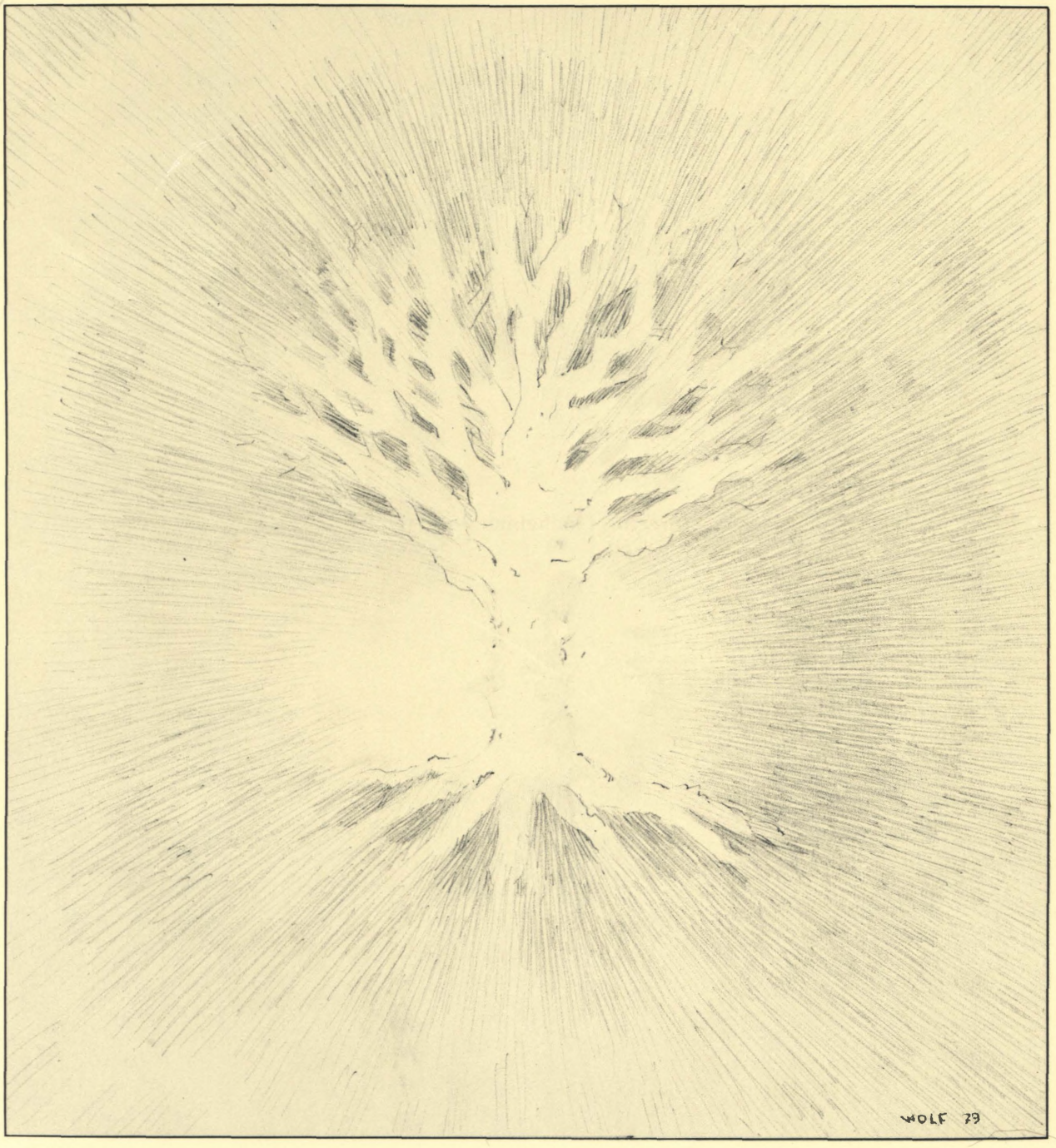
THE JOURNAL OF THE SOCIETY FOR THE INVESTIGATION OF THE UNEXPLAINED

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**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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THE SYNCHRO CHANNEL

by Barbara Jordison

THE method of collecting the Synchro Data is described in the Spring, 1978 issue of *Pursuit;* theoretically, anyone is able to collect data *via* the experimental setup. Briefly, to collect the Synchro Data an observer monitors a broadcast of English text and, at the same time, reads English text. Any words that are both heard and read, at the same time, become the recorded data—along with the clock time of occurrence.

"Data turns into information," says Jacques Vallee, "only when someone asks a question about it!"[1] Although he was talking with co-author Dr. Hynek about the storage and retrieval of data in computers, it's a metaphoric gem with algorithmic sparkle and it's applicable to the Synchro Data.

Here is a typical example of a 5-hour data run. The data were collected April 24, 1970:

CST	*Audio*	*Visual*	*Probability "average"*
12:50 am	"economic"	economic	.06323
2:07 am	"down"	down	.05105
2:09 am	"15"	15	.07995
2:10 am	"23"	23	.08498
2:35 am	"down"	down	.05105
3:35 am	"probably"	probabilities	.06976
4:06 am	"15"	15	.07995

News Note: "Last week, ending May 1st, Dow Jones Average at lowest in 7 years—since JFK in Texas time. Off 13.66 for the week."

List the immediately visible characteristics which you see in the data; there's one of Robert Anton Wilson's coincidental 23s, the timed intervals show an occurrence pattern, there's redundancy in the message and there's an oracle effect that only appears when the data series is linked with the news of the day.

And after you've brought the valent details into awareness, think a moment about our long development from oral cultural traditions, which were long ago directly transcribed into a written form. Adding, of course, what we know of printed form and today's electronic media effects on our awareness processes.

We seem to have a prototypical communication process. In Diagram 1, I've borrowed the 'black-box' and 'real-line' technique to present the Synchro Channel as an habitual 'programmed' route, over which the input signals arrive at the 'brain-box.' Thence to the projected 'product,' the Synchro Data. The 'word-form' is conveniently consistent.

Since energy concepts can form a 'meta' system to the diagram, all signals can be mathematically analyzed, and a formula written for the channel's capacity for carrying input signals through the whole Synchro Channel. At least when the signal is in word-form, because noise is considered a signal and is present.

Now a signal can be added to a banking channel, in such a way that it will route millions of dollars into a personal account. No doubt we'll learn more of something that's called the 'nine's complement.' The point is that this demonstrates, among other things, the concept that a signal can change the channel over which it goes. (And goe$, and goe$.)

Obviously, the world isn't yet safe for electronic banking channels. Are electronics making the world downright unsafe for living channels? There's evidence that this is happening. And our *inner* territorial rights are not high-priority legal rights yet. But bioentrainment is provable 'brain washing.'

At the moment, 'brain washing' is a term like 'propaganda,' it carries only negative valency. But when we call it 'meditation' the idea is more acceptable. It's become an individual responsibility to strengthen the inner freedom from unwanted bioentrainment, while at the same time in quest of new entrainments as we are free to follow inner need to know and to experience living channels. Problems arise whenever those living channels are not recognized in the collective laws of the nations.

I can think of two recent cases. A boy in Florida was defended on a murder charge by his attorney who tried to link the crime, in a cause and effect way, to the material on television. If bioentrainment was mentioned, I missed it.

And, second, there are the physical and other hidden symptoms showing up in animals and families living around high-tension electrical carriers. However, the answer isn't "move to Canada," because (surprise!) the U.S.S.R. may have been experimenting with signals aimed that direction.

It would seem we have two major recycling lessons to learn. As we tune into the electronic input stage, the first thing we meet is pollution and a total disregard for inner territorial rights. That's junque and 'noise.'

However, we seem to have some protection. In telepathy experiments it reportedly has been shown that a transfer of brain-wave pattern is possible between a human sender and a human receiver. But there's no 1:1 interpretation of any messages that are sent over such "biological radios." Well, individuals may not show efficiency in this, but what of collective effectiveness? If your own 'natural communication channel,' as presented in the diagram, ever carried an additional signal how would you recognize it? And how would you interpret it?

Which brings us to an all-purpose question: "How do we retrieve information about 'how to retrieve information'?" Given that we have data and we seek 'information,' what do we understand by the term?

There are four approaches: (1) we intuitively know what is meant by the word, but a context does influence us, (2) information theorists mathematically measure it, and carefully do not define it, (3) leaving this task to the semantic and communication theorists, thence we arrive at (4) synergetic approaches with new, often vague, retrieval rules—to find not only 'information,' but clues to its polar opposite.

The concept we've come to know as UFOs better have a high priority on the list of concepts to be redefined, "before transcendence past Piaget's Formal Operations stage."[2]

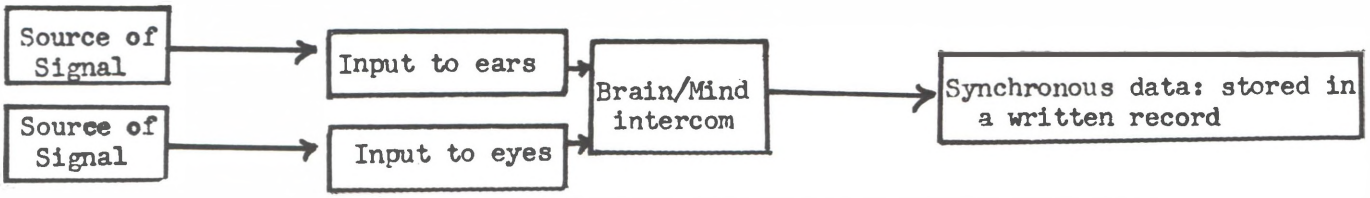


Diagram 1: A Communication and Information Conceptual View of the Synchro Channel

Let me quickly ruffle through the Synchro Data record book and find only the series of interest to 'Americans.' "We like American kept free," (1972). "No like deal Federal no we guys good," (1972). "New noise tell American past catalyst time," (1973). "America's/American true/truth back," (1978).

With over 1500 data entries recorded, you can imagine my reluctance to present any more examples of the Synchro Data. I think the best way is to describe the method of collecting the data and hope you're convinced to try it. And if you do try it and don't collect any data, perhaps it's just as well to keep studying and try again. Because there are pitfalls to worry about, as a reporter, bylined Robin Snelson, concluded a short report in the February, 1979 issue of *Future:* "The UFO phenomenon needs serious study now, Vallee warns, 'before the new myth is created, before the myth of extra-terrestrial revelation replaces the myth of rational acquisition of knowledge'."

I doubt if a reshuffle of myths is sufficient.

There's another experiment to try, using the basic two-inputs of English text to the ears and eyes. Add a second ear-input off a police band or something. I collected '10-4' and 'car' before the drop in quality and frequency of the data convinced me to discontinue the second ear-input.

This brings up Robert Anton Wilson's collection of co-incidental '23s.' Is it a collection of 'parity bits' which keep the channel open? Is it more like a collection of '10-4s' which seem mysterious if you don't know the code? Or, has he retraced an historical feedback loop and retrieved a 23-code book?

If a vote is taken for the best underground book, *Cosmic Trigger* gets my vote for the most interesting and the best written, but I question its conclusions based on the evidence as he's presented it thus far.



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1. Hynek, J. Allen, and Vallee, Jacques, *The Edge of Reality* (Chicago: Henry Regnery, 1975), p. 82

2. *Brain/Mind Bulletin,* Volume 3, Number 22, October 2, 1978, "Unitary Knowing—Intellectual Stage Beyond Science?"

LET'S TEST THE COMMUNICATION HYPOTHESIS

by Barbara Jordison

IN the summer of 1970 a series of lectures was organized at the NASA Ames Research Center. The background information—"from the question of the origin of the universe to that of the origin of life and the origin of intelligence"—was followed by a stepwise consideration of the possible methods for interstellar communication. This neatly packaged can of worms is available to the student and the general reader, along with a 40-page bibliography with references up to 1974.[1]

While the UFOs merit only a brief dismissal comment, ten scientists did go on record with their shared perspective that interstellar communication is a scientifically plausible quest. Would that their talents had extended to a discussion of the unscientifically plausible UFO sighted by an astronaut.

Michael Arib summarizes the basic questions: "First, are there 'intelligences' elsewhere in the universe? Second, if there are, can we, at least in principle, communicate with them? Third, if such communication is possible, how might we implement it?"

Considering the possibility that we already may be dealing with the second question, what form does he think a communication will take? What can we expect?

"Sending a message," Arib says, "is not a matter of phoning up Charles X who will be on a planet near Syrius and having a chat with him about the latest ballgame results. Presumably the message is going to be some sort of encyclopedia, a distillation of much information." In other words, we can expect a species-to-species message and we cannot expect dinner guests. Of course he did preface it with "presumably."

Let us assume that science fiction's 'star persons' are born traveling, and they live and work in space merely because they have solved some technological problems and can maintain a permanent artificial environment and tap an energy source that we are only slowly becoming aware is there. Then let us ask ourselves, once again, are we missing a message in the UFO reports? Specifically a species-to-species message? One that is designed to protect identities, and we have mistakenly assumed *that* is the mystery for us to solve rather than our trying to translate the message that is directed to us all.

When we put the UFO into the familiar context of a parade—followed by a series of nervous reports to our whole planetary classroom ("Show and Tell" speeches)—the fact that the parade route has circled the earth, and has been going on for years, is not emphasized by inexperienced parade-watchers. If there is a current repetitive response, it's the description of those 90-degree turns.

They intrigue the technician in us; who doesn't want to be the first kid on the terrian block to build their own working model?

Of course with competition comes some faking and stalling and a lot of evasive theorizing about who is sponsoring the parade. ("They are not real, it's all in your head.") What we need is a practical technological breakthrough! Obviously in the transportation categories, and not so obviously in the communication category.

That sign-using cousin of ours might be the favored geo-transmission species. And the big-feet mystery animals a long-term developmental link, in case plan-A fails. Anything is possible in *science* fiction moods. Even whales that sing a song of the seasons may be getting more direct incoming signals than we humans.

If communication is our next assigned lesson, and it seems it is, we need data to study. With Californian courage, B. Ann Slate opened a can of questions in 1978: "From somewhere in the universe, another intelligence is broadcasting messages to Earth. Perhaps these are being beamed via channels still undetected—or attuned only for certain individuals."[2] The retelling of their adventure with a "cryptic message" is a valuable addition to the ongoing record.

However, it suggests to me that one of the problems with data that are collected by automatic writing is the tug to interpret the words as directive, rather than as reflective of a larger principle. The data, in other words, carry a signal of the automatic writee's intercom. Interpretational comparisons are essential; the more the better.

All the methods of collecting potential incoming messages need study, but an open comparison is the best way to evaluate the methods. Perhaps a Fortean orientation is ideal for translating any species-to-species messages? If we find that pendulums, crystals or planchettes are constellating only remnants from a bygone age, well . . . try the synchro-data method.[3] And remember to file a report on your findings, hmm?



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BENEATH THE PLASTIC EAGLE, BETWEEN THE MEZUZAH AND THE CRUCIFIX, AN ARTICLE OF FAITH

by Grace Undapresha

I.
SNAKEOIL SALESMEN IN A CYBERNETIC WASTELAND

THOSE not bludgeoned by the decade mongering germane to the mid-sixties nor dematerialized by the tacit rumbles of the current preface to the eighties, have found out just how many wholes it doesn't take to fill the Albert Hall. The generation of stern impartiality, most uncommon to the reflexive consumer, precludes wishful thinking. To rational, Western man, psy, extra, meta or paranormal forces, are alien forces which the state religion of science resists as theological residue. Yet 10% of our network programming is devoted to precisely this ethereal area.

According to the antennas of *Time* and *Newsweek*, Fundamental Christianity is gaining ground faster than the various brands of Eastern wisdom now showing on the neighborhood shelves. Given that, one is not prone to squirming beneath the wrath of commerce or allowing one's vision to be ellipsed by the profit motive, are Scriptures a fair match for statistics? The relation of the slogan to the sale is as known to the ad man as the wrinkles in the benign countenance of Mao have become known to the populace of the People's Republic. Is there a difference between seeking truth and seeking fact?

"Slap me twice then turn me around and ask if it was nice," said the *Yankee Oracle* on January 27, 1978 in the Albert Hall of the Americana Hotel where non-denominational void dippers gathered for the Spiritual and Psychic Awareness Weekend. He stipulated that the investigators of hearsay drank plenty of coffee and ate plenty of french fries, i.e. armed themselves with enculturated fuel, before venturing toward the precipice from which few returned harboring the disposition with which they began. Suppose that the faith of 90 million Fundamentalists does not fit the findings of the metaphysical gumshoe, or that when Moses raised the Serpent for the Lost Children in the desert, he was asking them to sublimate their sex energy. What are the forces that change human nature and is it possible to accelerate the process of evolution?

The seventh of the fourteen basic transgressions is the telling of secrets to the immature or the uninitiated.

> "Give not that which is Holy unto the dogs, neither cast ye your pearls before swine lest they trample them under foot and turn again and rend you"
>
> MATTHEW 7:6

Just like the Danbury State Fair, one could see the non-existent mounties groom the non-existent Clydesdales, or sample some of Aaron Burr's ectoplasmic preserves.

Omens tacitly lingered, proclaiming the management's refusal to bear the responsibility for the destiny of the contents of your cranium. Psychics, Yogis, Doctors, Astrologers, known professionals within their field, coagulated upon the non-site ready to illuminate your drama and boost you toward the fountain of Ponce DeLeon. It is the same non-story of how the teachings degenerate into the practice of magic and fortune telling prior to the administration of authenticity. "Remember," said the caffeinated veteran dispersing his investigatory platoon, "Everyone is here to make money."

II.
THE SUTRA OF PRIMEVAL DELUSION

The teachings are those of the dispersal and acquisition of power, or the politics of juice and the percentages of those who short out upon gaining mere proximity to it. What have the old ways of magic, shamanistic ritual and prediction to do with new modes of morality and multiple ideological frameworks? The way one views gods, devas, toothpaste and reruns of the Twilight Zone, is contingent upon historical developments. The matrix of the contemporary spectacle is composed of psychoanalysis, the electronic communications media and the collaboration of corporations and centralized governmental structures for the purposes of social management and capital accumulation. "Clairvoyant" in French, means "clear seeing." To the ancient Egyptians psychics were called "mouthers," those through whom information flowed. The Media is often called "the public educator."

> "Whatever you learn of sortilege, calculation, rites and diagnosis, be clever and learn so as to know it. If your skill and cleverness of method have not been perfected by practice, you will not produce medicine, but poison."

On Saturday, February 18,1978, Murdock's *Post* told us that the man there, looking like Dr. John the Nite Tripper, wearing the Gre Gre hat, was none other than the archbishop Pangratos of the Greek Orthodox Holy Sepulchre Church of Graecia Magnesicily. He had empowered an ex-hijacker, thrice divorced, father of three into the role of Bishop. The newly ordained server of the Protestant Lord plans to set up ecclesiastical shop in a castle on Sunset Boulevard in Los Angeles. For the annual dues of $2,000, you too can kiss the Bishop's $45,000 cognac colored ring at will. Bishops are the conical figures that move on the diagonal either on the black or in the red. The typographer, upon dropping the lead is liable to hot line *god* into *dog* or place the angle where the angel should be in terms of linear stimuli pertaining to the pinhead.

III.
JUST HOW DEEP ARE THE ROOTS OF PLURALISM OR IS SECULARISM REFLEXIVE?

When Galileo let his balls roll down an inclined plane at his own chosen speed, the light which dawned upon natural philosophers was that our reason can understand what it creates according to its own design, i.e. that one must compel nature to answer one's questions. However, what forces evoke responses concerning the issues which have been stricken from the minds of the masses? Sixteen centuries of the dark ages were initiated by a spiritual movement. When Galileo turned his tube towards the heavens and proved that Earth was not the center of the Universe, the Church's resistance was akin to the Westerner's revulsion upon encountering the Eastern refutation of ego. America, emanating from the Reformation—hence the awareness of the political potential of theocratic institutions—was founded upon the separation of church and state as well as the freedom of religion. Christianity, essentially a patriarchal cult, was founded upon the separation of man from the divine.

IV.
ROUND ONE: THE MEN IN RED ROBES FROM THE EAST MEET THE PIN-STRIPED GLADIATORS FROM THE WEST

1) MISPLACED CONCRETENESS

The view from the Lhasa Cement Factory means that Tibet, roof of the world, which for centuries embodied the globe's vague musings about wonderment, no longer exists. In an age when atrocities are commonplace, a nation destroyed remains an exiled culture of mind. The *Times* of the aforementioned, synchronistically auspicious Saturday, ran an editorial on the predicament of the Tibetan refugee whose passport states his country of birth as China. What the Westerner misunderstands about the Tibetan is that although he may not have seen an electric light bulb until well on into his adult years, the life world in which he was bred was one which naturally assumes the paranormal realm of information. Those of us spawned in cultures which condition away from one's intuitive functions, find this intoxicating if not exotic. The acquisition of supra-normal powers is to the Tibetan, part of a process of maintaining certain commitments for the purpose of 'liberating all sentient beings from sorrow.' Given the major power's delicate dealings with the capricious Peking regime, if you're a Tibetan and happen to be speaking at the United Nations, you are in snow, the consistency of which is liable to be unpredictable.

2) HAVEN'T YOU SEEN THE SAUCERS?

If you happen to be the leader of one of the four sects of Tibetan Buddhism and are being viewed as something other than an anthropological curiosity, you're used to thin ice. That same Saturday, the United Nations held a conference on "Today's Chaos, The Spiritual and Psychic Answer." Speakers were Howard Kip Parker, producer of the Psychic Film Festival, Gene Kieffer, Director of the Kundalini Research Institute, and His Holiness Sakya Trizin, Patriarch of the Sakya Order of Tibetan Buddhism.

That we are currently becoming aware of our ability to communicate with dimensions which defy corporal contentions means only that. The meta/extra connection is not necessarily concurrent with ethical refinements. If one were to view the world in a manner which was not domi-

nated by linear dogma nor by star-trek, Leary-eyed terminology, one might upon having witnessed such phenomena as The Son of Sam or the rise of the Third Reich, and conclude that psychic forces are unamenable to human control.

The first speaker, a shaman who entertains the natives with magic pictures, foresees an explosion of epiphanies in the wake of the Star Wars/Close Encounter fever. The psi virus, presently creating landing platforms for extra-terrestrials in the minds of many, may very well be creating receptivity for expansive encounters with inner space. Mr. Parker asserts that the Psi film is going to replace the Western. Via manipulating aspects of perception, media can directly engage the psychic structure of the viewer. According to Parker one could, with appropriate audio visual stimuli, accelerate the growth of a Third World country to self-sufficiency within one generation. If the ranks of the star-spangled, technocratic godhead possessed sufficient sociètal dedication, we could 'eliminate hunger and create immortality.' In citing the example of a proposal to institute T.M. into the New Jersey public school system, which was blocked by the Catholic Church on the basis of maintaining the division of church and state, Mr. Parker advocates appropriating Eastern wisdoms as technology rather than as religion.

The present stage of psychic research is still esoteric, cultish, and has yet to catch up to the banalities of the witch doctor. Parker's vision is to create the proper context with which to inject the nuances of inner space into the foreground of contemporary consciousness via the Media's manufacture of a need for this category of stimulus.

3) DOES T.M. MAKE ONE LOVE ONE'S NEIGHBOR ANY MORE?

