate showman, even outranking the legendary Houdini (who was a terrible magician but a superb showman and publicist). After a brief, undistinguished career as a stage magician in Israel, Geller switched to a "mental act" and zoomed to success. Although he was frequently exposed as a fraud by the press in his native land, the public and the scientific community began to take him seriously.

Dr. Andrija Puharich, a famous parapsychologist and a man already steeped in the lore of flying saucers, visited Israel and, curiously, Uri was soon producing messages from outer space. He even had an ethereal UFO contact experience in the presence of Dr. Puharich, and on at least one occasion the two men saw a huge flying object while the others in the same car with them saw nothing. Dr. Puharich became Geller's greatest scientific advocate and brought him to the U.S. for "scientific" testing. Uri was not too enthusiastic about facing the scientists at first but he must have quickly realized that performing in a laboratory was little different from performing on a stage. The scientists were just another lay audience.

So Uri Geller became a psychic superstar. He has appeared on almost every important television show in the world. His lecture demonstrations have drawn overflow crowds everywhere. Learned scientific papers confirming and endorsing his feats have appeared in leading journals. Millions of people now believe Geller is the genuine article.

However, when a knowledgeable reader examines Dr. Puharich's book *Uri* it becomes obvious that Puharich himself was the focus of the phenomena which occurred in Israel while Geller merely served as the involuntary instrument or medium for the manifestations. Many of the things outlined by Puharich happened when he was alone and Geller was miles away. Some of his more controversial and outlandish claims, such as the mysterious erasure of his tape recordings, have happened to other UFO researchers. He even had a classic visit from a "Man in Black" who posed as an airline representative and took away his airline ticket.

In a number of incidents it is obvious that Geller amused himself by performing some routine magic tricks for his mentor. Dr. Puharich is clearly (and by his own admission) a victim of hallucinosis, and a man eager to believe almost anything. A flaw shared by many of his peers in the universities where Geller was later tested.

As Uri Geller's career escalated and his financial success increased it was only natural that the professional magicians would begin to fume. Geller was a natural target for a publicity-minded escape artist named James Randi who has busied himself exposing fake mediums and psychics for years. Some of his tactics have been questionable — even ruthless, such as his virulent attack against psychic photographer Ted Serios some years ago. And he has always exploited a simple truth: that a good magician can duplicate through trickery many of the feats performed by genuine psychics. Duplication does not necessarily prove that the original feat was fraudulent, as the believers are quick to point out.

In the case of Uri Geller, it is apparent that he does possess some uncontrolled psychic ability, particularly when he is in the presence of latent psychics such as Dr. Puharich. But you can't make a living from rare, uncontrollable psychic flashes. (The late Joseph Dunninger, once a nationally famous magician and stage mentalist, also possessed a high degree of ESP but couldn't rely upon it).

Behind the scenes in magical circles a controversy raged. Should Geller be exposed? Some felt he should be allowed to make his living by bending keys. Others, like Randi, felt he deserved a frontal attack. Randi's approach was very thorough and professional. Without Geller's knowledge, the escape artist approached TV shows where Geller was booked to appear and he set the conditions for the Israeli's tests. In each case (such as his appearance on the Tonight Show), Geller failed miserably when Randi was lurking backstage. Randi was not only able to duplicate all of Geller's feats, he even improved on some of them. Like Geller, he could start broken watches, bend keys and silverware "without touching them", locate water hidden in film cans, and after some of his performances the radio or TV station was swamped with calls from listeners claiming their own broken clocks had started or their own keys had bent while Randi was on the air!

Now Randi has compiled a fascinating book explaining the *modus operandi* of these seemingly impossible feats. He also draws heavily upon the experiences and observations of other investigators. He patiently reviewed over and over again the video tapes of some of Geller's appearances, pinpointing his sleights and bits of misdirection. All of his explanations are convincing and there is no rancor in this book. This is not simply a matter of a jealous professional magician attacking a famous psychic for publicity alone. Randi has the goods on the Israeli, up to — and including — testimony from Geller's ex-girlfriend and his Israeli chauffeur!

The book has already caused many red faces in scientific circles, while others are scrambling to attack the escape artist just as they attacked those who exposed the Soviet night club performer. The will to believe remains greater than the ability to understand.

However, Uri Geller still deserves credit for focusing the attention of the mass media and the general public on psychic (or parapsychical) phenomena. He has even stimulated public discussion of the once taboo UFO mystery. While his ultimate contribution to science will be nil, his role as a pawn in the strange cosmic games being played in this century is certain to become legend. The Amazing Randi can bend keys for the next forty years without having any impact whatsoever on the public consciousness. But Uri Geller has bent our minds and we may never recover.

—J.A.K.

The Mendelov Conspiracy by Martin Caidin; Pinnacle Books, New York; 1974; 274 pages; \$1.50.
Three Corners to Nowhere by Martin Caidin; Bantam Books, New York; 1975; 276 pages; \$1.75.