Kundalini is neither in the dictionary nor the encyclopedia. It is, according to Mr. Kieffer of the Research Institute, one of the most jealously guarded secrets of mankind and possibly the Unified Field Theory.

The issue is illumination, and Kieffer's position is to remove the matter from the domain of spirituality, the aesthetics of which abhors serenity's disruption by debate, into the realm of science and to prove the biological aspects of Enlightenment via examining the blood, spinal fluid and nerve structure of various subjects. In 1970, Kieffer read the autobiography of Gopi Krishna which documented his experience of the awakening of Kundalini, the serpentine energy sleeping at the base of every human being's spine. Krishna, living in Kashmir, having failed his college entrance examinations at the age of 17, began a daily mental exercise of concentration. Seventeen years later, at the age of 34, Krishna, a minor government clerk, experienced what is described as 'illumination' in various ancient scriptures of Egypt as well as India. "Suddenly with a roar like that of a waterfall, I felt a stream of liquid light entering my brain through the spinal cord ... the illumination grew brighter and brighter and I experienced a rocking sensation and then felt myself slipping out of my body entirely enveloped in a halo of light. I felt the point of consciousness that was my self growing wider surrounded by waves of light... I was now all consciousness without any outline...." etc., etc., etc. The metabolic entertainment was not just another roadside attraction, for Krishna began to experience all of the altered range of consciousness and activity described in obscure manuals on mysticism. He began to write cognitively in nine languages, three of which he knew prior to his awakening. He became clairvoyant, etc., etc., etc. Kieffer responded to Krishna's appeal, which was to bring his experience to a wider audience, to put the ancient phenomena on the contemporary map, and to focus some technological investigation upon the area. Now at the age of 76, six books and seven years later, Mr. Krishna is about to begin his public career with a visit to the States wherein he will confer with various scientists. What happens if the faith of 90 million Fundamentalists doesn't fit the facts? The wobble of earth as it traverses through space, and the warp of mind as it wobbles through time, consistently reveal that anger, lust and passions keep the wheel of life rolling. Hence it might take something just this side of mass lobotomy to change human nature. According to Kieffer, "the more we come up against the impenetrable enigmas of psychic phenomena, the more we fractionate our personalities." There are infinite numbers of separate realities. "There is no single underlying truth to inert meditation. Practitioners of transcendental meditation reach whatever level it is that they want to reach." A student of magic for years, Kieffer stated, "I don't know a single magician who doesn't live in fear of the forces with which he tampers."

4) WHITE LIGHT GOING DOWN THROUGH MY BRAIN WHITE LIGHT'S GONNA DRIVE ME INSANE OR IS IT TRUE THAT PROFESSOR EINSTEIN SLEPT WITH HPB'S SECRET DOCTRINE ON HIS NITE TABLE?

Posit the hierarchy of Being between: turkeys who are hopeless for they won't take their head out of the bush, chickens who ruthlessly peck and claw at materialistic kernels, and those who woke up to the fact that there isn't anything that can't be done to a turkey which in all probability will be done to higher forms of life. In that sense we stand on the brink of creating spineless, succulent, white meat winners, ignorant of their identity yet eager to perform. Kieffer's vision is grim, for it speaks of the internal divisions within the United Nations as well as the prospect of fifty nations possessing nuclear armaments. Those considering the regard of extra-terrestrials toward the child Earth have only to peruse the modern world's treatment of technically unsophisticated minorities such as the American Indian. Suppose Kundalini is the Unified Field Theory which underlies electromagnetism and gravity. Consider the evolutionary chain of life which stretches from microscopic invisibilities on out to intelligent elements which are unpositable to the human mind. Although the intellect is not the channel through which to tune into para-programming, it is certainly the means by which to subject the controversies to critical analysis. Since there is a fundamental disagreement as to the actual existence of this channel through which the evolutionary goal of genus man is instrumented, Kieffer suggests the comparative unfolding of metaphorical allusions veiled within ancient scriptures of mystery traditions.

Inscribed upon a temple within the delta region of Egypt, "I am all that was, and is, and is to be. No mortal hath lifted my veil. And the fruit that I bore is Helios," is attributed to the goddess Isis, sister and wife of the god Osiris, whose yearly death and resurrection personified the self-

renewing potential of nature. Bypassing for the purposes of brevity the yearly innundation of the Nile which vivifies the parched valley, and skimming over to Greece, Helios was the sun god depicted as driving his chariot across the sky from east to west, daily. Within the lineage of Tibetan Buddhism, Nagarjuna and Asanga are considered the two great chariots, emanating from Maitreya, the Buddha of the Future and Manjushri, the Lord of Wisdom, holders of the profound and extensive teachings. Vairocana is the Sun Buddha who "expels darkness and illuminates the world of men." One cannot realize Vairocana via the limitations of space and time, but as magic. The miracles will disappear when their cause, commitments to the teachings, vanish.

Enter Sakya Trizin, born in Tibet in 1945, considered an incarnation of Manjushri, training began at age 5, enthroned as Head of Sakya order at age 8, speaks fluent English.

Evolution is not haphazard but extremely methodical and gradual. Rather than start with metaphysical assumptions about the ultimate nature of reality, the Buddhist begins with a basic mindfulness regarding methods of procedure and understanding.

5) LIKE PUFFED RICE, THERE'S NOTHING THERE AND YET IT'S EVERYTHING.

According to the Kundalini Research Institute, Enlightenment is a physiological event. According to Sakya Trizin, the causes for Enlightenment must be created. When the historical Buddha was questioned as to whether he had taught everything which he obtained via his experience beneath the Bodhi tree, he held forth a blade of grass proclaiming *that* as all that was necessary. "Buddha" means one who woke up. The effects of the attainment of Buddhahood in this lifetime subsume all of the special effects attributed to paranormal phenomena with the exception that these 'gifts' were acquired via arduous training in renunciation and development of proper view, as well as a quality of compassion which knows no discrimination.

The floor opened up and questions began to trickle. The Lama excused himself stating that we wouldn't interfere with his concentration, and prepared himself to give a Long Life Empowerment. As he climbed up upon the throne positioned within traditional Tibetan ritual arrangements, the moderator watched as the Lama began his preliminary motions and commented, "And I hope his doesn't interfere with ours!" The dialogue flew but the fascinating part was how the beginning of the ritual wove in and out like a haunting tenor sax, wailing in the distance at a pitch so high that only gods could hear it. The talking ceased and the "wang" formally began. The Long Life Wang is a consecration of the Body, Speech and Mind, removing the moral and mental defilements from the participant, enabling him to pursue a long fruitful life. The benefits of this ceremony are dedicated to the welfare of all living creatures. Participants are requested to visualize light issuing forth from the Lama's heart, shining upon the world. Yes, folks, it did happen there. A Tantric ritual was held at the U.N., structured to keep your internal Timex ticking in tune forever. The Buddha of Limitless Life, Amitayus, is said to have appeared, radiant, in the form of an ancient Indian Prince. At the conclusion, participants could approach the Lama to receive special blessings.

6) I SAID MISTER, MY PROSPECTS ARE GOOD.
HE SAID SISTER, THAT'S UNDERSTOOD.
I GOT NO CAR AND IT'S BREAKING MY HEART,
BUT I FOUND A DRIVER AND THAT'S A START.

Wading Through The Opening Of
The Wisdom Eye

"I asked him if he wasn't playing the quintessential Clint Eastwood alone....." He said "You have to shut out doubt. You have to will your way through. You have to know how you feel about things and where you stand on this planet." (Eastwood talking to Jean Vallely in Esquire, *3/14/78)*

For obvious political reasons, we know very little about the Tibetan culture that was destroyed. The following Saturday's *Times*, 2/25/78, told us that the Chinese People's Political and Consultative Conference convened for the first time since 1964 in an effort to rally groups alienated by the Cultural Revolution. Present was the Panchen Lama, who had not been heard from since 1965. What appears to be a conciliatory gesture towards the Tibetans is merely more agit prop structured towards maintaining social order and regaining popular confidence. As was stated, the modern matrix consists of psychoanalysis, media and the collaboration of industrial and governmental forces for the purposes of keeping the people's blinders on. Is stating within the Spielberg idiom, "We Are Not Alone," very different from plastering across the dark highway, in Tibetan, "We Are Not Separate" in this predicament of embodiment? "The disease is not transmitted by the men, Mr. Spock. It is caused by the area of space which we are in." Far from stating that we are all one, for while Ms. Bryant is fuming over the complimentary magnum of K-Y, and some other force is looking to hang niggers from Louisiana, and others are wondering how Salvation Army People regenerate themselves, the *Post* of 3/3 told of the "Baby Born Without A Mother." If the story is indeed true, then the 14-month-old baby boy clone of the millionaire will mature into a carbon copy with identical fingerprints. Mail early and start to plan the tea party. King Tut can sit to the left of Adolph, and Elvis can sit to the left of Chaplain, but dear, dear, his body seems to be missing! Corporations have the right to own lifeforms created in their laboratories. Moralizing upon the issue, a Sloan Kettering scientist cited, "Human beings don't have the wisdom to be able to control genetics. Cloning should be stopped, violently if necessary." According to Kieffer, of the Kundalini Research Institute, "The intellect can recombine DNA and subatomic particles, it cannot recombine the hidden forces of nature which control us." By the time a little clairvoyance dawns upon a whole lot of us, we may just grasp the reason for secrets and the historic consistency to the persecution of Buddhists. In the meantime, "Go, monks, and wander forth for the gain of the many, for the welfare of the many, in compassion for the world, for the good, for the gain, for the well-being of gods and men. Proclaim, monks, the Teaching glorious, preach for a life of holiness, perfect and pure," sounds a bit more embracing than that Pearls-before-Swine stuff. To the Buddhist, hell is a heuristic realm of experience to be matriculated out of, whereas the Christian, that man of wealth and taste who's been around for a long, long time, just throws the key away.



NEODINOSAURS[1]

by Ivan T. Sanderson

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The entire first chapter from More "Things" *is being reprinted here in its entirety. Since the book has been out of print for many years, we hope many of our readers who have never seen this 'article' on Dinosaurs will enjoy it.*

THERE has been a very curious going-on in Africa for more than a century that needs a good airing. The mere thought of it is an abomination to scientists but it is a matter that never fails to excite our imagination. It revolves around the question—probably for the most part born of wishful thinking—that so many of us asked in our youth; namely, could there be a few dinosaurs still living in some remoter corners of the earth? But first, two expressions of caution.

One is that there actually is not and never has been such a thing as a dinosaur, *per se*, the term being a more general one like "predaceous beasts" than, say "hoofed mammals". It means literally "terrible reptiles" and was initially coined to cover all reptiles discovered as fossils, and at one time it came to include even the larger extinct amphibians and related comparatively tiny creatures only two feet long.[2] There never was any group of animals officially, properly, and scientifically designated that of the *Dinosauria*, although later the term tended to be confined to members of three large groups of terrestrial reptiles that are thought to have become totally extinct some seventy-five million years ago. These are now known as the sub-orders *Theropoda, Sauropoda,* and *Ornithopoda.* Lately, however, the term has once again swelled to include just about all extinct reptiles and the larger amphibians.[3]

My second word of caution regards the concept of modern-day Africa. Just because it has been so much in the news for the past two decades, has been fought over, and is now allegedly criss-crossed by roads, it does not mean that it is any "lighter" than a century ago. In fact, with the advent of the airplane it has reverted to being the truly dark continent in many respects. Its vast jungles and swamplands have been by-passed in all the modern hubbub, and thousands of locations that were fairly well known fifty years ago have now been virtually lost. The mere size of the place is quite beyond comprehension to those who have not visited it,[4] so it is quite useless to suggest that there is not room in it for all manner of things as yet unknown.

There is really nothing but negative evidence to support the statement that dinosaurs are extinct, while, astonishing as it may seem, there are apparently quite a few people who actually believe that some still do exist. Moreover, the evidence they present, is positive, even though they cannot deny that it is purely circumstantial. Much of it may probably and quite justfiably be disposed of as wishful thinking, as examples of mistaken identity, scientific over-enthusiasm, native stupidity or even bad liquor; but there are some things like the tuatara, a two-foot lizard-shaped creature from New Zealand, and some millions of crocodiles which are just as real as the elephants in our zoos and the cattle in our fields, but which are as old as the oldest dinosaurs. All the facts, moreover, are on record, so let us examine them, beginning with what will probably be regarded as the lunatic fringe.

A well-known South African big-game hunter, delighting in the name of Mr. F. Gobler, returned from a trip to Angola and announced to the Capetown newspaper, the *Cape Argus,*[5] that there was an animal of large dimensions, the description of which could only fit a dinosaur, dwelling in the Djilolo Swamps, and well known to the natives as the "chipekwe". He stated: "Its weight would be about four tons and it attacks rhino, hippo and elephants. Hunters have heard a chipekwe—at night—devouring a dead rhino, crushing the bones and tearing out huge lumps of meat. It has the head and tail of a lizard. A German scientist has photographed it. I went to the swamps in search of it, but the natives told me it was extremely rare, and I could not locate the monster. Nevertheless, I am convinced the chipekwe does exist. Here is the photograph."

This, of course, produced a terrific outburst in the editorial and correspondence columns of the paper, but the astonishing thing is that the majority of the experts, both scientific and sporting, and all with much local knowledge, agreed that it *might* exist. Their reasons will become abundantly clear later.

I doubt if any of us would believe such a tale, even if related in all solemnity by the most renowned explorer. Yet a well-known big-game hunter named Maj. H. C. Maydon, with over a decade of experience chasing animals in Africa, has written of this and a number of similar statements: "Do I believe them? Of course; why not? I add fifty percent for native exaggeration, but I believe there is more than 'something' in them. I met a man, an old hunter-prospector, once in Livingstone, Rhodesia, who swore that he had seen a water monster in Lake Mweru and had studied its tracks. Why has no one yet seen these beasts in the flesh for certain or brought one to bag? Because they are forest or swamp dwellers. How many people have seen a bongo or a giant forest hog or a yellow-backed duiker, and yet they are not excessively rare."[6]

The greatest animal dealer of all time, Carl Hagenbeck, not only believed in such reports but actually invested a very considerable sum in an expedition which he sent to Africa under his best professional collector to search for the creature. A hard-boiled businessman with many years' experience in buying and selling animals simply does not do such a thing unless he has very real grounds for expecting concrete returns on his money. Hagenbeck had such grounds, which he states in his own words as follows: "I received reports from two quite distinct sources of the existence of an immense and wholly unknown animal said to inhabit the interior of Rhodesia. Almost identical stories reached me, first, through an English gentleman who had been shooting big game in Central Africa. The two reports were thus quite independent of each other. The natives, it seemed, had told both my informants that in the depths of the great swamps there dwelt a huge monster, half elephant, half dragon. This however, is not the only evidence for the existence of the animal. It is now several decades since Menges, who is, of course,

perfectly reliable, heard a precisely similar story from the Negroes; and still more remarkable, on the walls of certain caverns in Central Africa there are to be found actual drawings of this strange creature. From what I have heard of the animal, it seems to me that it can only be some kind of dinosaur, seemingly akin to the *brontosaurus.*" [7, 8]

Now it is easy enough to scoff at these tales and even to pity the sporting major and the poor gullible animal-dealer. It is quite permissible to view such reports with a healthy skepticism and it is assuredly prudent to do so. Nonetheless, to let the matter rest there would be utterly unscientific. The very basis of science is a healthy skepticism—one, moreover, that should question the skeptic who denies the possibility of anything just as readily as it should question the benighted traveler who dares affirm it.

The borderland of zoology is very extensive; the number of animals still to be discovered on this small planet is much greater than is popularly realized or science is prepared to advertise.[9] Nor are all of these microscopic worms or tiny, obscure tropical beetles. There is the famous case of the okapi, an animal as large as a horse that was only a rumor until 1900 but is now well known. The number of entirely new types of animals that are discovered every year is amazing. And this brings us to the next set of facts which anybody with a truly unbiased mind should contemplate.

A notion has somehow gained popular credence that the surface of the earth is now fully explored and for the most part well-known and even mapped. There was never a greater misconception. The percentage of the land surface of the earth that is actually inhabited—that is to say, lived upon, enclosed, farmed or regularly traversed—is quite limited. Even if the territory that is penetrated only for hunting or the gathering of food crops be added, vast areas still remain completely unused.[10]

There are such areas in every continent, areas that for years are never even entered by man. Nor are these only the hot deserts of the torrid regions or the cold deserts of the poles. I have visited a house in New Jersey behind which the woods extend in one direction, unbroken by so much as a path, for twenty-one miles.

In parts of the tropics there are areas of quite staggering immensity which no man has as yet been able to penetrate. Whole mountain ranges in Australia have never even been seen from the ground; large parts of the northern Himalayas are as yet unvisited; regions of New Guinea have never been reached, and considerable portions of the Amazon valley are quite unknown. The Addar swamps in Central Africa cover 1800 square miles, those of the Bahr el Ghazal several thousands, and parts of them cannot be traversed. Just because a map is covered with names does not mean that the country is known. Aerial surveys made with modern photographic techniques only add to this popular misconception, for many of the physical features are recorded in some detail then rapidly find their way into our atlases. They are given names and fill up the space, but at the same time the country remains absolutely untouched.

The notion, therefore, that some beast could not exist because of its size or because somebody would sooner or later have seen it, is really quite absurd. There might easily be creatures as big as elephants living in some profusion, say, in the back of the Guyanas, which are now only a few hours' flight in a commercial plane from Miami. Such animals might have been well known to several thousand people for hundreds of years, but their presence would still be unsuspected by us, for few of the Amerindians—who from aerial surveys are known to exist in that area—have ever come out or even been seen by anyone from outside.

Another fact that is often not sufficiently appreciated even by experts is the extraordinary selectivity displayed by many animals in choosing their places of habitat. Larger animals especially tend to stay within a limited area that is often very distinctive as far as vegetation and other environmental conditions are concerned. Nomadic animals often travel only from one patch of some particular kind of forest to another of the same, avoiding all other kinds as they would a forest fire. Hippopotamuses will abound in certain stretches of a river and never be seen in others.

This trait often accounts for the supposed rarity of many animals, when in point of fact—apart from species that are actually on the road to extinction—there is probably no such thing as a rare animal. It is merely a question of finding where it lives and how it lives, and in that place it will prove to be quite common. Any creature living in a tropical swamp surrounded by dry jungles would always stay there and, if that swamp could not be penetrated by man, might never be seen. In such a swamp of two thousand square miles' extent, many very large beasts could lurk.

The possibilities become even greater if the animals in question be semi-aquatic; it is interesting to note in this connection that all the accounts of as-yet-unidentified-beasts which sound like descriptions of dinosaurs are of swamp creatures that retreat into the water when alarmed.

The vastness of Africa is a byword and can be attested to by any who have flown over it, but to be really appreciated it has to be seen from the ground. Also, it is only on the ground that one comes to understand the true nature of the tropical forests and swamplands. A companion and I once spent a full five minutes peering into a small patch of bushes trying to see an animal apparently about as bulky as the two of us put together, that we could actually hear breathing. We never did see it, even when it took fright and left, making about as much noise as a light tank![11] On another occasion I was in a canoe among reeds in Africa and, after looking up at the sun ahead to take my bearings, bent down to pick up a cigarette. When I looked up again there was a full-grown bull elephant almost on top of me. As I watched, quivering with fright, it sank down behind the reeds, and although I immediately stood up in the canoe so that I could almost see over the swamp, I never even heard the huge beast again, nor did I see so much as a single reed move. And this was only a mile from a native village of two thousand souls, in an area where elephants had not, as far as I could learn, been seen within living memory.[12]

Small wonder, then, that residents of Africa, and especially those who have hunted big game in more distant parts, do not readily scoff at these tales which provoke us to so much laughter—tales such as that brought out of the Congo by a certain Monsieur Lepage in 1920.[13]

This man returned from a hunting trip and announced that he had come upon an extraordinary animal of great size in a swamp. It had charged him, making a snorting noise, and he had fired wildly; but seeing that it did not

halt, he had retreated precipitately. When the monster abandoned the chase he turned and examined it through a pair of binoculars for a considerable period of time. He stated that it was eight meters—about twenty-six feet—long, had a long pointed snout, a short horn above the nostrils, and a scaly hump on its shoulders. The forefeet appeared to be solid like those of a horse, but the hindfeet were separated into digits.

The most astonishing thing about these reports, however, is not so much their prevalence as the widespread points of their origin. Here again our modern atlases are very misleading because the practice—born quite properly of necessity—of squeezing the whole of Africa into one page gives the impression that the Cameroons are not really very far from the Upper Nile. This distance is actually 1600 miles, and the territory in between is a vast land of forests, swamps, and savannahs. The natives on one side have no connection whatsoever with those on the other, and yet very similar stories are prevalent at both extremes.

These native tales are heard throughout the equatorial rain-forest belt from Gambia in the west to the Nile in the east, and south to Angola and Rhodesia. Carl Hagenbeck's collectors picked them up in Liberia, and the leader of a German expedition to the Cameroons in 1913 made a very interesting report which has never been published in full, but which has been quoted by several others. In widely separated areas, he collected descriptions of an alleged beast named the "Mokele-mbembe" from experienced native guides who could not possibly have known each other. His description states:

"The animal is said to be of a brownish-gray color with a smooth skin, its size approximating that of an elephant; at least that of a hippopotamus. It is said to have a long and very flexible neck and only one tooth but a very long one; *some say it is a horn*. A few spoke about a long muscular tail like that of an alligator. Canoes coming near it are said to be doomed; the animal is said to attack the vessels at once and to kill the crew, but without eating the bodies. The creature is said to live in the caves that have been washed out by the river in the clay of its shores at sharp bends. It is said to climb the shore even at daytime in search of food; its diet is said to be entirely vegetable. This feature disagrees with a possible explanation as a myth. The preferred plant was shown to me; it is a kind of liana with large white blossoms, with a milky sap and applelike fruits. At the Ssombo River I was shown a path said to have been made by this animal in order to get at its food. The path was fresh and there were plants of the described type near by. But since there were too many tracks of elephants, hippos, and other large mammals, it was impossible to make out a particular spoor with any amount of certainty."[14]

This brings up the whole question of native tales, over which there is perhaps more acrimonious debate than over any other subject. Opinions appear to be about equally divided among those who have lived in Africa, but both parties tend to overlook certain facts. Because of his animistic beliefs, the African lives in a world peopled by a host of spirits which are nonetheless just as real to him as animals are to us, and he may describe these with great clarity of expression. However, we must at the same time consider the fact of the African's customary and remarkable knowledge of natural history; usually, he not only has a name for all the animals in his country but also knows their habits and their slightest variations in great detail.

The African can, however, develop a maddening habit of exaggeration or even outright fabrication if he desires to please an inquiring foreigner. Against this, in turn, must be placed his very widespread reluctance to publicize anything in his territory that might conceivably be of value to the outside lest—as he has learned from unhappy experience—a new tax immediately be clapped upon it. If you do get a tribal African's confidence and he starts to talk about animals, as opposed to the spirit creatures of his country, it is well worth while to listen intently, for it must not be forgotten that certain Africans always contended that mosquitoes had something to do with malaria, a fact we proved only quite recently. Similarly, others talked about the okapi for a very long time before it was actually shot by a white man. But sometimes the African's patience with us and our disbelief of things he knows well becomes exhausted, and even he resorts to the writing of official minutes.

I must interject here a brief account of a personal experience that occurred in 1932 when I was with the well-known explorer and animal collector, W. M. (Gerald) Russell, and two young Africans employed by us, Bensum Onun Edet and Bassi Aga of the Anyang people. We had paddled all day up a remarkable river named the Mainyu which ran north, straight as a man-made canal, from a large circular pool in which another small river emptied, and from which the mighty Cross River emerged on its way south between the Cameroons and Nigeria to the Atlantic at Calabar. The Mainyu itself was over a hundred miles long, arising in the Assumbo Mountains to the north, ending in this straight run, then cutting a slightly tortuous gorge through a ridge of limestone four-hundred-feet high that lay athwart its entrance to the Mamfe Pool. All the way it ran through the uninhabited, (by any humans) high, deciduous, Equatorial rain-forest, between smooth rock shelves backed by strands of white sand with lush short herbage, behind which the towering forest rose like a cathedral wall, its foliage overhanging the sandy beach. From the giant trees of this forest wall hung innumerable creepers (locally called lianas) both enormous and fine as cotton threads. Many bore exotic flowers and enormous, globular green fruits, looking like footballs, and just as tough.

On returning downstream to the Mamfe Pool from a day of very hard paddling upstream on a collecting trip, we just glided along, paddling only now and then to maintain way. Sundown was approaching as we entered the gorge. Gerald Russell was in the lead canoe with Bassi; I followed about a hundred feet behind with Bensun. There were deepening shadows in the gorge and all along its towering vertical walls at water-level were the arched tops of huge caves. We had previously penetrated some of these at the pool-end of the gorge to collect a certain kind of very rare frog, but we had never before passed these huge ones farther upstream.

When we were about in the middle of the mile-and-a-half-long winding gorge, the most terrible noise I have heard, short of an on-coming earthquake or the explosion of an aerial-torpedo at close range, suddenly burst from one of the big caves to my right. Ben, who was sitting upfront in our little canoe with a "moving" paddle, immediately dropped backward into the canoe. Bassi in the lead

canoe did likewise, but Gerald tried to about-face in the strong swirling current, putting himself broadside to the current. I started to paddle like mad but was swept close to the entrance of the cave from which the noise had come. Thus, both Gerald and I were opposite its mouth; just then came another gargantuan gurgling roar and something enormous rose out of the water, turned it to sherry-colored foam and then, again roaring, plunged below. This "thing" was shiny black and was the *head* of something, shaped like a seal but flattened from above to below. It was about the size of a full-grown hippopotamus—this head, I mean.

We exited from the gorge at a speed that would have done credit to the Harvard Eight and it was not until we entered the pool that Bassi and Ben came-to. What we wanted to know, what was this monster? Neither could enlighten us as they were not river people. However, both finally yelled "M'kuoo-m'bemboo", and grabbed their paddles. When we reached the little beach at the far side of the pool where we kept our canoes, we were met by the rest of our gang, some twenty-strong and all local men. They were very shaken and solicitous of our safety. All the river people among them confirmed Bassi and Ben's diagnosis. These animals lived there all the time, they told us, and that is why there were no crocodiles or hippos in the Mainyu. (There were hundreds of both in the pool, the other river, and the Cross River.) But, they went on, "M'koo" does not eat flesh but only the big liana fruits and the juicy herbage by the river.

Later we moved across that river permanently and camped nearby. We found huge pathways through the herbage from the river and masses of the great, tough, green "footballs" smashed up, and some with pieces, a foot wide, bitten out of them just as we bite a piece out of an apple. But now back to official reports.

The now famous report of the late King Lewanika, of the Barotse tribe, is of this nature. The king, who took great interest in the fauna of his country, constantly heard of a large reptile that lived in the great swamps. He had passed this information on, but, since nobody believed it, he gave strict orders that the next time any of his people saw the animal they were to tell him immediately. After some time three men reported, saying that they had come across the beast at the edge of a marsh, that it had a long neck and small, snakelike head, and that it had retreated into the swamp on its belly. King Lewanika immediately visited the spot and states in his official minutes that it had left a track in the reeds "as large as a full-sized wagon would make were its wheels removed."

Other native evidence comes from widely separated sources. An experiences white hunter named Stephens, who was also in charge of a long section of the telegraph line which runs along the banks of the Upper Nile, has given a great deal of information about a large, swamp-dwelling reptile known to a number of tribes as the "Lau."[15] The natives described the animal to Stephens in great detail and more than one of them affirmed that they had been present at the killing of a "Lau." They variously described it as being between forty and a hundred feet long, but concurred in stating that the body was only about as big as a donkey; that it was dark yellow in color, and that it had a vicious, snakelike head, with large tentacles or wiry hairs with which it reached out to seize its prey. Later, a Belgian administrator from the Congo asserted that he had seen a "lau" several times in a swamp and had shot at it.

The most convincing native account, however, comes from Northern Rhodesia, and is of the animal called the "Chipekwe." An Englishman who spent eighteen years on Lake Bangweulu in that country has given an account of the slaying of one, as described by the local chief, who had it from his grandfather.[16] Apparently the tribesmen killed the creature with hippo spears. It had a smooth, hairless, dark body, and the head was adorned with a single white ivory horn. The story was firmly rooted in local tradition; the Englishman believed in the existence of the animal, for he reports that a retired local administrator had heard some very large animal splashing in a lake in the nighttime and had examined large unknown spoor on the bank the next morning.

The mention of a single ivory horn brings us to a whole set of most interesting facts that were assembled from quite another source. Some years ago during the excavation of the famous Ishtar Gate of Babylon by the German professor, Robert Koldewey, a number of startlingly realistic bas-reliefs of a dragonlike animal with curiously mixed features were brought to light. It had a scaled body, long tail and neck, hindfeet of a bird and forefeet of a lion, and a strange reptilian head sporting a single straight, upright horn like that of a rhinoceros, wrinkles under its neck, a crest like a modern iguana lizard, and a very pronounced, serpentine tongue. At first this fabulous creature was classed along with the winged, human-headed bulls and other fabulous monsters of Babylonian mythology, but profound researches gradually forced the professor to quite a different conclusion.[17]

The creature had the name of the "Sirrush" and the priests were said to have held it in a dark cavern in the temple. It was depicted on the walls of the Ishtar Gate in great numbers and in association with a large, ox-like animal which is now known to have been the extinct aurochs—very definitely a real animal. When analyzed, allowing for considerable Babylonian artistic license, the strangely mixed characters of the "Sirrush" appeared to be much less fabulous than had at first been supposed, and, despite his solid Teutonic background, Professor Koldewey became more and more convinced that it was not a representation of a mythical creature but an attempt to depict a real animal, an example of which had actually been kept alive in Babylon in very early days by the priests. After much searching in the depths of his cautious scientific soul, he even made so bold as to state in print that this animal was one of the plant-eating, bird-footed dinosaurs, many types of which had by that time been reconstructed from fossil remains. He further pointed out that such remains were not to be found anywhere in or near Mesopotamia and that the "Sirrush" could not be a Babylonian attempt to reconstruct the animal from fossils. Its characters, as shown in Babylonian art from the earliest times, had not changed, and they displayed great detail in scales, horns, wrinkles, the crest and the serpentine tongue, which, taken altogether, could not all have been just thought up after viewing a fossilized skeleton.

On further analysis, the "Sirrush" seems to display characteristics of the "Chipekwe" of Lake Bangweulu and of Monsieur Lepage's beast from the Congo. The single horn on the snout, the scaled hump on the shoulders, the solid forefeet and cloven hindfeet, the long neck

and small serpentine head and even the "tentacles" of the "Lau" all appear in the "Sirrush." But, much more significant is the little matter of a certain dinosaur of the *Theropod* or so-called "beast-footed" group known as *Cerotosaurus* or the "reptile with a horn". This had a single, upright, white horn on its snout, was probably scaled at least in part, had rather long kangaroo-like hind legs with only three toes like a bird. This is rather annoying because the designation thero-pod means beast or mammal-like-footed, while another of the dinosaurian groups is called ornitho-pod which means bird-footed and its members have three, four, or even five toes! The *theropods* were carnivorous, and this would coincide with the hippo-eating proclivities of the "Chipekwe." We have no evidence from fossils that *Ceratosaurus* was scaled but there is no reason why it should not have been; also, if you look at the head of a large, old iguana in profile you will note just such features as the "Sirrush" displays, namely, gular or throat folds of skin, a crest rising to a point on the crown of the head and then running down the neck and along the back, a very round prominent eye, a slim lower jaw with prominent scales, and sooner or later you will see the forked tongue flick out. Recently, the way in which the skeletons of many of the dinosaurs have been articulated and set up in museums has been very seriously criticized by a group of palaeontologists. (See bibliography.)[18] They contend that the ancient large reptiles were erected upon (like mammals), rather than slung between, the limbs (like lizards). It is possible therefore that dinosaurs like *Ceratosaurus*, despite its small front limbs, spent much time like a browsing kangaroo with its forefeet on the ground, and since the hands had five little clawed fingers it would be rather natural that a Babylonian sculptor should liken them unto a lion.

The only jolt to this theory is that the only one-horned *theropod* — this *Ceratosaurus* — is known only from the Cretaceous period of North America. However, this does not mean that it could not have had an ally in Africa, since there are closely related *theropods* of other kinds known from both continents.

The final link in this chain of evidence may well be the findings of some archaeological digs in Somalia. These brought to light numerous massive structures of a type known only from the Mesopotamian region, composed of baked bricks, some of which were glazed just like those built into the wall and gate of Ishtar. This is much less fabulous than it sounds, for there is absolute evidence that seaborne trade had been carried on by the Sumerians, before the rise of Babylon, between Mesopotamia and the east coast of Africa which was called "Me-lukh-kha" and was said to be inhabited by Salmuti, meaning "black men". If a horned, *theropod* dinosaur existed in Africa at that time, a captive specimen or specimens might well have been shipped back to Mesopotamia, where they would undoubtedly have created quite a stir and become the exclusive property of the ruling priesthood; in fact, the "beast in the pit" of the Bible. Their presence as sacred beasts would prompt the making of very careful portraits of them on important monuments.

Whether the Babylonian "Sirrush" and the other creatures rumored to have come from Africa exist now, or ever existed at all, is a matter that can be proved conclusively only by the discovery of either a live specimen or of fresh bones in association with the remains of men. But if they do exist, the question that immediately springs to mind is, could they be dinosaurs? The answer, perhaps rather surprisingly, is yes.

Neither in its general nor its restricted sense does the name dinosaur necessarily imply primitiveness of structure, great geological age, or even large size, for there are many medium, small, and tiny ones. The crocodiles as a group are just as old and individually much larger than many dinosaurs, while the tortoises belong to one of the most primitive of all reptilian stocks. The little lizard-shaped tuatara which still lives on some islands off New Zealand, is, in the general sense, a dinosaur and it is much more primitive and comes from an older stock than those three groups which we call dinosaurs in the more restricted sense.

This puts the whole matter in an entirely different light. If the tortoises, the tuatara, and the crocodiles have managed to survive from the age of reptiles, there is really no reason why members of the other groups, some much less primitive and including those that we may choose to call dinosaurs, should not also have survived. The majority of the reptiles disappeared at the end of what is called the Cretaceous period, after which the more active and "clever" mammals took over. But there is no reason why some might not have lingered on until today in the vast and isolated swamps of Africa—the one part of the world that has remained tropical and comparatively stable since the Cretaceous period and which was almost entirely unaffected by the great ice ages and the mountain-building disturbances of intervening times.

It is indeed a very curious business that merits our consideration and, in my opinion, some active investigation. Can the whole thing be the product of wishful thinking? Can all these big-game hunters, animal collectors, game wardens, and princely African writers of official minutes be pure sensation seekers or under the influence? Did Professor Koldewey just go daft, and throw away his high scientific standing with carefree abandon?

There could be dinosaurs alive today, so let us try to maintain what should be the true scientific spirit and simply say that, as yet, there is no positive evidence that they do still exist.

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MORE ON EXTANT DINOSAURS



Cerro Santa Ana. At its top, a patch of tropical rain forest has remained isolated in the desert from the end of the Cretaceous.

by Dr. Silvano Lorenzoni
Photographs by the author

IN the Spring, 1977 issue of this magazine[1] I had explained that the survival of actual dinosaurs—or of some other kinds of prehistoric and supposedly "extinct" living forms—both animal and vegetable—was both possible and likely in the high and isolated plateaux of the Guayana region south of the Orinoco River, in northern South America. In particular, I quoted an exceedingly puzzling eyewitness account to that effect.

Since then this matter has acquired broadened contours, both as a consequence of my readings and of my conversations with several knowledgeable people interested in this subject,[2] and of my own travels and on-site perusals and interviews with witnesses.

* * *

To begin with, something more about the Guayanese plateaux. There is evidence, collected and published by



The Roraima from near Santa Elena de Uairén. Atop this mountain it has been said that unidentified fossils are extant.

Dr. L. Croizat,[3] that the definitive isolation of those plateaux dates from the end of the Cretaceous (60 to 80 million years ago) which is exactly the time when the dinosaurs—at least as a well-distributed and powerful group of species—became extinct. That in itself constitutes an additional prop for the hypothesis that their last descendants could still survive on those isolated heights. Dr. Croizat, however, leads us one step further when he expounds a theory whereby the Guayanese plateaux reached their present configuration in a very quick and almost catastrophic fashion. I shall attempt to sketch, very briefly, Croizat's theory:

At the end of the Cretaceous most of South America was formed by a comparatively low and continuous plateau of pre-Cambrian sandstone that extended roughly from the Caribbean to the Argentinian pampas. At that time the rising of the Andes, all along the western edge of the continent, changed the situation in two ways:

(a) the primeval plateau was lifted—owing to isostatic forces set up by the appearance of high rock masses to the west—and presumably cracked.

(b) new rivers and river basins were created—notably the Orinoco to the north, the Amazonas to the center and the Paraná to the south. As a consequence large water masses, channeled along the cracks of the primeval plateau, caused an unprecedented erosion. The result was the definitive breaking up of the plateau into two parts: Guyana in the north, and the Brazilian uplands (the "Mato Grosso") in the south. Guyana, while smaller in extent, is substantially higher above sea level than the Mato Grosso and of a much more broken nature, being the land of the fantastic "tepuyes" or flat-topped mountains.

Incidentally, the cracking mentioned in (a) above should have caused some localized volcanic phenomena and/or extrusions of igneous rock. *I have personally observed igneous extrusions on the north side of the Auyantepuy* during my last (April, 1976) expedition to that mountain.

In the event Croizat's theory is correct, the credibility of the possible survival of purportedly "extinct" species on those lone heights would be strongly enhanced. I have been able to collect two further pieces of information:

(a) During a recent trip (September, 1978) to the Salto Angel area[4] I was informed by the local indians that in the vicinity certain "unusual size lizards" exist. One may justifiably wonder *what* they may be.

(b) A report on *fossils*, supposedly seen atop the Roraima, has been made.[5] No "official" report has ever been made of fossils in the Guayana area.

Quite apart from the above, Croizat's theory has some other interesting consequences. In particular, any formations, however small, made up of pre-Cambrian sandstone which is to be found north or west of the Orinoco, should

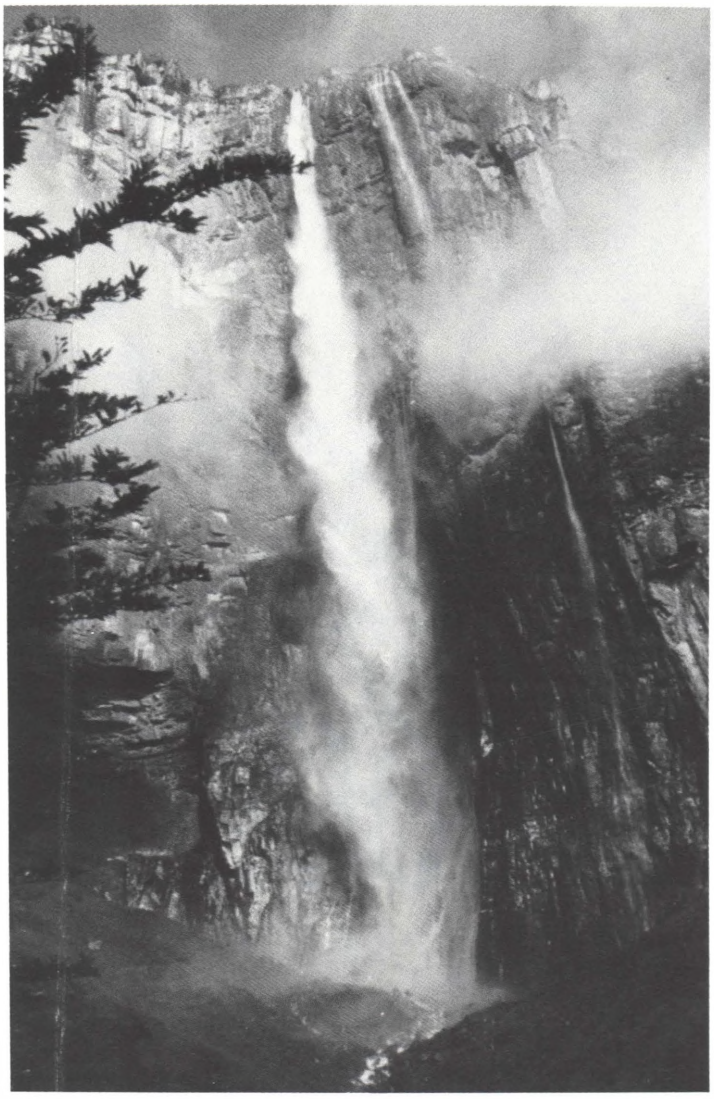
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OPPOSITE PAGE

Above: **Serrania del Moroturo, as seen from the farm "La Herrereña (La Aparicion, Portuguese, Venezuela). An unidentified "water monster" is reported to inhabit a lake in these mountains.**
Below: **Pre-Cambrian sandstone formations in the Galeras de El Pao. A peculiar saurian (a varanid?) has been sighted in this area.**







Salto Angel (Auyantepuy). In this area "unusual size lizards" have been reported.

be interpreted as residues of the "primeval plateau"; as such, they are worthy of an investigation as to possible peculiar biological endemisms.

In Venezuela there is at least one such formation, of a fair size, the so-called Galeras de El Pao (States of Guárico and Cojedes). This is a system of low hills, about 300 m. high, about 100 km. long, and 20-30 km. wide, parallel to and separated from the Venezuelan coastal range (which is a prolongation of the Andes) by narrow and low swampy valleys.

Peculiarly enough, *it is from these "Galeras" that an exceptionally large reptile has been reported,*[6] described as something resembling a "Komodo dragon"—i.e., what could presumably be a large varanid. To this day, *true* varanids do not officially exist anywhere in South America. (The closest there is to them is the zoological family *Ameividea:* iguana-size carnivorous lizards that are, however, very far from fulfilling the descriptions that are given for those unknown "dragons."[7])

I have personally observed residues of sandstone walls in the higher parts of the Sierra de Coro (State of Falcón, Venezuela). Those, too, are likely to be residues of the "primeval plateau," probably too small and too broken to offer much of a hold to any prehistoric endemism. But, of course, *one never knows.* In Colombia, on the other hand, what appears to be a large pre-Cretaceous residue is the Sierra de la Macarena, scarcely 200 km. southeast of Bogotá, which would also be worthy of Fortean attention.[8]

* * *

I shall round off this paper by indicating a few more locations in Venezuela which, even though they are not tied in with the theory and phenomenology of the Guayanese plateau, nevertheless may merit Fortean interest in terms of the possible existence of unusual flora and/or fauna:

(a) Cerro Santa Ana (peninsula of Paraguaná) and Galeras de El Baúl (State of Cojedes).[9] The Cerro Santa Ana is an isolated height about 900 m. high close to the middle of the otherwise nearly flat peninsula of Paraguaná. This peninsula is the driest part of Venezuela—to all intents and purposes a desert—while the summit of the Santa Ana sustains a genuine tropical rain forest in its uppermost part (above about 600 m.). *This patch of rain forest, not larger than about 25 sq. km., must have remained ecologically isolated for the last 60 to 80 million years.* I have personally visited this peak on several occasions. During one of my visits there I discovered a peculiar crustacean, some specimens of which I sent to SITU to have identified.*

The forest atop the Santa Ana (a mountain that appears to be of volcanic origin) is definitely unlike anything I have observed in my multiple travels and expeditions, with the presence of an endemic dwarf palm (known to science but of no known relationship) and abundance of a large tree of the *Ficus* family and creeping ferns—all of them singularizing features.

Geologically akin to the Santa Ana are the isolated volcanic hills of El Baúl (Galeras de El Baúl), in the midst of the Venezuelan central plains. To the best of my knowledge they are still ecologically, botanically and zoologically unexplored.

(b) Serranía del Moroturo is a wooded mountain range, about 2000 m. high. It branches off from the Venezuelan Andes and makes the border between the states of Lara and Portuguese. In a secluded area of that range there is a lake, about 1000 m. above sea level, in which is said to live, for want of a better identification, a "water monster." The area is not particularly isolated from an ecological standpoint; it may be that this "water monster" is nothing other than an anaconda—which in itself would be a peculiar occurrence in an isolated lake at 1000 m. above sea level. On the other hand, since the pond apparently dries

* SITU sent these specimens to Dr. Thomas E. Bowman, Curator, Crustacea, Department of Invertebrate Zoology, of the Smithsonian Institution. Here is a summary of his findings: "I have examined the specimens of *Ligia* and I believe they are *Ligia platycephala* (Van Name). There are some small differences from published descriptions, but I suspect these are related to the smaller size of your specimens. I have found that *L. platycephala* has already been reported from Cerro Santa Ana by A. Vandel, the leading authority on terrestrial isopods, in 1952. ("Étude des isopodes terrestres récoltés au Vénézuela par le Dr. G. Marcuzzi," Memorie del Museo Civico di Storia Naturale di Verona, vol. 3, pp. 59-203). It is generally agreed that *L. platycephala* and *L. simoni* Dollfus from Cumbre de Valencia, Venezuela and Santa Marta, Colombia, are sufficiently distinct from other species of *Ligia* to warrant recognizing a subgenus, *Pogonoligia Jackson,* for them.

"Until now we have had no representatives of *L. platycephala* in our collections, so the speciments you have given us are most welcome."



Residue of sandstone wall in the Sierra de Coro.

out during severe droughts, there is a chance that it may be a variety of lungfish. Lungfish are known from the low-lying grounds of the Venezuelan central plains as well as from the Amazonian basin (and also from equatorial Africa and Australia), but never from above 1000 m. above sea level. In the event that the denizen of the Moroturo lagoon was indeed a lungfish, it would have to be of a new and unknown variety. But need it *be* a lungfish?

* * *

To sum up: I have presented what evidence is known to me as to the possibility of Fortean findings in the biological field in South America in general and in Venezuela in particular. While some of this evidence—specifically that which refers to sightings and second hand reports—may turn out to be pure hearsay, I think it is *highly unlikely* that it will *all* prove to be without a basis. I feel quite certain that a *systematic* exploration of the areas mentioned would be richly rewarding. Such a systematic study I have myself slowly begun, even though within the all-too-narrow margins of my extremely scarce free time.

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2. In particular, with Dr. León Croizat, one of the world's greatest biogeographers and ecologists, now director of the Xerophitic Botanic Gardens at Coro, Venezuela.