Martin Caidin has published seventy books, most of them non-fiction dealing with science and aviation. His first novel, *Marooned*, the story of three astronauts trapped in space, was made into a major motion picture a few years ago. Highly regarded as one of the nation's leading experts in aviation and space technology, Caidin has also led an interesting life as a closet Fortean. He has flown over the Bermuda Triangle in his own plane and, like so many other reporters in the 1960's he tried to get to the bottom of the flying saucer maze. He apparently stalked the wild UFO through the corridors of the Pentagon and the mysterious warehouses of Project Blue Book at Wright-Patterson in Ohio. The result of this frustrating enterprise was an offbeat novel, *The Mendelov Conspiracy*, which quietly appeared and disappeared in 1969. Now it has been published in a paperback labeled "A nerve-snapping novel of nuclear age suspense!"

As a novelist Mr. Caidin is a failure. His dialogue is strained; his characters are wooden and unbelievable; his situations are as mechanical as the big war birds he usually writes about. Even the names of his characters have a comic book sound. The hero of *The Mendelov Conspiracy* is named Cliff Brady while Dale Fenton carries the ball in *Three Corners to Nowhere*, a dreary tale about life in the Bermuda Triangle. Caidin's solution to the flying saucer enigma is the grand cliché of a secret base hidden in South America and manned by human nuclear scientists. A mawkish love story between Cliff Brady and Ann Dallas fails to breathe life into the effort. Dale Fenton suffers an even worse fate in *Three Corners to Nowhere*. The book ends with his plane caught up in a time warp, getting ripped to shreds by unseen forces. Fenton, we hope, fails to escape.

However, Martin Caidin is a man to be reckoned with and both books contain considerable information about UFOs and the notorious Triangle, much of which will be new to many readers, and worthy of attention. The long non-fiction passages expertly woven into the stories give the books their only merit. His experiences in the Triangle, and his explanations of the puzzling weather aberrations and magnetic anomalies are extremely interesting. So, too, are the fine sequences about planes and flying in general. Mr. Caidin should keep his characters in the air as much as possible, for when they have to walk about on land and act like human beings they become ludicrous bores. The titles and flashy Fortean-oriented covers have probably lured many a SITU member into adding them to the library. Actually, they are worth buying, but not as entertainment. Rather, they offer some insight into the life of a first-rate reporter who has gained an insider's view of some of the most profound mysteries of our times.

—J.A.K.

Beyond the Time Barrier by Andrew Tomas; Berkley Medallion Book; Feb. 1976; \$1.25 (Translated from the French edition pub. by Editions Rene Julliard, 1974.)

Occasionally a mediocre book has one redeeming quality — that of initiating a train of thoughts which becomes the very adventure which the book itself fails to provide. Just as a powerful actor can sometimes break through the confines of a shallow play to truly move his audience, so can certain topics excite the reader despite an amateurish framework on which they are displayed.

Tomas gives us a series of thoughts, speculations and facts; he offers a virtual laundry list of truisms, quotations and notions, which make no pretense of being elements in the development of an actual literature. Some are embarrassingly simplistic: "Yesterday is but a today that is blotted out ... Tomorrow is but another day ... The printed calendar contains 365 days, only one of which is today ... What is solid and tangible today will turn into dust tomorrow ... What does not yet exist, will eventually come into being."

The thrust of this work is, first, to focus our attention on a variety of views of the nature of time and its dependence on the observer's perspective. A much-too-brief section alludes to scientific discoveries which tend to demonstrate time reversal in the laboratory. Unfortunately, this initial thrust ends before the reader is halfway through the book, and it is here that the vagaries of the mind must assume the task of developing this sketchy material into a conclusion. The remainder of the book focuses all too heavily on prophecy, building on the notion that precognition is tantamount to time travel. Included is a retelling of the classic mystery of the Petit Trianon. Anyone unfamiliar with this intriguing example of apparent time travel (called "time reverberation" by Tomas) will find the section fascinating. Finally, overweighted in its recounting of historical prophecies, the book bogs down in Tarot research, Nostradamus, and, for heaven's sake, St. Malachy's interminable prophetic "mottoes" of 35 popes! The author's most noteworthy achievement is, undoubtedly, his compassionate omission of 76 additional popes.

In short, *Beyond the Time Barrier* never begins to get anywhere ... except in the mind of the imaginative reader.

—C.L.W.

Scientists as a group have some oddly apt names, says a researcher on the science journal *Nature*. She unearthed a Dr. Zakariah Ovary addressing a conference of gynecologists; a fertility expert named Miss Mercedes Conception; two fish biologists named G. C. Trout and P. J. Herring; a brain specialist in mental disorders named Dr. J. M. Looney, and a certain Dr. E. G. Boring, author of "A History of Introspection."

NOTICE

In Vol. 9, No. 2 (the last issue of PURSUIT), the inside back cover listed Charles L. Wiedemann as "Editor." This was a mistake. Furthermore, Charles L. Wiedemann, D.D.S. no longer serves in any capacity whatsoever with SITU or its journal, PURSUIT.

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