3. See: León Croizat: *Biografía analítica y sintética (panbiogeografía) de las Américas*, Biblioteca de la Academia de Ciencias, Vol. XV, Caracas (1976) (2 tomos).

4. See: Croizat: *Panbiogeografía*, op. cit.

5. The Salto Angel, the world's highest waterfall (1000 m.), falls from the Auyantepuy. I was informed of this by Dr. Janis Rácemis, now retired from a biology chair of the Universidad Central de Venezuela. His source was "a Swedish geologist" who had climbed the Roraima sometime in the 1960s.

6. The information was given to Dr. Croizat in 1972 by a prospector then living in Caracas.

7. All quotes referring to Venezuelan fauna are taken from: Eduardo Röhl: *Fauna descriptiva de Venezuela (vertebrados)*, Tipografía Americana, Caracas, 1949.

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EXEGESIS: UNEXPLAINED DATA RELATED TO UNITED FLIGHT 389

by E. Macer-Story

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ONE of the most interesting side effects of "ufo" manifestation is the false image or "angel" effect on radar mechanisms. For example, at the time of the mysterious nosedive taken by United Flight 389 on August 16, 1965, the U.S. Air Force Air Defense Command radar network (SAGE) recorded two moving targets in the 389 crash area.

As a matter of fact, there was only one aircraft in that area. These two radar tracks recorded by SAGE both displayed secondary data which does not agree with first hand information determined by examining the actual wreckage of the plane.

The central, stabilizing device in a standard radar instrument is a continuously-oscillating time standard, usually a quartz crystal. An approximation of the distance and speed of objects registering on the radar screen is obtained by a process of "time demodulation," during which the difference between a constant electrical pulse and the similar pulse reflected by the moving object is measured in terms of time delay and relative frequency. The demodulation of the frequency gives the speed of the object, while the measure of the time delay interval provides an approximate distance of the target from the radar registry.

In analyzing the sudden nosedive of Flight 389, the radar data which has perplexed investigators involves a certain Track AO39, which ceased recording several minutes before the crash, and a second Track KO47, which began suddenly several minutes before the crash and continued for two minutes *after* the crash, discontinuing at a point approximately 23 miles due west of where the wreckage was later discovered. This is a simplified visual representation of tracks AO39 and KO47:

Assuming that this is the track of one airplane, since no other aircraft was in the area, Flight 389 seems to have disappeared for two minutes, reappeared, crashed, and yet continued to fly on for several minutes after this crash, finally vanishing entirely. Jay Gourley, in his book on the "Great Lakes Triangle" area, states that Flight 389 would have to have accelerated to well over the speed of sound in order to make this observation valid.

Clearly, since ordinary wreckage was found in Lake Michigan near a place where eyewitnesses saw a fireball over the water, this hypothetical acceleration is impossible. The radar tape processed by SAGE must indicate a malfunctioning of equipment.

The odd behavior of this equipment must be due to some problem with the continuously-oscillating time standard or some time demodulation program computer-linked to this constant electromagnetic pulsing.

It is significant that the crash of Flight 389 seems to have been caused by the irrational behavior of three experienced commercial pilots who, while engaging in casual conversation with the control facilities in Chicago about their ordinary altimeter setting, failed to level off their aircraft normally, and instead directed it downward, making a surprise nosedive into Lake Michigan. Previous conversation with the Chicago Approach Control seems to indicate that the instruments in the plane were working normally, and that this uncontrollable crash landing was the result of some inexplicable human error or sudden equipment failure.

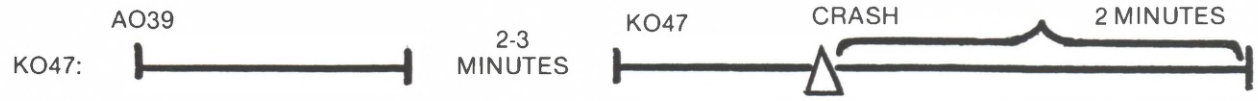
I was standing out looking at the stars one evening last summer, when a bat flew at my head. It flew back and forth from my head to the house several times, seemingly trying to get a bearing on my alien height in comparison to the familiar dimensions of the building.

Perhaps this bat felt that a measure of my height might be a measure of my identity.

Like the U.S. Air Force Defense Command, bats use a "radar" device which bounces signals off physical objects. It is not any direct impression of the object itself which reaches the bat, but a variation of its own original ultrasonic probe. Bats use ultrasonic rather than electromagnetic test probes of their vicinity. A bat which had ceased to remember the original signal which it emitted would lose directional orientation, due to a lack of any ability to make an approximate comparison between the original remembered signal and current ultrasonic signals bounced back from the object.

Memory malfunction in the bat would manifest as spacial disorientation. It would start flying into objects. It might even make a nosedive directly down into the obvious blue surface of a lake, thinking that it was flying upward.

As in measuring a human being against a house to find the comparative height of the object, the only way to correlate the mental state of the pilots in charge of Flight 389 with the unusual radar tracking of this ill-fated flight is to compare these two unlike malfunction events in terms of what they may have in common. It seems to me that in both cases there has been a significant "memory



malfunction." The radar mechanism forgot how to process the data correctly, and three experienced pilots forgot for a moment how to fly their plane. Or the equipment in the plane forgot for a crucial moment how to fly itself automatically.

What sort of phenomenon could cause a memory malfunction in both a machine and a trained human being, and/or two pieces of electronic equipment situated miles apart geographically? Certainly, this long-distance coincidence is not just a psychological error on the part of the flight crew. It has to involve a very palpable sort of mutual phenomenon or the radar equipment would not have gone haywire at the same time, and scanning the same area, as an inexplicable nosedive into Lake Michigan. What sort of physical phenomenon could both throw off the time standard of the radar mechanism and alter the consciousness of the flight crew of United Flight 389?

Since the nervous system, like the continuously-oscillating time standard in a radar sensing system, is basically an electrochemical mechanism, clearly this mutually-experienced phenomenon is something which alters the electromagnetic atmosphere in the area where these unusual effects are occurring, otherwise the radar and the mental capacities of the crew would not both be independently affected within the same time/space frame.

This would also be true if the equipment within the plane and not the sensibilities of the flight crew had been affected by some unknown phenomenon: in order to logically link the malfunction of the radar with the crash itself, it is necessary to postulate some more general electromagnetic change in the crash area, which was being routinely scanned by the U.S. Air Force Air Defense Command when the unusual effects were recorded on the radar tape.

There is only one problem as concerns this supposition about a changed electromagnetic atmosphere in the area of the crash. The crash and the radar mechanism were not in the same small geographical area. Therefore the pilots and/or their equipment and the continuously-oscillating time standard of the SAGE radar network were *not* independently affected within the same time/space frame.

They were, however, independently affected with reference to the same unusual *event*, an inexplicable plane crash.

Clearly, there must have been something very particular which both caused the plane to take a nosedive and bolex up the radar. Suppose, for example, that Flight 389 entered a pocket of altered molecular-electronic density at the termination of radar track AO39.

Once inside this area of *altered structural density**, the plane itself would "disappear" to the radar, since the area surrounding the plane would be an area of matter which was structurally different from the electronic density of the surrounding atmosphere, and therefore non-reflective to a conventional electromagnetic radar pulse.

Of course, any accelerated craft which entered such a pocket of altered molecular density unexpectedly could not be expected to survive this transition intact. Suppose that at some point the wreckage of Flight 389 precipitated out of this area of altered density and into Lake Michigan. Further suppose that at the beginning of radar track KO47 a craft of an unidentified nature emerged from this area of altered molecular density and continued on about its esoteric business, then re-entered this same continuum of altered molecular density, vanishing to radar.

The flight data recorder of Flight 389 has never been recovered. If I were now plotting a science fiction story, I might now order these speculations in such a way as to indicate that a craft which was able to navigate using energies of an electronically "strange" density, and which also possessed a more sophisticated knowledge of the "time" continua than we currently do in the U.S.A., had darted out into the skies over Lake Michigan just long enough to recover the evidential flight data recorder . . . before or during the crash descent.

This would account for the unusual acceleration recorded by track KO47, if the SAGE mechanism was not malfunctioning. However, I am not at this moment plotting a science fiction story. We will never know exactly what happened to Flight 389. Either the radar device was malfunctioning, or it was not malfunctioning. If it was malfunctioning, it is extremely interesting that the misbehavior of the continuously-oscillating time standard occurred within the same half hour as the inexplicable air crash which it was tracking.

If the SAGE mechanism was *not* malfunctioning, then something unusual indeed happened in the vicinity of Flight 389. It is within the realm of real possibility that United Flight 389 hit a pocket of *altered structural density,* which affected not only the relationship of the molecular structure of the aircraft to its environment, but also the electrochemically regulated perceptual mechanism which they were consulting. Clearly, the unusual event of the crash itself had some effect on the time/space perception of the radar mechanism, most particularly the *time* perception of this mechanism, which abruptly dropped one track, only to begin another track several minutes later, happily continuing this anomalous second track for several minutes after the time of the crash as witnessed, only to abruptly discontinue recording a solid target over twenty miles from the crash site, indicating the termination of the flight in an area where no wreckage has been recovered.

If the reader finds the foregoing information difficult to understand, that is because it makes no sequential sense. During all of these various stop/start times, there was only one aircraft in the scanning area, and this aircraft was seen by eyewitnesses to explode into the water at a time well *before* track KO47 had ceased recording.

This sort of discontinuous information is common among individuals who have experienced precognition or other altered states of informational consciousness, associated with dreams, drugs and/or ESP. It is unique to have a tape from a radar mechanism which perhaps may demonstrate the same purposefully-discontinuous mode of perception.

Associationally, then, whatever caused Flight 389 to take an abrupt nosedive into the water seems to be in effect quite similar to the "bio-plasmic" or "pranic" phenomena accompanying a strong ESP impression or poltergeist haunting.

* Altered structural density is a quality involving a change in the electronic bond which binds together the basic molecular structure of matter. An alteration of basic molecular-electronic density would change the electromagnetic structure of any large object.

Of course, an airplane crash is not a haunting, and only a short-sighted ultrasonic bat might dart from one to the other of these mysteries in order to make some sort of analytical comparison.

This meticulous directional disorientation has probably led to the widespread use of the colloquial expression "going bats," which is exactly what happened to the SAGE radar mechanism and the crew judgment/flight instrumentation of Flight 389. Separately, these sensing devices lost track of the usual, sequential mode of time duration and spacial placement. Whether this mutual disorientation was due to a pocket of *altered structural density* or the presence of an alien aircraft using unusual means of propulsion cannot at this time be reliably established.

However, controlled experimentation should be done to test whether or not psychokinetic concentration can really alter important electronic characteristics of a continuously-oscillating time standard, such as is utilized in radar mechanisms. A small instance of this, such as a psychic concentrating and slightly altering pulse frequency, might indicate the possibility of larger and more sophisticated effects on molecular structure and/or time perception.

It is a documented fact that certain pilots racing through the Bermuda Triangle area have experienced unusual behavior of their stopwatches, which "lost time" in traversing an area where craft often become disoriented.*

Possibly the time loss and consistent instances of disorientation in this famous mystery area are due to pockets of *altered structural density*, as has been discussed with reference to Flight 389.

* "New Devil's Triangle Mystery," *National Enquirer*, June 13, 1978.



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HOW TO 'FINGERPRINT' A UFO AND 'HEAR' ITS LIGHT

by Russ Reardon

A commercially available electronic device, a photomultiplier, could take us a lot further down the UFO road by identifying the origination of its light. For example, when focused on a glowing light bulb, the photomultiplier not only correctly identifies the source excitation wavelength as tungsten on its meter, but also draws the individual tungsten 'fingerprint' on its pen drop contour plotter-recorder (fig. 2). I should like to know that 24-hour ground bases would be operational where many UFOs are sighted.

As you know, tungsten and the hundreds of other light sources each have set wavelengths of light emission (angstroms). So they are easily detected and fingerprinted by this equipment. Even holograms. Thus when pointed at a UFO, the source chemical element (or whatever) causing UFO red, blue, orange, white, or green light, would be identified, contour mapped, and heard.

Heard? Yes! A photomultiplier can be hooked up to an audio-amplifier which converts light vibrations-per-second into sound. And each light source has its own individual tone on the musical scale. So as a UFO changed colors, it would literally write its own song! And since we could then 'hear the light,' that might help us to see the light—if you get my drift?

I expect the photomultiplier with its moving finger to paint out a lot of the mystery behind those unknown lights. Why, it would almost amount to Physical Evidence, wouldn't it? The only trick would be to 'be there' with this equipment.

The photomultiplier is available in the U.S. from EMR Photoelectric, Princeton, N.J. 08540 (image dissector detector system Model 658A). Or from Nye Optical Co., Spring Valley, Calif. 92077 (spectral range from below 2000 to above 7700A). The photomultiplier with the pen drop plotter (fig. 1) is an Amino-Bowman Spectrophotofluorometer, Catalogue No. 4-8106. (Both the increment of the excitation wavelength and the scanning speed of the fluorescence are manually adjustable. In this way, the entire excitation vs. fluorescence wavelength domain will be scanned within 10-15 minutes. The photomultiplier will sense the emission intensity level at every point in the scanned wavelength domain.) Audioamplifiers are available from the "Fisher" or the "Edmund's" electronics supply catalogues.

These assemblies with their proven fact-finding potential should be added to our arsenal of motion pictures, videotapes, still photos, radar scans, computer enhancements, etc., of UFOs. I've described the state of the art of identifying the sources of light. Whereas, the present state of the art of identifying unknown flying objects is dark: let it be resolved that it won't be too long before one among us armed with this equipment will show us the right insight in sound and fingerprints of UFO light here on these pages.



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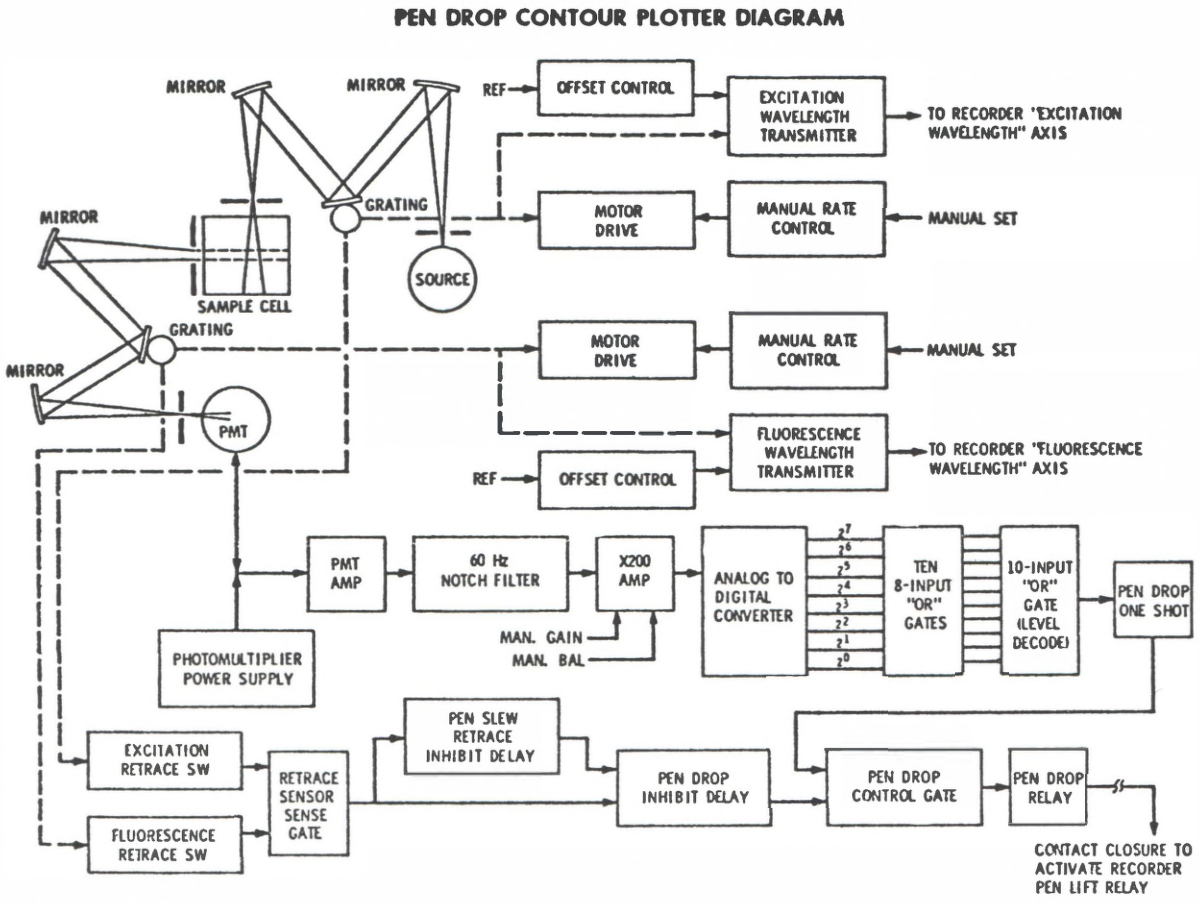


Figure 1 – Schematic diagram of the electronics circuit designed to generate the isointensity contour plot. PMT: photomultiplier; source: excitation light source.

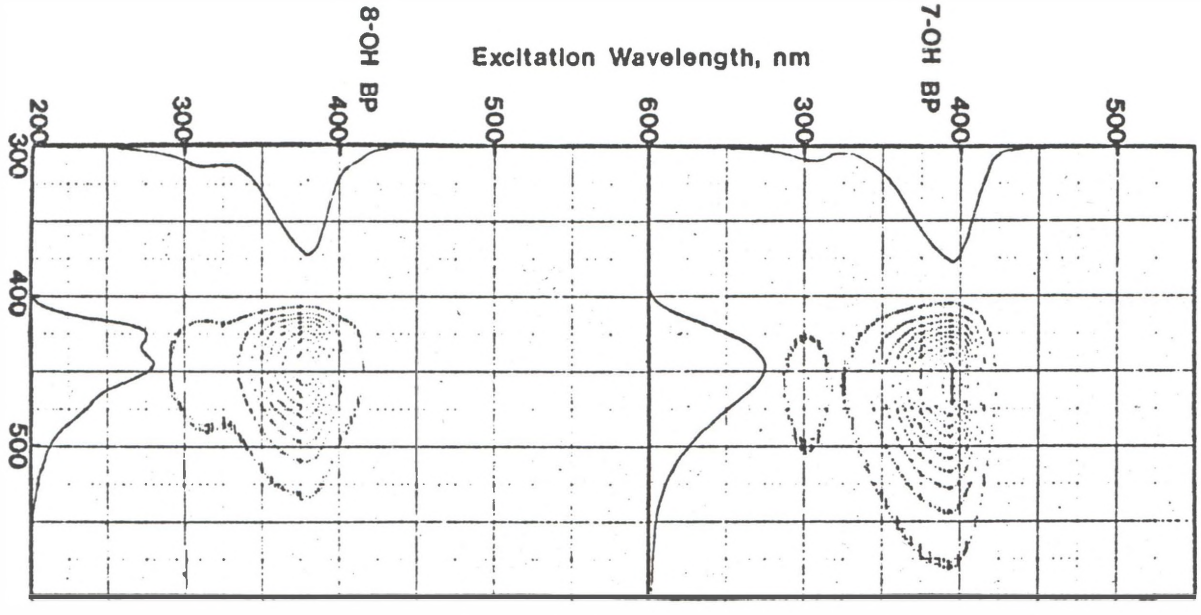


Figure 2 – A UFO light "fingerprint" would be printed out like this by the photomultipliers' pen contour plotter.

ULF TREE POTENTIALS AND GEOMAGNETIC PULSATIONS

by A. C. Fraser-Smith

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HIGH-SENSITIVITY measurements of ultra-low-frequency (ULF: frequencies less than 5 Hz) geomagnetic pulsations[1] usually require elaborate receiving antennas ranging from large air-cored coils[2] through multiturn steel, or mumetal-cored solenoids[3-5] to small superconducting loops immersed in liquid helium[6]. Pairs of electrodes inserted in the ground have also been used as antennas[7,8]. The need for a large spacing between the electrodes (varying from hundreds to thousands of metres) and the difficulty of calibrating the measurements absolutely have resulted in the almost universal use of the more compact and easily calibrated coil-type antennas in recent years. I describe here a new method for measuring ULF geomagnetic pulsations, which requires a minimum of elaborate equipment. The method is based on the use of trees, or, more specifically, on the use of pairs of electrodes inserted into trees, as ULF receiving antennas.

There are several reasons that this new method of measurement may be of interest. The equipment is simple and thus the method could lead to more widespread observations of ULF geomagnetic pulsation phenomena. The method of measurement also provides new information about tree potentials, that is, it shows that some, and perhaps all, of the ULF components of these potentials are induced by ULF geomagnetic field fluctuations and do not originate in the trees themselves. Finally, although it is not clear at present what effect induced ULF electric fields may have on the growth and other vital processes in a tree, the link between these ULF electric fields and geomagnetic field fluctuations suggests that some environment-related changes in trees could also be influenced by changes in geomagnetic activity. These changes may have a natural origin (for example, the changes that occur during a solar cycle[9]) or they may be caused by a variety of human activities (by modern d.c.-powered mass transit systems, which can produce large amplitude ULF electromagnetic fields[10]).

The ULF measurements reported here were stimulated by the work of Burr on relatively steady-state tree potentials[11]. Burr recorded these potentials for more than a decade using a pair of specially-designed non-polarisable electrodes inserted in the cambium of an unspecified tree (which was probably a maple). The electrodes were about a metre apart along the long axis of the tree and Burr observed diurnal, 27-d, and seasonal variations, as well as a suggestion of a correlation with sunspot activity, in their potential difference.

Most of Burr's observations were at frequencies far below the frequency range for ULF geomagnetic pulsations. One series of measurement obtained, however, during an electrical storm suggested that ULF variations of tree potentials might occur on occasion. I therefore began a search for variations with frequencies predominantly in the Pc 1 geomagnetic pulsation range (0.2-5 Hz). These frequencies correspond approximately to the delta regime for human brain waves.

The measurements were made using a large native oak, *Quercus lobata*, that was located near conventional ULF recording equipment at a site on the Stanford University campus. This latter equipment uses 20,000 turn steel-cored solenoids as ULF antennas and it operated continuously throughout the interval during which the tree measurements were made. Thus, simultaneous measurements of ULF geomagnetic pulsations using both conventional loop antennas and a tree 'antenna' were obtained at one location.

Two steel nails were used as electrodes. Following Burr's configuration, they were inserted about 0.05 m into the tree along the long axis, with a spacing of 0.76 m. The lower electrode was approximately 1 m above the ground, and the two electrodes faced toward the geomagnetic west. Because the tree was not completely vertical, a line joining the two electrodes would have been inclined approximately 20° toward the geomagnetic east. The diameter of the tree midway between the two electrodes was 0.65 m.

A resistance of about 5 kΩ was typically observed between the electrodes, increasing to about 10 kΩ if polarisation was allowed to occur. A d.c. potential difference was also observed that varied from day to day but whose absolute value was usually in the range 10 to 100 mV, with the upper electrode positive. The electrodes were connected to a low-frequency high-gain amplifier through an *RC* filter ($R = 22$ MΩ, $C = 50$ μF). The amplifier was usually set for 50 db gain, and its output was filtered (0.02 – 7 Hz) before being recorded, generally without additional amplification, on a chart record and on analog magnetic tape.

The ULF signals measured by this system were undoubtedly induced in the tree 'antenna' and not in the shielded cabling between the electrodes and the recording system; when the electrodes were disconnected from the tree and connected to an equivalent 5 kΩ resistor, without any other change in the wiring or configuration of the system, only a steady low level of white noise (typical resistor thermal noise) was observed.

Similarities between the ULF signals recorded conventionally and with the tree 'antenna' were immediately apparent on the chart records. More detailed analysis confirmed that Pc 1 pulsation events recorded by the two systems were very nearly identical in all their important characteristics. Figure 1, for example, shows spectrograms of a sequence of four Pc 1 pulsation events that occurred during the interval 1200 to 1500 UT on 17 January 1976, and which were received by the tree 'antenna'

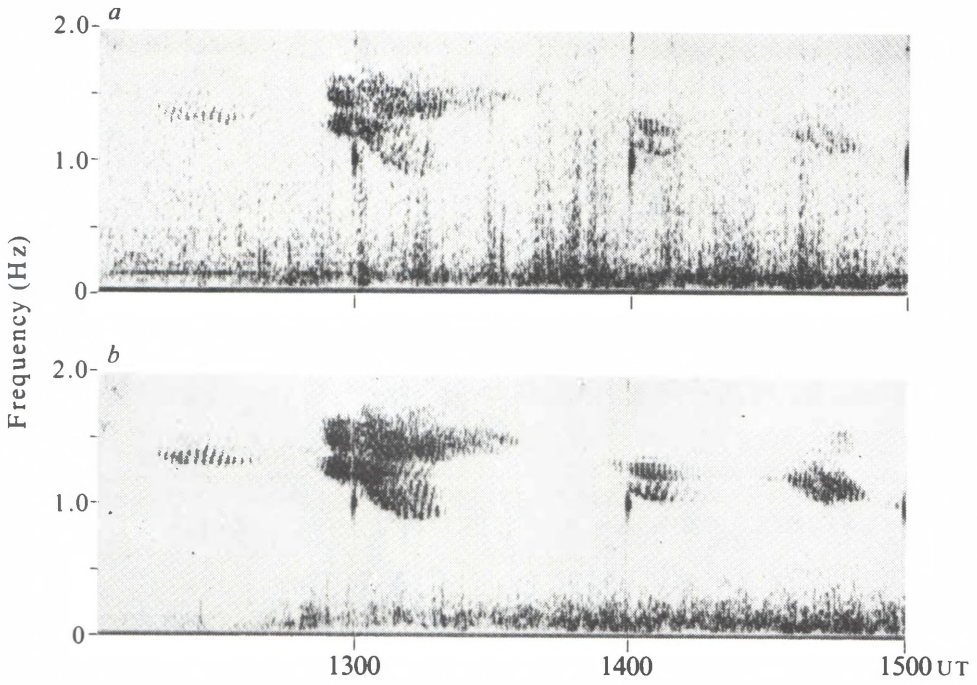


Figure 1
Spectrograms of a series of Pc 1 geomagnetic pulsation events recorded at Stanford, California, using tree potentials (*a*) and a conventional solenoid antenna (*b*). Short intervals of a 1 Hz calibration signal appear at the start of each hour. The vertical lines in the upper spectrogram are caused either by local electromagnetic transients or by natural sferics; similar lines occur in the lower spectrogram, but they are not as obvious because the background noise is comparatively suppressed.

(*a*) and the conventional north-south solenoid antenna (*b*). With the exception of a lower signal-to-noise ratio for the tree measurements, the two Pc 1 pulsation records are closely alike. It will also be noticed that the lower frequency Pc 2/Pc 3 geomagnetic activity (frequencies in the range 0.02 to 0.2 Hz) is recorded similarly by both systems. The amplitude of the ULF pulsations in the tree potentials is very small. For the Pc 1 pulsations shown in Fig. 1, the maximum amplitude of the potential fluctuations was about 0.1 mV.

The nearly identical occurrence and spectral characteristics of ULF events measured by the tree electrodes and by the conventional ULF equipment indicated that the tree potentials were largely induced by ULF time variations of the geomagnetic field. To investigate this possibility, a portable planar search coil powered by a 1 Hz signal generator was moved around the tree near the electrodes. It was found that a 1 Hz oscillation of the potential difference between the tree electrodes was produced only when the search coil was orientated with its moment vector in the north-south direction. When the two electrodes were moved to the north face of the tree, a response from the electrodes could be obtained only when the search coil moment vector was orientated in the east-west direction. These results, and the observations of natural Pc 1 pulsations, can possibly be best understood by considering the tree/electrode pair combination to form a collection of conducting loop antennas in which e.m.fs may be induced by magnetic field fluctuations in the appropriate direction. The conducting paths are provided by the conducting material of the tree (and the cambium in particular[11]), and, for field fluctuations in a particular direction, the area of the relevant loop antenna is defined by the intersection of the tree with a vertical plane perpendicular to the particular field direction and passing through the two electrodes. Thus, in the measurements reported here, the Pc 1 pulsation events observed in the tree potentials were produced by Pc 1 pulsations of the north-south component of the geomagnetic field.

Further tests showed that the tree potentials could only be detected in a living tree. Thus, when a tree dies, the potentials gradually disappear as the wood dries and loses its conductivity.

In conclusion, measurements with tree electrodes show that ULF tree potentials are largely produced by ULF fluctuations of the geomagnetic field (the remaining component of the potentials is probably thermal noise). Presman[12] noted that electromagnetic fields usually have an adverse effect on living processes. If the ULF geomagnetic pulsations have any adverse effect on the growth of trees (and, as we have seen, they must induce electric currents in the living material) these effects could possibly be observed in tree ring data. Pc 1 geomagnetic pulsation occurrences vary markedly over a solar cycle[9] and thus, if these particular pulsations affect tree growth, a solar cycle in tree ring data could occur. LaMarche and Fritts[13] searched unsuccessfully for a relation between tree ring data and sunspot numbers. The phase of the Pc 1 pulsation solar cycle, however, differs by several years from the sunspot cycle and, assuming the two cycles affect tree ring data, they may tend to obscure each other's effects. Furthermore, other geomagnetic pulsations and higher-frequency electromagnetic signals have their own cycles of occurrence, and their effects on tree ring formation, if any, could add further to the complexity of the tree ring data. Studies of these possible effects are desirable, because the tree ring data could provide a unique record of past ULF and higher-frequency geomagnetic activity.

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THE WEEKEND EFFECT: ULF ELECTROMAGNETIC FIELDS, POWERLINE HARMONICS, AND AN INTERVIEW WITH ANTONY C. FRASER-SMITH

AT a field site on the Stanford University campus during December, 1969, continuous recordings of ultra-low-frequency (ULF, frequencies less than 5 Hz) were begun by Stanford geophysicists Antony C. Fraser-Smith and D. B. Coates.

Although the equipment used was designed specifically for pulsations in the Pc 1 category (0.2 to 5 Hz), it could also measure activity in the Pc 2 (0.1 to 0.2 Hz) and Pc 3 (0.022 to 0.1 Hz) frequency bands. Beginning in 1972, the researchers began observing intermittent interference in the Pc 2 and Pc 3 bands as well. This interference gradually increased in strength and duration until, by 1975, it completely dominated activity in the Pc 2 and Pc 3 bands for some 20 hours of each 24-hour weekday. Except for a few Saturdays before Christmas, when typical large-amplitude weekday activity was observed for about 12 hours, the interference was almost totally absent on weekends.

The unusually regular daily variation of the large-amplitude ULF magnetic signals as well as their distinctive absence on weekends implied a man-made source. An initial attempt to reduce the interference by moving the equipment to another location was unsuccessful, suggesting the interference was not produced in the immediate vicinity of the Stanford field site. When the equipment was again moved, this time to a site 14 km from the campus field site, the amplitude of the ULF interference was only slightly reduced. Finally, the equipment was moved to a site 27 km away from the original one; it was found that the amplitude of the ULF interference here was even larger than at the campus site. Furthermore, during the recording of the signals, D. B. Coates observed the simultaneous occurrence of large-amplitude ULF signals and the arrival and departure of trains at the nearby Fremont BART (San Francisco Bay Area Rapid Transit) station.

A comparison made between the occurrence of the ULF interference at the campus site and the BART schedule confirmed that the source of the interference was the BART system.

In retrospect, the researchers noted that their first observations of large-amplitude ULF interference on the Stanford campus coincided with BART's preparations for and the commencement of partial revenue service on September 11, 1972, which involved only 45 km of double track. Coinciding with the expansion of BART's service in 1973 and 1974 was the subsequent rapid build-up in intensity of the interference. Full service throughout the 115 km system began September 16, 1974, with the only major change since that date being the introduction of permanent evening service on January 1, 1976.

BART represents the first major transit line constructed in the United States west of the Mississippi, and its design involved many innovations. After preliminary tests, a 1000 V dc electric propulsion system was selected, with the supply voltage to be delivered to the trains by a third rail conductor located alongside and slightly above the continuously-welded steel running rails. The BART system was immediately distinguished from other mass transit systems at the time by the selection of 1000 V dc for traction power. The others typically used ac power (often at a frequency of 25 Hz) or considerably lower dc voltages (e.g., 600 V). Although dc electric propulsion systems with current distribution via a third rail were the first to be used when railroad electrification was introduced in the United States, at the time BART was designed, the prevailing tendency was to use an ac electric propulsion for electrified railroad systems. The return to a dc system for BART and for the new generation of rapid-transit systems was made possible by improvements in electrical technology.

An important feature in regard to ULF generation is BART's third-rail conductor. The complete third-rail power distribution system runs about 270 km in length and is divided into sections which are separated by gaps that are normally kept closed. The voltage is maintained by transformer-rectifier substations distributed along the track at 37 locations, each of which is supplied with 34.5 Kv ac power by the local electric utility. Contact between the moving train and the third rail is achieved by means of an overriding pickup shoe connected to the train. During acceleration, a loaded 10-car train can draw as much as 7 Mw of power (i.e., a total current in the range 5 to 10 kA).

A typical current path for accelerating trains is as follows: current leaves a transformer-rectifier substation, passes along the third rail to the train, drives the motors, passes via the aluminum/steel-rimmed wheels on the train into the rails, and returns to the substation largely through the running rails. Since the running rails are only partially insulated from the ground, some of the current is also able to flow in the ground back to a grounding screen at the substation (the screen also connects with the running rails). For a train running at a steady speed or decelerating, the current path is the same as for the accelerating train, but with the current reduced in magnitude. During deceleration, the current flow reverses due to the use of dynamic braking, which greatly reduces wear on the friction brakes. The dynamic braking becomes ineffective and the friction brakes are used to bring the train to a stop. During this final stage of deceleration, the flow of current around the current path is comparatively very small.

Although other possible alternative sources exist for the BART ULF fields, the strength of the fields observed suggests that it is the current loops associated with each train which constitute the primary source of the BART ULF fields. We therefore have the following model for the generation of the BART ULF fields. First, each train moving on the tracks produces a time-varying magnetic field (and therefore also an electric field) because of its associated system of current loops. Second, the actual ULF fields measured at a given location at any particular time are produced by all the trains in operation on the BART tracks at that time, and they consist of a superposition of contributions from each individual train. Not only is the ULF characteristics of the BART fields a function of an individual train's motion, it is also therefore a function of the relative motions of all the trains in operation at any time.

There are several secondary mechanisms which may also contribute to the BART ULF fields. An extraneous ULF ripple on the third rail current introduced either at the substations or through the power supply to the substations, for example, produces its own ULF component in the fields. ULF modulation of the third-rail current flow caused by the dc choppers in the train motors may also occur. Depending on the load, the choppers operate at frequencies in the range 218 to 230 Hz, and they tend to change tracks as the load changes. One chopper may partially or fully lock onto another chopper's frequency, and in this locked condition beat frequencies in the ULF range may be produced.

Although the BART trains run according to a schedule, this ordering has little effect on the electromagnetic fields produced at a distant point: there may exist as many as 34 independently-varying superimposed contributions to these fields (a maximum of 34 trains can operate on the tracks at any time). Should the point of observation be close to a particular section of the BART tracks, as was the case when the equipment was moved to a new site, the electromagnetic fields produced by nearby trains should consist of a noisy background produced by the distant trains and would greatly exceed those from distant trains. Should this be the case, the time variation of the measured fields should consist of a noisy background produced by the distant trains, on which is superimposed a series of large-amplitude pulses that can be identified with individual trains on the close section of track. This variation was also consistent with the scientists' observations.

Since the response of the Stanford equipment used for the ULF measurements did not extend below 0.03 Hz, where the BART ULF fields appear to have their largest amplitudes, the magnetic fluctuations produced by BART near the center of the system must be very substantial when compared with the fluctuations produced by natural activity.

One of the major requirements for ULF hydro-magnetic wave generation in the ionosphere by a ground-based current array is a large magnetic moment for the array. As noted, the total ULF magnetic moment of the BART system must be greatly variable. The track is also located near sea water, which has a relatively high electrical conductivity. While this would reduce the effectiveness of the BART system as a generator of ULF hydro-magnetic waves in the ionosphere, it is still possible that the system may excite these waves in the lower ionosphere and that they will propagate over large distances both within the ionosphere and the magnetosphere. If that were the case, distance observations of the BART-generated ULF signals may help clarify some of the outstanding questions about the generation and propagation of natural ULF signals. Also, the semi-controlled large-amplitude ULF fields produced in the ground and in the vicinity of the BART "antenna" could possible be used to probe the structure of the ground. More speculatively, they could be used to monitor the electrical characteristics of earthquake faults in the San Francisco Bay area and in other locations where the fields are still measurable.

For some time, the study of naturally occurring ULF geomagnetic pulsations has been hindered by the lack of artificial, controlled sources which would make possible active experiments in the ionosphere and the magnetosphere and thus help distinguish source and propagation effects. There has been an interest in developing an artificial, controlled source of ULF electromagnetic fields for this purpose. For this reason, the identification of the BART system as a powerful and potential completely specified source of ULF electromagnetic fields is of considerable interest. Its existence could make possible new experiments on ULF wave generation and propagation which could aid in explaining some of the properties of the naturally occurring ULF signals.

Other systems similar to the BART system are planned in the United States and elsewhere. It appears likely that all these systems will produce large-amplitude ULF electromagnetic fields. Proliferation of these sources may pose an interference threat to geomagnetic observatories that are well removed from the new rapid transit systems. If ionospheric propagation of the ULF interference should

be involved, it is possible that geomagnetic observatories could record ULF interference at distances of 1000 km or more, depending on the strength of the sources and the ionospheric conditions.

Attention should also be drawn to other possible sources of ULF electromagnetic fields. These possible sources, in addition to other rapid transit systems similar to BART, include high-voltage dc power transmission lines, electric railways using dc power, and dc-powered mine haulage systems. Although there is presently only one high-voltage dc (HVDC) transmission line in operation in the United States, more HVDC lines will soon become operational. It is expected that these lines will become increasingly more important and widespread in future years. Since the HVDC lines are of great length and carry large currents (the existing one—the Pacific Intertie—is about 1300 km long and can carry currents up to 1800 A), they are potentially powerful sources of ULF electromagnetic fields provided that ULF fluctuations in line current can occur and that the separation between the cables is large enough to give a current loop with a substantial magnetic moment.

In September 1978 SITU representatives traveled to the Stanford campus to speak with Dr. Fraser-Smith. We asked him about an overall weekend increase in disturbances of the earth's magnetic field ("geomagnetic activity") that he has observed, and how his findings relate to those of another Stanford professor, Robert A. Helliwell, whose theoretical work done over the last 20 years indicates that a small amount of radiation leaking from the earth's surface into space can there provoke a disturbance about one thousand times greater than itself. Some of Fraser-Smith's data is derived from century-old records, and he finds the effect persisting from the present until about 80 years ago. Fraser-Smith's suggestion that the weekend effect is caused in part by the power lines that crisscross the United States is corroborated by Helliwell's more recent research. Describing their work, Dr. Fraser-Smith clearly indicated the importance of their findings:

"The initial idea for a search for a weekend change in geomagnetic activity came from our studies of the interference created by BART. Our equipment at Stanford was getting saturated for about 12 hours or more a day, except on weekends. At the time we did not know that BART was the source of the interference, but it seemed pretty clear that the source had to be man-made—there is no reason for nature to have a "weekend effect," as I have been calling it. So I began analyzing some data coming in from remote stations around the world which should be completely free from man-made effects. When I analyzed it I found there was a tendency for this activity to peak up a little bit on weekends. The fact that there was a weekend effect indicated to me that there was some man-made contamination. That's how we got into this weekend effect—thinking of man-made contamination.

"At the same time, Helliwell and his collaborators, working in parallel with me, were looking into the power line harmonic radiation in great detail, and they began to feel that the radiation was not only passing out through the earth's atmosphere into space, it was actually getting out there and modifying the Van Allen radiation belt particles and through them modifying a lot of other things—in fact modifying many things out there in the radiation belt region that we had always thought were completely free of human effects.

"This finding coincided very nicely with my work, because the only possible explanation I could see for the weekend effect I had been observing was that it was caused by power line harmonic radiation, the reason being that there's less power used during weekends from the big power-producing regions, so the radiation from there is less. Assuming the power line harmonic radiation suppresses the natural processes that produce geomagnetic activity, there should be more activity on weekends.

"I guess the feeling that comes out of all our work is that everything is tied together rather more closely than we thought in the past. Helliwell was observing effects in his very-low-frequency (VLF) range, and I was observing effects in the ultra-low-frequency (ULF) range that were all produced by the one source: 60 Hz and 50 Hz harmonic radiators on the earth. We are quite sure these effects are occurring now and that they are really quite important scientifically.

"The proliferation of sources of electromagnetic fields in recent years has begun to worry me. My work indicates that there is now no place on earth where geomagnetic activity is unaffected by human activities. And then there is the huge increase in electromagnetic fields produced in the San Francisco Bay area by BART. Physicists are very well aware of the fact that electric fields add up. They may also subtract, but if they are in the same direction they will add up. It doesn't matter what their frequency is, they always add and subtract.

"Any cell in my body is exposed to the electric fields from: the student transmitter here at Stanford; the electric fields generated by the BART fluctuations; electric fields generated by microwave radiation; electric fields generated by fluorescent lighting; and all these things have a general tendency to increase the overall level.

"This room, for example, is full of all sorts of electromagnetic radiation. Every cell in my body has a level of electric and magnetic fields around it, and I know that once the electric field reaches a certain level it is possible to disrupt some of the structure within the cell. So it worries me generally that we are being exposed to an increasing total of electromagnetic fields and that people investigating particular types of radiation may not be fully aware of other types of radiation and how they may all interact.

"The problem is, we have a situation where there are so many sources of electromagnetic radiation that there's no way of minimizing it anymore. The whole world is becoming contaminated. At the moment there's no real effort being made to minimize it."

* * *

The information in this article has been extracted, by permission, from an article entitled "Large-amplitude ULF electromagnetic fields from BART," by A. C. Fraser-Smith and D. B. Coates, in Radio Science, *Vol. 13, No. 4, July-August, 1978, pp. 661-668, and from a personal interview with Dr. Fraser-Smith by SITU representatives R. Martin Wolf and Steven Mayne in September, 1978.*



WHAT TO BELIEVE – OR, PARING DOWN THE PARADIGM

by Dr. Arlan Keith Andrews, Sr.

It should be reiterated that no statement made by an individual author in the pages of Pursuit *should be taken to represent the views of the Society as a whole.*

In printing the following article, the editors of Pursuit *feel that Dr. Andrews is making a valid point (i.e., phenomena must be evaluated by means of a "reality check," or in his own words "by comparing what we observe with what we have previously classified as 'real' and 'not-real'"). We should point out, however, that there are inherent dangers in that approach, and Dr. Andrews perches precariously on the edge of that danger zone. The problem lies in denying any new possibilities solely because we have never considered them previously as part of our reality paradigm. Any consensus of reality must constantly re-evaluate itself, and new discoveries in all fields of research contribute to the re-evaluation of our reality.*

Dietrick E. Thomsen, the Senior Editor of Science News, *speaks for a lot of us when, in answer to a letter to the editor (in* Science News, *Vol. 115, No. 2, Jan. 13, 1979), he writes: "To insist that the only reality are phenomena that can be submitted to the paradigms of classical science is itself a religion."*

The editors of Pursuit *would only add one word more to Thomsen's observation:* Amen.

WHAT do *you* believe? As a *Pursuit* reader (and presumably a Fortean of sorts) you are exposed to an unending stream of "Damned Facts"—from falling frogs to Sasquatch, from UFOs to Vile Vortices—all outside the conventional scientific "paradigm," or basic perceived order of the Universe. Obviously, Forteans are willing to accept—or at least speculate upon—a wider range of occurrences, and thus by definition, have a wider paradigm. We also tend toward rather unusual theories to account for these unusual events. Perhaps justifiably, we are somewhat proud of our broader glimpses of the Truth. But must we believe *everything?*

The purpose of developing a notion of universal order is to help to classify knowledge, allowing us to determine the priorities of actions that should occur as the environment changes. These "events" (i.e., changes in the environment as perceived) are broadly classed as "real" and "not real." If an event is judged to be "real," such as an oncoming auto, we initiate action—in this case, jumping aside. If an event is perceived to be "not-real," such as a dream, mirage, or optical illusion, usually no physical action is taken. Thus a *reality check* occurs by comparing what we observe with what we have previously classified as "real" and "not-real." This human instinct of reality-checking is at once an evolutionary survival trait and a possibly dangerous mental straightjacket.

A primitive paradigm that viewed natural forces as gods to be placated served Man as spiritual comfort for thousands of years by explaining the injustices of brutal life—yet exacted a terrible cost in progress, toil, and human life.

As technology attenuated the severity of life in the wild, Man adjusted the paradigms accordingly, until the modern age evolved with its two antithetical views—nature with and without God, or Religion versus Science. Although Science demands more rigorous training for its acolytes and shows more material gains for their efforts, both sects are based on faith in unseen forces and each is relatively intolerant of other views.

As Forteans we have feet in both of these camps and others as well—with the remaining Pagans and their natural (i.e., Earth) religions; with parapsychologists who hover between the Two Powers; and with the scientific UFOlogists who are beyond them all! And as such, we must have special requirements for a believable, if not quite totally knowable, paradigm, against which to perform our own "reality-checks." We must have consistent rules if we are to convert others to our paradigm.

For example, consider a recent *Pursuit* article about a photograph of a Loch Ness creature. When submitted to photoanalysis the "creature" appeared to be transparent with background waves showing through! Rather than merely saying, "Tough luck , lads; please don't bother us any more with such stuff, we haven't the time," we were subjected to affidavits as to the veracity of the photographer and his wonderful personality, and then to suggestions that the creature must have been "multi-dimensional" and therefore naturally semi-transparent!

Fellow Forteans, when we submit evidence to conventional scientific evaluation, we implicitly agree to abide by the rules of the game! If we bring a Geiger detector to a UFO landing site and detect no radiation, do we then say that there must be "anti-radiation" and therefore not detectable? If our thermistors in a haunted house fail to register temperature changes in the "cold spots," do we reject the negative results and suggest an entire alternate *universe* to explain our failure? Of course not. We question the observers, record the known correlations and then file the data. If such data is "real" it can eventually be compared to other such events and some pattern or forms detected. In this way we evolve a paradigm for Fortean studies. We cannot have a useful means of judging progress if we do not generate that "reality-check." If we are forced to believe, or spend our time evangelizing others to believe, that *everything* is real, that no hoaxers exist, that *no* misinterpretation of natural phenomena occurs, we are doomed to wander forever in the occult wasteland. Like the roadside fortunetellers of the last 50,000 years, we would play games with our vast psychic potential and waste it on superstition and trivia.

As one example, the enormous amount of harm Uri Geller has foisted upon our field is incalculable. While performing inane sleight-of-hand tricks on credulous

"scientists," he has caused predictably unproductive research into "key-bending," diverting time and funds from other PK research. A simple reality-check with James Zwinge and Yascha Katz (respectively, a magician and Geller's former manager) would have saved thousands of man-hours and millions of words in magazines and journals. But the damage is done, and continues. And supposedly, robots from Hoova continue to direct Uri toward Messiahship . . .

"Everything is possible" is a common Fortean statement. Whether it is a true sentiment or not, we do observe that everything is *not* equally probable. This process of categorizing probabilities gives us our meaning of "reality." It is much more probable, in *my* paradigm, that Adamski's saucers were chicken brooders, than that the far side of the Moon is inhabited, or that Venus is a nice place to live. It is much more likely, in *my* universe, that the Loch Ness creatures are closely related to all other forms of Earthly life, than that they exist in more than three dimensions. Why?

In Adamski's case, we have objective proof that his celestial bodies don't support life as we know it. In the Loch Ness case, Nessie reports are consistent with activities of flesh-and-blood amphibians, and furthermore, there are no—repeat zero, zilch—cases of a sighting, capture, carcass, feces, tracks, etc., of *any* living creature that is occasionally transparent and that lives in and out of our dimensions.

If we attempt to create entirely new universes and new laws to "explain" each anomalous event, we may as well forget any concept of advancement of our cause or progress toward solutions. And if you persist, count me out.



THE ONE PHYSICAL EXPERIMENT IMPOSSIBLE TO EXPLAIN

by T. B. Pawlicki

AT the end of the Nineteenth Century, the science of physics was brought to an impasse by paradoxes created first by the Young Twin-Slit Experiment and finally by the Michelson-Morley Experiment. Albert Einstein is credited with the greatest stroke of scientific genius of all time by proposing the equations of the Special Theory of Relativity as a solution to the Michelson-Morley Experiment. But Einstein's stroke was not of genius; it was a stroke of the same audacity that inspired Alexander to cut the Gordian Knot. The Michelson-Morley Experiment proved by measurement that light always manifests the same speed relative to every observer regardless of the velocity of the observer. All Einstein proposed was a contraction of time and/or space in geometric ratio to speed so that the product of the two functions remained constant. Relativity explains nothing at all; it is merely a Fisherman's Rule to make the experimental data conform to the bookkeeping system. Pressed between a similar gap between inventory and accounts payable, businessmen exercise considerably more mathematical acumen to compress profits relative to the velocity of cash flow, but commercial accountants do not regard fiddling the books as indication of any great genius unless it gets past the auditors from the IRS; would Relativity pass a tax audit? But no one cared that Einstein's equations told us nothing about the way the universe unfolds that was not already known, as long as it lifted the science of physics over the impasse. Once past the mental block, no one made any further attempt to explain the Michelson-Morley Experiment, and the Young Twin-Slit Experiment was forgotten along with all the other experiments that threaten the validity of the prevailing wisdom.

In the Young Experiment, an electron is directed at a target surface drilled with two microscopic apertures placed as close together as technologically feasible. Under observation, the electron passes through one hole or the other, registering the event as a splat on a sheet of photographic film directly behind the target screen. The Young Experiment proves that the electron is a particle.

But when the same experiment is performed in the dark, the electron passes through *both* holes *at the same time.* The event registers on the photographic film as a diffraction wave pattern of concentric circles expanding from each aperture, and a wave interference pattern where the two intersect. The Young Experiment proves conclusively that the electron is a structure of waves. This experiment, producing contradictory data, is called the one fact of physics impossible to explain, by Nobel prizewinner Richard Feynman.

Now, physicists have tolerated the wave/particle paradox since at least the time of Newton, so one more experiment is regarded as inconsequential. The Young Experiment, however, is not merely another paradox to molder in the scientific closet, but a fatal disaster to the entire philosophy of science. The foundation of scientific conception is the axiomatic belief that the universe is an objective reality that unfolds according to regular laws regardless of observation. The significance of the Young Experiment is not another example of the wave/particle paradox, but the conclusive fact that the action of *light* converts a wave structure into a particle structure. This, in itself, is a momentous discovery which no respectable professional scientist, with the exception of Tom Bearden, is willing to countenance. And now that Bearden is calling attention to the experiment, the profession does not want to countenance Bearden.

The observation that the action of light can convert a wave phenomenon into a particle phenomenon is self-evident and superficial, however novel it may be. It takes no heavy sweat to formulate a set of equations to accommodate the fact and fit the mechanism into the scientific

structure of photo-activity, like the effect of light upon silver halide. Unlike the conversion of silver halide, however, the conversion of wave to particle in the Young Experiment is not the effect of *radiation*, of any frequency, but of *light*. The only difference between radiation and light is the perception of the observer. In other words, it is the act of observation that converts a diffuse and undifferentiated wave structure into a particle structure possessing mass, instant and location.

You will recognize by now that the paradox resembles the old problem as to whether a tree falling in a forest makes a sound if no one is present to hear it. The Young Experiment goes further to prove that there is no sound, no tree and no forest unless someone is present to perceive them. Reality is a special kind of solipsism. Now, Quantum Physics has always accepted the concept that the mechanical process of perception *alters* the phenomenon being observed, but scientific belief cannot accommodate the proposition that the act of observation not only defines but virtually *creates* objective reality. This proof threatens to dissolve science in a sea of magic.

In my previous article, "Mind Over Matter" (*Pursuit*, Vol. 11, No. 1, Winter, 1978), the Michelson-Morley Experiment is resolved upon immediate inspection of the Plate Flutter Model. The wave functions of the Fitzgerald Contraction are also self-evident in the Model because it requires merely two dimensions of space to demonstrate the mechanics. The Young Twin-Slit Experiment can be proven by the Plate Flutter Model as well, but the mechanics are not in evidence because the operations require a full extension of space in all six dimensions. It requires a developed faculty for spacial visualization to project the coordinates of the Plate Flutter Model from two dimensions to six, so if you are unable to conceptualize more than one, two or three extensions of space, you will have to look at the following geometry without recourse to valid criticism. I am sorry that I lack the mathematical training to express these concepts in the conventional language of algebra, so I am limited to performing my operations with tangible models. This is not quite so great a handicap as my critics charge because a tangible working model is the incontrovertible proof that the calculations are correct; one cannot be sure that more abstract mathematics possess anything more than formal propriety until the answers are tested with a tangible model. For those who believe tangible reality is not quite so real as abstract reality, however, Tom Bearden has formulated a set of algebraic equations summing up the propositions of this article; he describes it as the *photonic reaction*, and his copyrighted papers are on file in the United States Defense Department Library.

If iron filings are used to render the lines of force visible around a small bar magnet, it will be seen that the dynamic field has the geometric configuration of a torus. The cross-section is shown in figure 1. The length, width and height are the three axes of extension in space. The lines of force are a wave pattern, and this wave pattern is the essential definition of the field torus. Wave length not only establishes the radial extension of the field, but also the energy level of the field at any given point. Because energy level is essential to the field, but not included in axial dimensions, the wave length functions as a fourth spacial dimension. There are more cogent proofs establishing frequency as the fourth dimension of space/time, and I have described them to some extent in other articles, but the fourth dimension is not pertinent to the Young Experiment. The Young Experiment yields its data from the mechanism of phase. Phase determines where the full spectrum of wavelengths in a field torus intersect. Phase is the fifth dimension of space/time, and the Young Experiment proves that phase is the factor determining where and when a field will become manifest as particle.

The vectors of white sound manifest no preferred direction. Therefore, each wave flow in one direction must be balanced by a counterflow in the opposite direction. If flow and counterflow are equal and opposite, however, the Plate Flutter Model would have to be an experiment demonstrating statics, not dynamics. Since we know that the velocity of the material powder in the Plate Flutter Model is a function of phase tuning, it follows that the very material particles of the powder must themselves be phase tuned. The lines of force surrounding a magnet are static standing-waves. This means that the magnetic field torus must be generated by a flow of essential wave energy balanced by a counterflow. Yet, electrons and other charged particles will flow from one pole of the field to the other. This means that the electrons, and other charged or polarized particles, must be phase tuned to the frequencies manifest by the magnetic field.

The phenomenon of standing-waves moving in a field of random vectors can be explained by a geometrical structure calculated from the equations of Probability. The field is comprised of three toroids interpenetrating each other, each torus being constituted of vector flow and counterflow in equal balance, and the central axis of each torus is aligned at right angles to the other two, as shown in figure 2. This is a six-dimensional structure which cannot be represented clearly in a two-dimensional diagram. You must possess the faculty for multidimensional spacial visualization to understand its local relationships and internal dynamics. But even if this structure were presented to you as a full-dimensional model, without the faculty for spacial analysis, you would be incapable of perceiving what you observed, just as philosophers were incapable of perceiving that all objects fell with the same acceleration until Galileo showed them how to see. (For opening the eyes of philosophers, you will remember, Galileo got put to the Inquisition. The moral may be to let sleeping dogs lie.)

Although the field of random vectors is balanced in all directions on a gross scale, on a Quantum scale, waves move in one direction and another. The Calculus of The Drunkard's Walk proves that the result of all the little movements is a spiral vortex, balanced by a counter-vortex. We find, then, that a field of random vectors can be defined as a congregation of infinitesimal wave vortices harmonically integrated to form an ascending scale of compound vortices until the entire defined field spins as a single unit. Because the number of vectors is virtually infinite, and the number of elementary vortices only nominally less numerous, every part of the field vortex is identical to every other part for all practical purposes. In theory, very fine distinctions can be made throughout the conformation of the field vortex, and these distinctions are critical to the way its phenomena unfold, but these definitions are another story. For most practical purposes, the field vortex is a perfect hologram.

A hologram is structurally undifferentiated. Anyone who has played with commercially marketed holograms

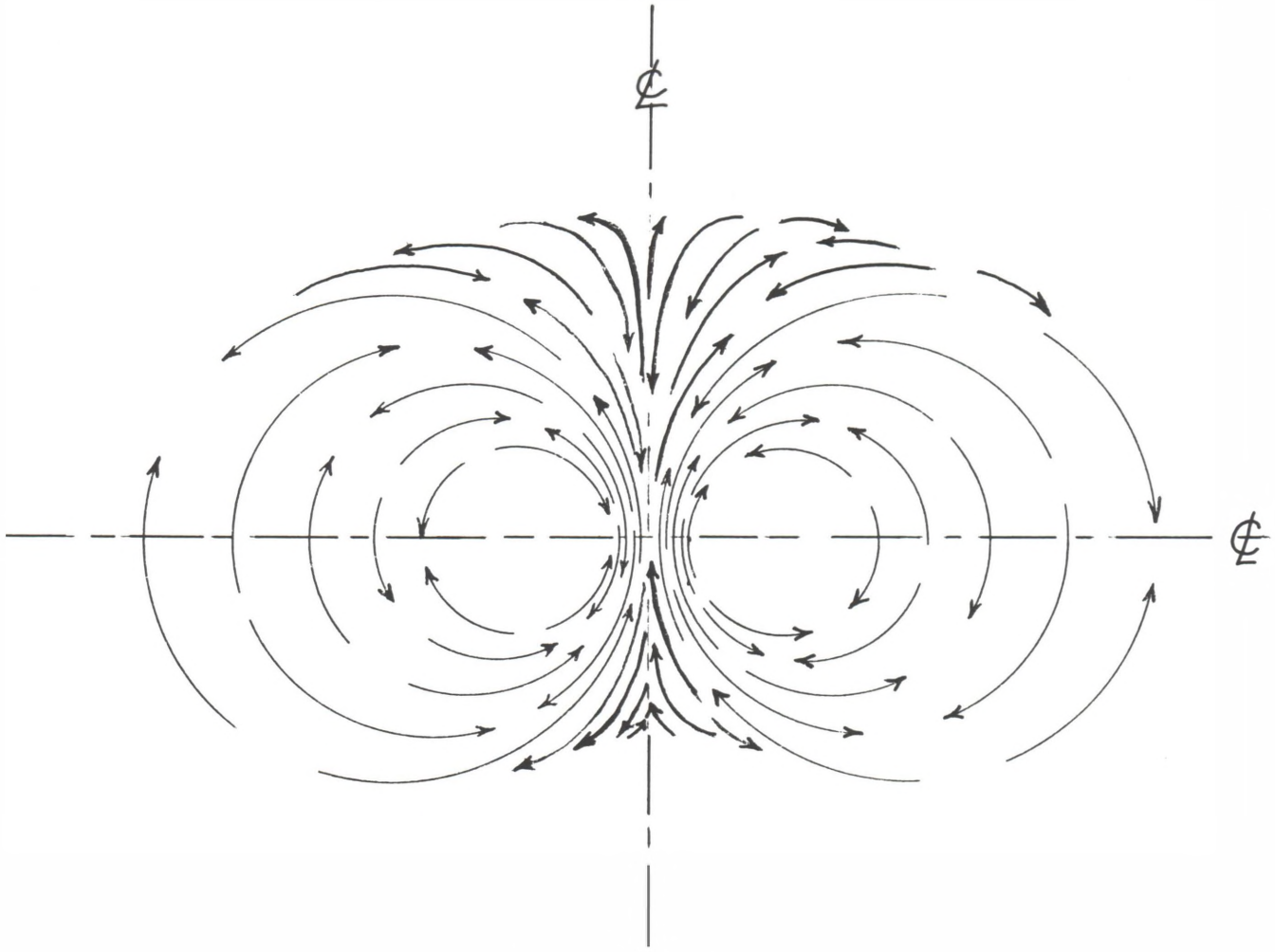


FIGURE 1

FIELD TORUS ILLUSTRATING FLOW VECTORS AND COUNTERFLOW

knows, however, that when the radiation coming from a hologram is subjected to the operation of a phase-tuned filter, a stereo-image becomes manifest. Manufactured holograms are not structurally undifferentiated; their waves are biased with the pictorial image. If a perfectly random hologram is subjected to a regular, phase-tuned filter, a standing-wave, spherical vortex will become manifest within the field, the dimensions of the material structure being a function of the frequency of the filter. As a dynamic field structure, the standing-wave sphere will not only spin on its own polar axis, but also revolve around the main axis of its field. The revolutions will also precess around the other two axes of the field. The Plate Flutter Model will show the rotation of the standing-wave vortex and its revolution around the axis of the entire field along a spiral trajectory. We can infer, therefore, that the particles of powder function as a phase-tuned filter to select one set of resultants from the undifferentiated hologram.

You will recognize that this model represents an electron in its atomic field and a planet in its stellar field.

Essentially, the field vortex is an undifferentiated and infinite wave structure. This is why the electronic field will pass through both slits at the same time in the Young Experiment. There, you have the paradox half-explained already. See how easy it is when you do not give way to panic at the prospect of intellectual catastrophe?

When the electronic field is phase differentiated, however, the electron becomes manifest as a particle, and this material sphere can pass through only one slit at a time. There, you have the other half of the paradox. The impossible did not take a bit longer, did it?

Now, you are going to tell me that I have explained nothing. What produces the differentiation of phase in the electronic field? Well, this is so obvious that I did not think it worthy of further mention. If the electron is manifest as a wave structure in the dark and a particle structure in the light, there cannot be the slightest question that *light* functions as a phase-tuned filter.

The Young Twin-Slit Experiment is proven conclusively, but a properly scientific curiosity will not be satisfied with the information that light functions as a phase tuner, creating our material reality from the infinite potential

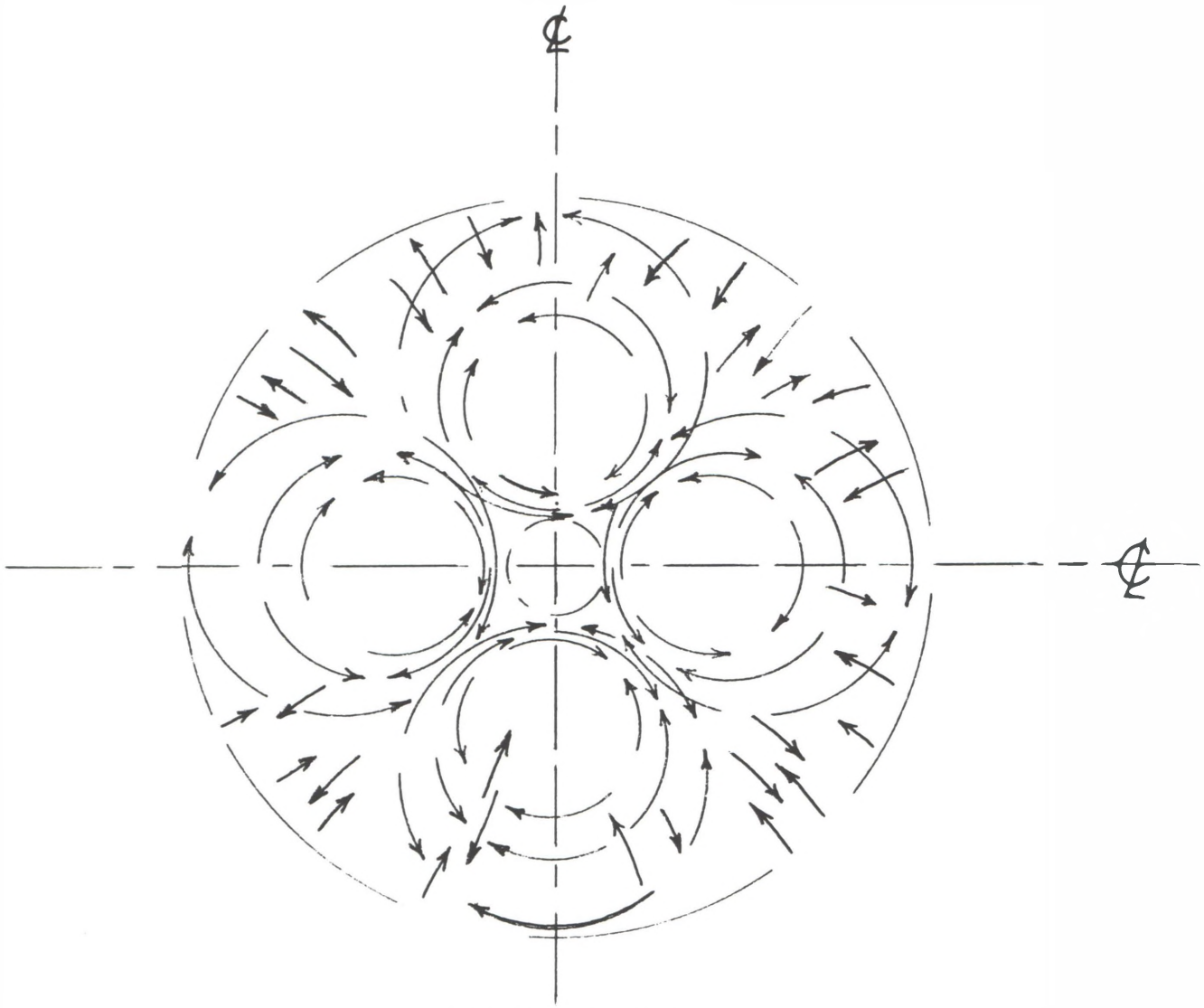


FIGURE 2

FIELD VORTEX COMPOSED OF 3 FIELD TORI AT RIGHT ANGLES

realities of the undifferentiated field. The problem, like all good scientific pursuits, is elevated to a higher level. How and why does light define our reality? It is at this point that the solution to the Young Experiment terrifies scientific philosophy and the Experiment becomes a proper subject of Fortean enquiry. In my previous article, I presented evidence showing that frequency of radiant energy determines the state of conscious perception. The frequency that *is* consciousness is experienced as *light*. Therefore, *consciousness is a phase defined space*; the current pursuit of consciousness as a phenomenon of purely frequency is a red herring. It follows that the phase angle to which a consciousness is tuned creates the physical body of the perceiver from the matrix of the universal hologram along with all of the objects of perception. In other words, everything perceived as real is a *physical extension* of each person's own mind. The fact that we share a common reality is due to the fact that we are all tuned to the same phase. All education is determined to reinforce the reality of the dominant minds in society by making as certain as the vicissitudes of biology make possible, that every one of us is locked into the same phase of consciousness. This is what religion is all about, and this is why all religious philosophies must be essentially totalitarian. Modern science is the most totalitarian of all religions, according to its most respected spokespeople.

At this point, my calculations and models differ from Bearden's. Insofar as I am able to understand his equations, the Bearden "photonic reaction" is manifest as an abrupt right-angle rotation of phase when light intersects with an undifferentiated field. Because my models establish phase rotation as the definitive measure of energy, I fail to see how this abrupt rotation can occur without a drastic conversion of energy. I expect the reason for our difference is that we are doing our respective analyses on different scales, but Bearden is slow to make his datum points clear to me. On my scale of operation, rotation of phase is gradual and directly commensurate with spacial

extension. What we recognize as consciousness is defined by phase focussing to such a fine angle of perception that the distinction between form and field can be seen only as squarely abrupt. Persons experienced in tuning their heads to alternative states of consciousness testify to a gradual defocussing of phase with a commensurately gradual loss of definition between form and field. As phase focussing increases its acceptance angle, the light spreads into the dark of the field until everything is lost in its brilliance. This is what the *divine light* is all about.

All human enterprise is ambivalent. The scientific curiosity is as terrified of learning as it is eager to know. It is in its attempts to serve both passions that science has become complicated, ritualized and obscurantist. The Young Twin-Slit Experiment has been put aside as insoluble not because it is refractory but because its solution is altogether too clear and immediate to satisfy the human ambivalence.

You see, when you combine the data of the Young Experiment with the Plate Flutter Model and the research into brain waves, you will find that the process of tuning one's consciousness to an extremely fine focus is identical to the mechanical operation of bringing material bodies into existence into this life. Conversely, loss of phase focussing is identical to death and dematerialization. These simple experiments prove conclusively that all the great religions are based on an essential scientific provable truth, but no ecumenical philosophy is emotionally capable of accepting the truth of its own faith. And science is the most ecumenical of all philosophies established as an institution. In other words, scientific problems are refractory mainly because too many scientists are not wholly scientific.



METRICATION: EVEN PYRAMID POWER WON'T SAVE THE SACRED INCH

by Robert J. Schadewald

The following article is reprinted with permission from the August, 1978 issue of *TWA Ambassador* magazine, copyrighted (first rights only) by Trans World Airlines, Inc., and from the author, Robert Schadewald.

IF Joshua dragged his feet around Jericho, and Noah measured the Ark in inches, why are we adopting the metric system? Why, indeed?

On December 23, 1975, President Ford signed the Metric Conversion Act, and the U.S. began inching toward metrication. The response from the public hasn't exactly broken the applause meter. Many people seem to think that the British system of measurements—inches, pounds and degrees Fahrenheit—is somehow sacred. There's just a chance they might be right.

Ironically, metrication coincides with a boom in "Pyramid Power." By this time, you must have heard about the mysterious and beneficial occult energy supposedly generated by the pyramid shape. According to believers, the pyramid energy helps mummify mummies. If you store food in a pyramid-shaped container, it won't spoil. Razor blades kept in a pyramid are sharpened. Meditating in a pyramid will increase your cosmic awareness, and a pyramid over your bed. . . .

What exactly does Pyramid Power have to do with the metric system? Well, back in 19th-century England, the pyramids, along with Noah and Joshua, were dragged into a conspiracy to block metrication.

To begin with, the French concocted the metric system at the close of the 18th century as a replacement for their archaic system of measurements. Rather than make the new units purely arbitrary, they made the length of the meter equal to 1/10,000,000th of the distance from the equator to the North Pole. Then a liter is 1/10th of a meter, cubed, and a kilogram is the weight of a liter of water.

The metric system has some obvious advantages, and in 1854, a Decimal Association was organized in England to promote its adoption. Had England gone metric then, the U.S. would have followed. But there was broad-based opposition in England: aristocrats associated the metric system with the French Revolution; the merchant and working classes were generally opposed, and so were a few scientists. The brilliant young Astronomer Royal of Scotland, Charles Piazzi Smyth, set out to defeat it.

Smyth based his strategy on an obscure book by one John Taylor, *The Great Pyramid: Why Was It Built? And Who Built It?* Though Taylor had never seen the Great Pyramid of Cheops, he was able to conclude that it wasn't designed by a heathen Egyptian. Taylor's suspicion that Noah was the actual architect is discounted by modern pyramidologists, and even Smyth wasn't convinced. But Smyth was very impressed by Taylor's proof that the inch was the basic unit of measurement used on both the Great Pyramid and the Ark. If the Ark was measured in inches, it would be a sacrilege to abandon the inch for the centimeter, Smyth reasoned.

Smyth studied everything written about the Great Pyramid and all the measurements made of it. He concluded that the fundamental unit of measurement was indeed the "sacred inch," and that said unit varied from the British inch by only 1/10th of one per cent.

There was more. In a chamber of the Great Pyramid, there is a hollowed-out block of granite, much like a bathtub. Egyptologists believe it is a sarcophagus intended to hold the mummy of Cheops. Taylor had suggested that the capacity of the sarcophagus was precisely equal to the capacity of the Ark of the Covenant, which Joshua had carried around Jericho to make the walls come tumbling down. Smyth's studies of the sarcophagus convinced him that the Egyptians also used the pint and the pound.

The Great Pyramid turned out to be a storehouse of knowledge supporting the sacred old British way of mea-

suring things. Consider: the base of the pyramid is 9,125 sacred inches long, which, divided by the number of days in the year, is 25. Twenty-five inches is the sacred cubit, Smyth figured, exactly 1/10,000,000th of the earth's polar radius. Furthermore, the height of the pyramid is a billionth of the distance to the sun, and its weight is a quadrillionth of the weight of the earth.

Smyth published his two-volume refutation of the metric system, *Our Inheritance in the Great Pyramid,* in 1864. The books were very successful, and the Metric Act, which passed Parliament that year, did not make the metric system mandatory, but only allowed its use in certain cases. Even this concession to the metric system was repealed in 1878.

Smyth's triumph was only temporary. His speculations about the pyramid had a brief vogue, but Egyptologists now universally considered his sacred inch and sacred cubit sheer fantasy. Only a few pyramidologists (privately referred to by Egyptologists as "pyramidiots") still defend Smyth's ideas. England has gone metric, and the U.S. is rapidly following. For the ultimate insult, some occult supply houses now offer "Power Pyramids" in *metric* sizes.

Poor Smyth must be rotating beneath his—you guessed it—pyramid-shaped tombstone.



ORNITHOLOGICAL ERRATICS: WINTER 1978-1979

by Loren Coleman

SOME unusual winter visitors have been sighted in the United States during 1978-1979, especially as viewed from my vantage point in the Northeast.

In October and November 1978, most of the focus was on Rhode Island. There, in a field in South Kingstown on November 11th, an unidentified hunter shot and killed a European barnacle goose which was among a flock of Canada and snow geese. Barnacle geese winter in Scotland and Ireland. Around the same time, a South African shelduck of a sort which usually travel between Cape Town and the Transvaal was sighted in the South Kingstown-Charlestown, Rhode Island area. Most "experts" felt the shelduck was an aviary escapee. They were not so certain about the barnacle goose. "It's just an unusual year," Charles Wood of the Audubon Society of Rhode Island said.[1]

Around the same time, also in Rhode Island, a white pelican made an appearance, and the speculation was the pelican was working his way home to the Gulf of Mexico via Little Compton and Newport.[1] Perhaps, for in October-November, 1978, another white pelican was sighted on Cape Cod.[2] Or perhaps not; the white pelican sighted in Rhode Island was the first one seen there since 1946.[3]

Meanwhile in the Chicago area, on five occasions from November 19 to December 1, bird-watchers spotted a Ross's gull. This was only the second time the Ross's gull had been reported in the continental United States. In the spring of 1975, an estimated 3,000 people viewed the bird from a beach near Boston. The gull is a native of the Arctic and breeds in Siberia. It has been sighted in northern Europe twelve times. Dr. William Beecher, Director of the Chicago Academy of Sciences, commented on the recent sightings: "The bird has gotten here and it's rare. Aside from that we can't hinge any facts on it."[4,5]

Some Arctic birds tend to be infrequent visitors to the United States during the colder months of the year, but the 1978-1979 season appears to be exceptional.

A phenomenal number of Arctic owls have been reported in the northeast since November 1978. Snowy owls have always been well-known Arctic visitors, and Marcia Litchfield, naturalist for the Massachusetts Audubon Society, told me usually one or two are reported in New England every year. But this year, as of the 30th of January 1979, she noted "conservatively" fifteen snowy owls have been seen in Massachusetts alone.[2] For example, a snowy owl was observed guarding its prey, a pigeon, on a building in downtown Pittsfield in November; a snowy owl was seen near runway 4 at Logan Airport in December; and two snowy owls were viewed near Salisbury in January, all in Massachusetts.[6,7,8] Snowy owls were sighted in increased numbers throughout the northern United States.

Another Arctic owl, the hawk owl, was being reliably reported from the northern extremes of the northeast. Four, maybe five, were seen in Maine, and two were sighted in New Brunswick during November-December 1978 and January 1979.[2] During the last week of January vague sightings of a hawk owl near Seabrook, New Hampshire, and Salisbury, Massachusetts, were recorded by the Massachusetts Audubon Society.[8]

Great gray owls, yet another Arctic interloper, were also seen throughout the northeast. Three were sighted in upstate New York, and during mid-January, one was seen on Long Island. The Long Island incident was viewed as extremely rare as the great gray owl is hardly ever seen that far south.[2] During the third week in January, one of these owls was frequenting Hancock, New Hampshire, and in the last week of that month, great gray owls were seen concurrently at the Audubon Society headquarters in Falmouth, Maine, and the Ipswich Wildlife Sanctuary at Topsfield, Massachusetts.[2,8,9] In February, a great gray owl was sighted around Newburyport, Massachusetts. Marcia Litchfield, Audubon Society naturalist, felt all the Arctic owls were being forced southward by the lack of food, and noted the sheltered nature of the sanctuaries gave them an oasis for survival.[2]

The rarest specimen to be spotted in the invasion of Arctic owls is the boreal owl seen at Salisbury, Massachusetts, on December 31, 1978. This Arctic owl is a native

of northern Canada and Alaska, and Joan Irish, another Audubon Society naturalist, felt it may have come south because of inclement weather in the far north. Heidi Harrington took a series of excellent photographs of Salisbury's boreal owl, the first one viewed in New England in 36 years. The owl was not seen before or after the 31st of December, and thus it was fortunate Heidi got her snapshots, for I am certain no one would have believed her.[10]

Arctic owls are irregular visitors to the continental United States but they do seem to have a cyclical pattern of reappearances. This has especially been found to be true of snowy owls. I have records of snowy owls being found in central Illinois in January 1967, and January 1971.[11,12] In the context of the reports of one of those finds, an Audubon Society spokesperson is quoted as saying that every fourth year the birds migrate south from the Arctic when their food supply runs low.[11] Projecting this pattern from 1967 and 1971, then January 1979 would appear to fit within this fourth-year pattern for snowy owls. But why the increase in sightings of other Arctic owls?

Even within the Massachusetts Audubon Society there appears to be a disagreement. Joan Irish, on the one hand, feels the weather is to blame, and Marcia Litchfield points to the food supply. The latter reason would agree with the theoretical model most ornithologists use for the basis of the snowy owl's cycle of southward inclusions, but would the snowy owls' food supply decreases be comparable to the other Arctic owls' respective niches' declines? The evidence would point to a combination of factors, which source must logically be meteorological in nature. A closer examination of the changing patterns in the winter ranges of birds of prey may give some insight into an overall gradual shift in the ecosphere, caused by variables in seasonal weather and small animal survival.

The ornithologically interesting winter of 1978-1979 may have been an enigma, but the chronicling of the phenomenon of Arctic bird intrusions should be examined or begun, with an eye to viewing the data on a broader scale.

Then again, maybe it was "just an unusual year."

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11 YEARS IN *PURSUIT*

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INDEX TO VOLUMES 1 - 11

a convenient key to reference reading and investigative insight.

We are pleased to announce that a comprehensive *Pursuit* index has been compiled by member George Eberhart. This index is an exhaustive listing of materials published in *Pursuit* from 1967-1978 (Volumes 1-11). So complete is this index that it is 60 pages long.

We had hoped to publish the index as a special issue *free* to current members. But due to skyrocketing postal rates, and in order to cover handling and printing costs, we are obliged to charge interested members a nominal fee. The price is $1.50. Members who are interested in obtaining a copy of the 60-page index please send $1.50 to: SITU, P.O. Box 265, Little Silver, NJ 07739.

UFOS DOWN UNDER AND ALL OVER

by Jon Douglas Singer

TOWARDS the end of 1978, a new upsurge in interest about UFOs began to appear in the popular press. Starting with a controversial sighting of a UFO in Central Park, New York City, according to the *New York Post,*[1] in November, reports began to mushroom around the globe. Was this a new *flap* or wave of sightings comparable to the one at the end of 1977? We shall see in this report. We shall also examine a couple of spectacular abduction cases, the more sinister of the so-called CE-III, (Close Encounters of the Third Kind) phenomena, to borrow the term developed by Prof. J. Allen Hynek for a meeting between humans and "aliens" on the ground beside or inside landed UFOs.

The Central Park case broke on November 2, 1978. According to a brief anonymous article, "UFO Stops By The Park," in the *New York Post,* some 50 or so people, mostly workers in the Gulf and Western Building at Columbus Circle, saw a silvery circular object floating over the park on the evening of November 1. As New York City UFO reports are comparatively rare, this report provoked a couple of days' worth of excitement. Channel 11 "Action News," on one of the local independent TV stations, broadcast a report on the object and showed a sketch of a strange gyroscope-shaped object. The next night, November 3, Channel 11 reporters from "Action News" learned that an inventor from New Jersey named Robert Young (no relation to the actor) had invented a kite with a transparent string that was similar to the drawing of the gyroscope-shaped object. It seemed that one mystery had been shot down.

That was only an hors d'oeuvre. An even more startling case, which could have been written by the late Rod Sterling of "Twilight Zone" fame, took place in the tropical skies over Australia. This event occurred Saturday, October 21, 1978, at about 7:00 p.m. It was dark but skilled pilot Fred Valentich, age 20, was making a routine flight—a simple training flight. Flying a Cessna 182 single-engine plane that was in good condition, his flight plan would take him from Melbourne to King Island, 130 miles or so to the south.

Everything went well until Valentich noticed an odd array of four lights that approached from the east. The lights seemed to come from a vague elongated shape which swooped in and maneuvered 1000 feet above him. Valentich radioed to Melbourne, but the control tower was unable to locate any nearby aircraft at his 4500 foot altitude.

Valentich circled the odd object for a better view, and to his surprise he found the object was also circling him! According to news reports,[2] Valentich's communications became more panicky as he realized that he was confronting the unknown. The pilot now saw that the object had two basic colors, a greenish light and a metallic-hued light (silvery? - J.S.). The intruder closed in on Valentich and at 7:12 p.m. his last message described the UFO's onrushing flight toward his plane.... Then there was a weird metallic scraping noise followed by silence.[3]

A report in *FATE Magazine* for February, 1979, stated that search planes combing an area 13 miles north of King Island found an oil slick, but that officials were certain that it wasn't from Valentich's plane. Also, a report in the *New York Daily Press*[4] noted that searchers from the Australian Department of Transport had found pieces of metal 50 miles to the north, but that these were probably not from the Cessna 182 either.

Valentich's father, Guio, insisted that while his son was interested in UFOs as a hobby, he would not perpetrate such a hoax. He was certain that his son had been kidnapped.[5] Australian government officials, after conducting a thorough search, suggested that Valentich had probably mistaken the reflections of lights from lighthouses on Cape Otway and King Island for something mysterious, and added that it is also possible he became confused as his plane accidentally turned upside down. Also, while Valentich was a good pilot, he had made few night runs and hadn't been to King Island before, the report noted, adding that he had only been flying for 18 months and was still in the process of completing his license requirements. Weather conditions were good, however, and there is no reason why the pilot would suddenly foul up and mistake lighthouse reflections for a bizarre UFO, let alone turn upside down and not know it!

An article in the *New York Post* of October 27, 1978,[6] reported that Valentich's girl friend, Rhonda Rushton, 16, was certain the pilot was still alive and had landed somewhere in the course of a top secret mission. She also thought he might be injured. These are only the surmises of a teenage girl, so we needn't take them too seriously, although we must sympathize with her. More interestingly, the *Post* article noted that the Australian government was still stumped by the enigmatic incident, for the search continued and the case was passed from the Rescue Coordination Center to the Transport Air Safety Investigation branch of government. The implication, according to the anonymous author of the story, was that the pilot was still thought by government officials to be missing but alive.

The Valentich case produced no tangible results and has now entered the course of ufological history. It was not an isolated incident. Although no more abductions were reported, the *New York Daily Press* revealed that Ken Williams, spokesman for the Australian Transport Department, had announced that his office had been receiving many UFO reports *after* the Valentich story broke. Williams implied that the reports had been held up by people who were at first reluctant to make them. Nevertheless, more detailed reports of other Australian UFOs came from the *City News*[7] (the *New York Daily Press* gave no details), which reported that UFOs had been seen in two Melbourne suburbs. One area of sightings occurred around Queenscliff and another sighting occurred near Geelong, 35 miles southwest of Melbourne. A third

area of sightings occurred near Bass Strait, over which Valentich had been flying, according to a report in the *New York Daily Press.*[8]

The *City News* report stated that one of the witnesses was a bank manager, Colin Morgan, who with his wife saw a glowing star-shaped UFO hovering for nearly an hour over their home town of Geelong. The craft passed over them as they were driving down a highway. It had flickering green lights, as did Valentich's craft, but no shape was described by the man.

The Queenscliff UFO, sighted by Mrs. Barbara Bishop, consisted of a spectacular ferris wheel shape with two concentric rows of lights spinning in an odd position in the western sky at around 8:40 p.m., an hour or so after Valentich had disappeared.

The *City News* also mentioned vague reports of UFOs in the state of Victoria, and added that 11 reports had been made to the Royal Australian Air Force. No details of these other sightings were given, but it appears to me what we have here is very possibly a "flap," as ufologists call a wave of sightings at roughly the same time and date.

Interest in UFOs subsided for a while until suddenly, around Christmas time, a new wave of sightings invaded the major New York daily newspapers. The usually reserved *New York Times* was suitably impressed by UFO reports from Italy, and a mildly humorous article detailed the antics over Italy, particularly over Palermo and Milan.[9] The article described in some detail the aerial antics of unknown objects which danced a cosmic tarantella over Italy's sunny skies. The saucers, called OVNIs ("oggetto volante non identificato"), were *doughnut-shaped,* a significant point to which I'll return in a moment. Typical craft had red, green or white lights, and the objects themselves apparently actually had circular holes in their midst.

The *Times* also reported that dozens of witnesses in reports from Rome and Salaria to the northwest, were startled by the appearance of a mobile beam of green light that wandered over the countryside. That was on Thursday, December 14. On Tuesday, December 12, bank clerk Nino Raffagnino actually photographed one of the weird doughtnut-shaped objects; but unfortunately, while his photographs were printed in the Italian papers, none was published in the *Times* article. Palermo police also photographed UFOs, the resulting photos showing a long streak of light. The *carabinieri,* Italy's famed national police force, received reports of enigmatic aerial objects at Lecce, where their local officers had sighted UFOs. Additional southern Italian sightings were reported from Brindisi. The *Times* article notes that the sightings were reported frantically for weeks, and the Communist paper in Rome, the *Paese Sera,* even considered a daily column.

Events took a more sinister turn in the vicinity of the Adriatic Sea near the city of Pescara. Not far from Pescara is the fishing village of San Benedetto del Tronto, whose peace was broken by the startling appearance of the saucers. One clear night, two fishermen vanished and did not return. After that, fishermen in the area refused to go out at night. The *Times* article ended by referring, with cryptic brevity, to theories about an "Adriatic Triangle," where ships and men have, over many years or even over many generations, vanished.

What is significant about the *Times* article is that doughnut shaped UFOs have been seen before. The most famous were the Maury Island UFOs sighted June 21, 1947, by Harold A. Dahl. Maury Island is in the vicinity of Tacoma, Washington, and Dahl was piloting a harbor patrol boat. Two crewmen and Dahl's son also saw no less than six huge doughnut-shaped craft about 2000 feet overhead. The objects were each about 100 feet in diameter, each with central holes about 25 feet across. The objects' color, as seen under daylight conditions, was a mixture of gold and silver. The saucers made no sound. The case is reported in Brinsley *Le Poer Trench's Secret of the Ages.*[10] Although Dahl photographed the flying doughnuts, pictures did not come out on the film which was spoiled by mysterious spots.

What is even more interesting about these doughnut-shaped craft, if they are craft, is that another was seen at a much later date, right over Union Square near 14th Street in the heart of Manhattan. This particular UFO was seen by Warren Siegmond and Miss Jeannine Bouillier of the French Government Tourist Office. They were taking photographs when, according to Trench (p. 168), Miss Bouillier noticed that there was a huge circular thing radiating a brilliant light. It was silent, without wings, tail or markings. The object was photographed and reported on in the *World Telegram,* and a wire service photo was sent around the world.

A third doughnut-shaped craft was described by Trench, in *Secret of the Ages* (pp. 168-9). On September 21, 1961, two Boeing 707s, one a BOAC plane and one a Pan American airliner flying near each other, saw a doughnut-shaped, enigmatic craft as they flew over the Pacific!

The December 17 Italian flap faded from view, and for a while the New York news media lost interest in UFOs. Then, on New Year's Day, 1979, the sightings returned, breaking upon the press like a great wave that had receded and had now rushed back again. Once again it began in Australia and New Zealand. Three months had passed since Valentich had vanished when, on January 1, civilian radar operators at Wellington, New Zealand, detected mysterious blips of unknown origin. On that same day, pilot Bill Startup of a Melbourne, Australia, TV news production unit, was sent with a film crew to hunt for UFOs over the area of Kaikoura, New Zealand, where the radar blips clustered like fireflies. Quentin Fogarty, the chief reporter, spotted a UFO with a bright, whitish glow at 11:35 p.m., 10 minutes after the film crew had left Melbourne. It was doubtful they were observing an optical illusion, since the UFO was suddenly joined by four or five others, including one that was disk-shaped, according to the *New York Post.*[11]

The *Post* also reported that four policemen near Brisbane, Australia, watched a UFO for two and a half hours. The Royal New Zealand Air Force regarded the reports so seriously that they even scrambled Skyhawk jet fighters to search for the UFOs. Civilian air controllers also reported they had tracked dozens of radar blips of enigmatic origin; and visual sightings had been logged by six pilots on three planes during a ten-day period as well, hinting at yet another flap. Incidentally, the photographs of the UFOs were published in both the *Post* and the *Daily News* January 2,[12] and both newspapers published interviews with the pilot, Bill Startup, who flew the four-engine turboprop plane that was rented by Fogarty's news team. Pilot Startup said they first sighted the UFO when it was 20 miles from them, over Kaikoura near Davis Strait adjacent to South Island, while they were retracing the route taken

by mysterious blips first tracked a few days earlier, on December 21, 1978, near Cook Strait. The plane flew as close as 10 miles to the UFO, flying above them and then swooping under them, circling them. The *Post* went into more detail, reporting that four or five UFOs, including an egg-shaped one with white lights moving around it, and the saucer-shaped UFO mentioned earlier (which had a dome atop it in the classic style), joined the first UFO.

The skeptics had their say as well. The story was reported January 2 on CBS-TV's "Evening News" by anchorman Walter Cronkite, who said an interview with Australian astronomer David Navin indicated the object seen could have been Venus. That explanation, however, does not explain the fact that four or so objects, including the one with a dome, were seen—but then who can explain why Venus is so often 'accused' of being the culprit in UFO sightings, even when it is astronomically impossible!

Similar sceptical opinions were voiced by New Zealand Air Force pilot Ray Curran, who said that the lights and blips may have been caused by misidentified night lights used by Japanese fishermen, whose boats are common in those waters.[13] Do Japanese fishermen use domed disks and egg-shaped boats with rotating lights?

As though unsatisfied with their mixed reviews, the UFOs returned, and a second film was taken of strange objects maneuvering over the lands down under, this time on the morning of January 3, 1979. *The Australian* reported that six policemen in a town 500 miles distant from the TV cameras which filmed a UFO had reported a similar object to the one shown in the film. The new UFO was described as being shaped like a volcano. It was triangular, with a notch at the apex, according to the film crew's sound recorder, Lloyd McFadden. What appeared on the film, however, was a glowing ball with a reddish center. The film was taken near the Clarence River in South Island, near the northern part of that island. A photograph of the object appeared in the January 2, 1979 *New York Post.*[14]

This new wave of UFO sightings was reinforced by reports from all over the world as interest in UFOs increased dramatically. Although it seemed that a world-wide flap was on, UFO reports coming from a remote area might, when reported simultaneously by a number of witnesses, seem to be part of a pattern to these sightings and suggest that the UFO appearances are coordinated. We can't really say that without more proof, of course. The UFOs might come from several separate sources simultaneously.

For example, while the Australian-New Zealand flap was under way, the *New York Post* reported that UFOs were seen in Ferrara, Italy, on New Year's Eve. However, as the article noted that the witnesses had been returning from a party, it is perhaps a case of misidentification. The new Italian UFO consisted of a bright oval which moved slowly and left a dense white tail. Trails left by UFOs are rather rare and may be clues to their propulsion.

More detailed reports of UFOs have come from Israel, South Africa, New Jersey, and from near Nashville, Tennessee. These were summarized by the January 5, 1979 *New York Post,*[15] which said that police and civilians had sighted craft of unknown origin that zoomed and zigzagged over the skies of Jerusalem and Haifa, Israel. An earlier *Post* article, dated January 4, said that the UFOs over Jerusalem were three in number and were apparently of diamond-like shape, colored red, blue, and purple. These were seen in daylight and sparkled, and were reported as being about the size of "flashlights."[16]

From South Africa came a fascinating Close Encounter-type case. The event took place outside the city of Johannesburg. Although the exact date of the sighting isn't given in the *New York Post* article,[17] we can infer that it occurred some time around the period of January 1-5. Mrs. Meagan Quezet and her 12-year-old son Andre insisted that they came across a landed grayish, egg-shaped UFO from which "ufonauts" emerged. The exact number of the ufonauts isn't given, but Mrs. Meagan said that they had a leader who not only bowed but was even charismatic! Also, the crew all wore pinkish uniforms. The leader attempted to speak to Mrs. Meagan, but she was unable to understand what was being said. The aliens then re-entered their craft, which left, making a purring noise as it rose into the starry night.

The cosmic spotlight then seemed to shift toward the U.S. In Tennessee, near Nashville, Lt. Robert Ezell reported that his colleagues on the local police force had witnessed alleged UFOs whizzing over the highways. Those UFOs had white lights on their tops and flashing red lights in the center of each of the round objects.[18]

New Jersey got most of the attention. It seemed that a minor flap was under way. Sightings seemed to cluster in southern New Jersey, over Brick Township and Barnegat Bay.[19] Although the objects failed to appear on radar screens at the Lakehurst Naval Engineering Center and at McGuire Air Force Base, policemen from Brick Township saw a balloon-shaped UFO with running lights (color not given).

The *Daily News* of Friday, January 5, 1979 reported that, on Wednesday of that week, Lt. Joseph DeAngelo saw a white circle of light with blue lights at each end. It hovered and left.[20] (The *New York Post* of January 4 stated that the UFO appeared around 7:40 p.m.) Joseph Frank, reported as an animal control officer, along with his brother Nick and wife Anna, as well as his father, Joseph Sr., saw a blimp-sized, rectangular object that was brightly lit by an unspecified color. The article also mentioned that SITU's president, Bob Warth, categorized the Barnegat Bay sightings as a Close Encounter of the Second Kind, which, according to the terminology of Prof. J. Allen Hynek, represents a prolonged sighting of a UFO which hovers close to the ground without landing.

On January 4, 1979, at 7:55 p.m., Channel 11's "Action News" reported another CE-II which occurred at New Milford, New Jersey. Rev. Charles Rizzo saw a disk with red and green lights approach his house before it took off into the night. "Action News" reported on January 5 that some of the New Jersey UFOs may have been caused by misidentified sightings of aircraft of a Farmingdale, Long Island aircraft company which was conducting night flights in that region of New Jersey. That plane, however, did *not* have blue running lights, so the reports of blue lights on unknown aerial objects should remain classified as enigmatic cases that have yet to be explained.

Two other reports originated from Secaucus and from Jersey City, both New Jersey. The *Jersey Journal* of Saturday, January 6, 1979 reported that Joan Hubert, a secretary for the Secaucus Board of Health, was driving on Central Avenue in Secaucus at about 6:45 p.m. when she saw a red disk with a serrated rim flying past the Elms

Building. Her daughter Kerry also saw it. Although the article added that a similar object was sighted over Jersey City, no additional details were given. It appears that in the New York metropolitan area, the UFOs suddenly faded from the news as rapidly as they had swept onto the front pages and screens. The wave, which had rushed forward from the shadows, once again had receded. Was the 1978-79 flap over, or had it only subsided for awhile?

Whatever the truth may be behind the current wave of UFO sightings, a few points should be brought up which may present clues to our persistent cosmic mystery.

First, the December-January Flap began only a few months after Valentich disappeared in a bizarre fashion. The fact that the wave began in Australia and New Zealand may be of added significance.

Second, the wave of sightings began as NASA's spaceprobes were approaching Jupiter and other probes had already landed on Venus.

Third, these sightings came almost precisely on the anniversary of previous UFO sightings in New York State, Pennsylvania , and New Jersey's shore area which ocurred a year earlier in conjunction with those enigmatic high-atmosphere booms called "skyquakes." (None of those anomalous supersonic booms were reported in conjunction with these UFO sightings, however.)

Fourth, the *New York Daily Metro* of September 24, 1978 reported that Takeshi Urata, an amateur Japanese astronomer, had discovered a new asteroid which he named "Mizuho" after his daughter.[22]

Fifth, the *New York Times* of December 24, 1978, reported that scientists from Western Washington University had built a device which could carry messages on previously elusive neutrino beams directly through the earth, an hitherto difficult task. Dr. Peter Kotzer felt that the neutrino beams could ultimately be used in a worldwide communication network. He added that he felt extraterrestrial civilizations, if they exist, may have already used such beams, and that if radio astronomers failed to detect intelligent radio signals from space, perhaps they could use the neutrino beams. Indeed, he even suggested that neutrino beams carrying messages from various extraterrestrial civilizations could already be passing, by chance, through the earth and that we could eavesdrop on those conversations.[23]

Lastly, it should be pointed out that Barnegat Bay, New Jersey, is no stranger to Fortean phenomena. In their fascinating book, *The Jersey Devil*,[24] James F. McCloy and Ray Miller, Jr., describe a strange man-sized, bat-winged, flying creature that supposedly haunts the remoter regions of New Jersey's rural districts. The creature, whose existence is as hotly debated by New Jersey savants as is the UFO enigma, has been sighted from the early 1700s onward right up to the mid-Twentieth century. Commodore Stephen Decatur, the great naval hero, is said to have not only see the creature over Barnegat Bay but, since he was testing cannon balls at the time, he was able to fire a few shots at the airborne monstrosity. Decatur failed to bring down the creature in what might be said to have been the U.S. Navy's first clash with a flying enemy. It is also said that Captain Kidd, who came to the area, supposedly saw the creature. Whether there is any relation between the Jersey Devil and the UFOs recently sighted in the same area is anybody's guess, but John Keel has pointed out in *The Mothman Prophecies*[25] how he recorded hundreds of reports of a similar creature that appeared in West Virginia in 1967 during a wave of UFO sightings in that state.

Although the present UFO wave represents a story with a beginning and a middle, we will have to wait and see if there is to be an ending....

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SYMPOSIUM

Comments and Opinions

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We believe, as Ivan Sanderson did, that science is truly the pursuit of the unknown.

* * *

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* * *

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SITU MEMBERSHIP DIRECTORY UPDATE

The SITU Membership Directory Update addenda and errata are herewith presented. (Interested members not familiar with the Directory should see Volume 11, Number 4 for coding and instructions).

The next *complete* listing will be an all-inclusive one to be updated early in 1980. The service can only be extended to members who have renewed in time to be included. The cut-off date will be October 1, 1979. A paid-up member will *not* be removed from the directory unless we are so notified.

All matters pertaining to the directory should be addressed to:

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Anthropology . . . . . AH
Falling or phantom animals . . . . . FA
Psychiatric makeup of Fortean observers or contactees . . . . . PS

MEMBERS AND THEIR INTERESTS

(New Entries)

Member No.	State	ZIP	Interests
3039	CA	90503	U,L
3078	CO	81037	AM, U, AN, E, R, X
210	MA	02138	G, M, X, FA, PS, AH, Z
2741	MN	55374	AG, C, H, PM, SK
2610 (corr.)	MN	56248	U, T, E
2503	NJ	08096	F, L. M, UA, X
1976	NY	14615	AA, AP, AT, C, IA, L, M, H
3070	OH	43618	U, X, L5
6025	WY	82071	D,H,U,V,X,Y
1692	B.C., Canada		U
2714	England		G, U, M, F, H, O, R (corr.), TT

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Current Pursuits: Wanted: Information on erratic zoological specimens (great gray owls to alligators). Also, specific data on the locations and associated folklore for (1) Fortean places with "devil" names, (2) walled structures such as Fort Ancient, Ohio, and (3) mounds. Please send ideas, clippings, references to: Loren Coleman, 115 Chilton Street, Cambridge, MA 02138, telephone 617—354-7412. I will appreciate your assistance, and reward you with a Fortean surprise envelope of news items.

LETTERS TO THE EDITOR

You lower the high standards of your journal by publishing so naive a tirade as Dr. Lorenzoni's "The Psychoanalysis Wangle" (*Pursuit*, Vol. 11, No. 4). No educated person today has the blind faith in Freud's teachings which Lorenzoni presupposes, nor can an unquestioning adoption of his belief-system be regarded as one of the initiation rites required of an aspirant to the scientific establishment.

I personally have a profound distrust of psycho-analysis, and little doubt that Freud was frequently mistaken in his interpretations. But this does not prevent me from recognizing him as one of the most fruitful thinkers of the past hundred years. Indeed I question whether SITU would exist, or Lorenzoni feel able to write as he does, had not Freud gone before to clear the way with his bulldozing iconoclasm.

Just forty years ago, on the occasion of Freud's death, Auden wrote:

> If often he was wrong and at times absurd,
> To us he is no more a person
> Now, but a whole climate of opinion,
> Under whom we conduct our differing lives.

Lorenzoni blames Freud because the mass media have labeled him 'the discoverer of the unconscious'—but since when have SITU members relied on the mass media for their information? Such reasoning is on a level with his childish name-calling ('squalid individual', 'Freud and his gang') which is, ironically, characteristic of that classic father-rejection which Freud himself identified!

With a bravado typical of that Freudian pattern, Lorenzoni claims to have 'demolished' Freud as he formerly demolished Einstein and Darwin. Setting aside so ludicrous a boast, let us consider his suggestion that such demolition work is an important part of the true Fortean's task. As every Fortean knows, the Master's method was to proceed by *con*struction, not *de-*. He would propose a notion such as his Super-Sargasso Sea and use it as a working hypothesis until a better hypothesis should replace it. Similarly, Darwin, Einstein and Freud offered us working hypotheses. Time is already starting to replace them, but that is no reason to belittle their achievement. They may not have attained the heights of ultimate truth, but it is by standing on their shoulders that we who follow can hope to scale those heights.

—Hilary Evans
England

This area was about in the center of an unexplained sonic phenomenon the night of January 8, 1979. That was a bad night, weather-wise: very cold with a freezing rain falling, shrouding the countryside in a sheath of ice that knocked out power lines, broke a myriad tree branches, etc., so few people were outdoors.

About 9:30, people here, and in dozens of other communities over south-central Kentucky and north-central Tennessee heard a very loud boom or crash or roar. Some (most) thought it was a powerful sonic boom created by an aircraft breaking the sound barrier. However, both civil and military aeronautic authorities later denied any such event occurred with any known aircraft.

Other folks figured there had been a huge explosion, but none had taken place. A few people, who chanced to be looking out of their windows at the time of the boom, saw a brilliant red flare or flash low in the sky. These folks thought a low-flying aircraft had exploded in a brilliant blast. However, no aircraft [was reported] missing, and no trace of any explosion, or wreckage, to be found on the ground anywhere.

I myself heard the sound, though did not see the flare. It was a rather unusual noise—a roar and boom and crash and whine and vibration all combined. As I've mentioned, a heavy ice storm was in progress, and my first thought was that the ice accumulation had toppled a large dead tree near my residence (at that time I thought it strictly local and had no idea it had been audible over such a huge area), but at dawn I saw the ice-sheathed tree standing.

A similar sound was heard by me, and a few others locally though I do not know if it was reported elsewhere, on the night of January 20. I was sitting up late, reading, and at about 1:30 a.m. I heard this second boom-crash-roar-whine-grind-vibration. It was quite loud, and I distinctly felt a slight quiver of the old farmhouse I inhabit. While no seismograph reported any earth activity in this portion of the nation on that date, I wonder! About 12 years ago, an earthquake did shake this area, and it was accompanied by a sound very similar to these latest.

—Member #380
Scottsville, Kentucky

I am member 755, and you are probably member 34, 697 or 3041.

These numbers, as Ivan once told me, are to protect our privacy as SITUians.

To those of you who haven't heard, everybody knows about UFOs, the Bermuda Triangle, and Uri Geller.

So who are we protected from by using these dandy membership numbers? People who most likely wouldn't even care that we massage a secret hanker for frog falls or ten-penny nails nestling inside rocks, mainly because rocks pelting a chicken coop from the Super-Sargasso Sea and things that go thump in the night are not that mind-wrenching compared to Von Daniken's speculations.

The professors who should fear for their jobs don't use the SITU membership number; their names are right out there on the *Pursuit* masthead—complete with an address—something that strikes me as a dopey way of preserving their confidentiality. Perhaps prima donnas don't sweat reprisal, but a 35-year-old math teacher is not so sure of his paycheck and so wants the lid kept on.

Then does the membership code number help writers? No. You reach them through their publisher's customer service desk. Or look them up in the book.

So if the membership number doesn't help people with reputations to protect, or keep nuisance letters from writers, it must be to protect all us less distinguished aficionadoes of the Bizarre. The Forteans I know are constantly making new contacts and meeting on their own. Some even write in and beg to have their name and address printed with a request to hear from other SITUians.

I do not suggest that *Pursuit* undertake the mammoth project of publishing all our names and addresses, no, no. I merely point out that *since* the numbers are not used in the *Pursuit* articles, and *since* the numbers are not used by the academics or writers to preserve their identity as Closet Forteans, *what good is the membership number system?*

Back in '71 Ivan told me he was in British Intelligence during WWII. He was assigned a number then, but the War's over.

Spread the word.

Confidentially yours,
Mr. X
aka #755

SITUATIONS

This section of our journal is dedicated to the reporting of curious and unexplained events. Members are encouraged to send in newsclippings and responsible reports they feel should be included here. Remember, local *newspapers often offer the best (or only) information concerning some events. Please be sure to include the source of reference (name of newspaper, periodical, etc.), the date the article appeared and your membership number (or name, if you prefer to be credited that way).*

NEW NESSIE FILMS?

A British TV cameraman, driving along the Scottish loch with plans to do a film on forestry, instantly changed his plans when he found the "monster" instead. "It had a round head rather like that of a seal," said the cameraman, Peter Leddy, who claims to have filmed the fast-moving creature from about a half mile away. "The head was visible for so long that I was able to make several lens changes."

The film was sent (so they say) to the British Broadcasting Corp. for processing.

SOURCE: *Philadelphia Inquirer,* April 4, 1979
CREDIT: Sabina Sanderson

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IGUANA FOUND ON DESERTED ISLE CALLED 'LINK' IN ANIMAL MIGRATION

Dr. John Gibbins, a British scientist, claims that a newly discovered, 3-foot-long iguana he found on a deserted island in Fiji is the "missing link" indicating how animals got from South America to the South Pacific.

Gibbons said that the iguana is similar to South American species with a crested back and *extraordinary* color change powers. The scientist feels that the find indicates that iguanas floated to the Fiji islands on rafts of vegetation washed out to sea millions of years ago.

SOURCE: *The Tennessean*
CREDIT: Member #380

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MYSTERIOUS RINGS IN SAUDI ARABIA BEING STUDIED

Puzzling circular stone formations are scattered on remote hilltops and in valleys throughout Saudi Arabia, reminiscent of those found in Europe. The "mysterious rings" are formed by stone walls one to two feet tall and range from 15 to 100 yards in diameter.

Archaeologists have noted that many of the rings have "tails," appendages that stretch out for hundreds of yards across the wilderness.

Thanks to the Saudis, who opened their doors to foreign archaeologists, American and European experts have been conducting general surveys of the country's potential archaeological sites. The Arabian desert has been virtually untouched for centuries.

"This country is a gold mine of archeological treasures," said one archeologist. "The desert is covered with inscribed stones and artifacts. All you have to do is bend over and pick them up."

When viewed from the air, the stone rings bear a marked similarity to huge circles etched into the Nazca Plain in western Peru.

SOURCE: *Evening Journal* (Wilmington, Delaware), December 29, 1978
CREDIT: Member #659

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ATLANTIS—HAVE THE RUSSIANS FOUND IT?

Dr. Andrei Aksenov, deputy director of the Soviet Academy's Institute of Oceanography, said that scientists aboard a survey ship 200-300 miles west of Portugal have taken eight underwater photographs that show a horshoe-shaped group of flattop mountains and "vestiges of walls and great stairways."

Aksenov told reporters that Soviet oceanographers believe it could be the ruins of Atlantis. "Yes, the Soviet oceanographers believe it could be true, considering ocean-floor tectonics. The geologists think it quite possible that this horseshoe was a rather large archipelago that submerged as a result of geological unrest," he said.

Aksenov said the photographs would be made public in Moscow, but that more investigations would be necessary before any conclusions could be reached.

The scientist is currently on a second expedition to the site, and added that oceanologists have equipment that is a self-contained submersible research station. Researchers in such a "microboat" can move sideways, up and down and can examine the underwater landscape.

SOURCES: *The Nashville Tennessean,* April 3, 1979; *Herald-News* (NJ), March 29, 1979
CREDIT: Fred Wilson and Member #380

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MAN WALKED 3 MILLION YEARS AGO

Dr. Mary Leakey, noted anthropologist, recently discovered, in East Africa, human-like footprints in hardened volcanic ash. The footprints are the first concrete proof that man's ancestors walked upright more than *3 million* years ago!

At a National Geographic Society news briefing, Dr. Leakey stated that fossil remains of 22 individuals did not indicate large heads, there was no evidence of tools at the site, and therefore the prints seemed to indicate that walking upright preceded development of a large brain and toolmaking. "The finds are of greatest importance in the picture of human evolution," she said. "They establish that man reached bipedal, free-striding gait (upright walking) much earlier than was known for certain."

SOURCE: *Herald-News* (NJ), March 22, 1979
CREDIT: Fred Wilson

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MYSTERIOUS MARINE MAMMAL STRANDINGS

During the first week of 1979, fifty-six sperm whales beached themselves and died near the Baja California town of Mulege. The accompanying photo shows some of the ocean-going mammals as



January 8, 1979. Scientists from the United States and Mexico examine some of the 56 sperm whales that beached themselves and died near the Baja California town of Mulege. *Los Angeles Times* photo by Bill Varie.

well as some of the scientists from the U.S. and Mexico who went to examine the creatures.

The phenomenon is not unique; each year whales and their smaller relatives the dolphins are found dead or dying from strandings on beaches around the world. The numbers involved, as well as the circumstances involving the beachings, however, are still confusing to scientists seeking an explanation for the phenomenon.

A mysterious series of such events occurred during a two-week period in July, 1976 in Florida. It began when residents living near Siesta and Casey Keys, small barrier islands along the southwest coast of Florida near the town of Sarasota, heard strange sounds the night of July 13. About 10 p.m., residents reported hearing high-pitched sounds, almost like bird cries. Looking toward the ocean they saw between fifty to a hundred dolphins, each about six feet long and weighing about 150 pounds, heading for the beach.

All night long the residents, assisted by officers of the Florida Marine Patrol and representatives of the National Marine Fisheries Service, attempted to turn the animals back to sea. Despite all the efforts made by hand or motorboat, twenty-five of the mammals died.

Dr. James Mead, curator of marine mammals at the Smithsonian Institution, who has studied over a hundred mass beachings of whales and dolphins, was summoned to the scene. He noted that the dolphins, identified as *Stenella longirostris*, are deep water mammals that usually stay at least ten miles from shore, are somewhat different in appearance and are slightly smaller than the Atlantic bottlenose dolphin or porpoise. Their sudden appearance on the Florida gulf coast beach was a rare event, according to Dr. Mead. This was the first mass stranding of this particular species to be brought to his attention.

Under Dr. Mead's direction, the dead dolphins were taken to nearby Mote Marine Laboratory on the southern tip of Siesta Key. After spending two days performing autopsies on the dead mammals, the researchers—including Dr. Mead; Ed Aspar, curator of mammals and birds at Sea World of Florida, and other researchers from that marine attraction near Orlando; Dr. Daniel Odell from the Rosenthiel School of Marine and Atmospheric Science at the University of Miami; Drs. Robert Schimpff and Nicholas Hall, neuroscientists from the University of Florida, and Carroll Woodard, veterinary pathologist, also from the University of Florida—could find no apparent cause for the beaching.

Earlier work by Dr. Mead had shown that the pilot whale, a related species, plays host to a parasitic worm which infests the middle ear sinuses, the brain and the central nervous system. This causes extensive damage by impairing the animal's echolocation system and food-finding capabilities, which sometimes causes the mammal to become disoriented and to head for shore, followed by the others in the group. Although he felt this might be the case with the dolphin beaching on Siesta and Casey Keys, the autopsies showed no such clear-cut conclusion was possible.

According to Ed Aspar, "Mentally those animals had died. But as far as their necropsies went, those animals looked very, very good." He was referring to two survivors who were brought to the lab but

were found to have lost their "sonar" capability. As a result, they would swim into the walls of the natural pen. After being kept there 24 hours for observation, they were taken to Sea World for further tests. They died a short time later. The animals, although seemingly healthy, were suffering from what Aspar termed a "stranding shock syndrome," and they were unable to recover from it.

Nine days later, July 22, another marine mammal stranding occurred approximately 50 miles further south. Five whales, at first thought to be pilot whales and later identified by Ed Aspar as *Pseudorcus* (false killer whales, a porpoise-like mammal 13 to 16 feet long, weighing 1,000 to 2,000 pounds, and very rare on Florida's gulf coast), had beached themselves on sandbars in Pine Island Sound near Upper Captiva Island in the Fort Meyers area. Dr. Odell again performed an autopsy on one of the whales which had died. His report indicated there was no food substance in the stomach or intestines and that those organs showed the presence of a type of parasite. Preliminary findings, he indicated, were similar to those of the Casey Key dolphins. The other four whales were taken to Sea World for observation, where it was noted that lung worm infestation was also present. All four mammals subsequently died.

Just three days later, 24 false killer whales were found stranded on Loggerhead Key, a small island in the Dry Tortugas, about 65 miles west of Key West. This time rescue workers managed to head all but one back to sea and scientists were able to secure the brain of the dead whale within two hours after death.

Although hundreds of inch-long parasitic worms were found in the ear canals of the Loggerhead Key casualty, Dr. Odell, who spoke with SITU representatives in February, 1979, feels there was not sufficient organic damage to have caused the whale to become disoriented enough to head for shore.

No one really knows what causes the dolphins and their whale cousins to strand themselves on land. A report issued by the health center at the University of Florida in January, 1977, indicates no evidence of brain disorders or parasitic infestation in the Casey Key dolphins which would account for the stranding. Those findings agree with those of Ed Aspar, who believes the stranding occurred because the dolphins came too close to shore, perhaps following food sources which were depleted in their normal environment, thus causing them to search in a wider range. The long sloping continental shelf on the gulf coast might have confused them, by tending to absorb the sound. "If they don't get a feedback, there is a good possibility that their impression is that there is deep water ahead," Aspar noted.

Aspar also related that in attempting to get the whales off the beach and into the water at Loggerhead Key, all efforts aimed at selecting the five largest bull whales and starting them out in deep water one at a time failed, until *all* five were headed out. As long as even one of their group remained the others stayed in the area.

Dr. Perry W. Gilbert, director of the Mote Marine Laboratory, feels that this theory was disproved during a prior pilot whale beaching on Boca Grande on August 20, 1971. "In that stranding the large bull whales remained offshore while the smaller members of the herd beached themselves," he said.

While parasitic infestations and other organic causes may have contributed to the whale strandings, and whether all the whales were affected or only a few with the rest following along will probably never be known; and the question is still open as to why or how the Casey Key dolphins, which showed no such organic illness to account for the stranding there, became disoriented due to finding themselves in shallow waters.

We have learned a lot about dolphins and their marine cousins over the years. We know, for example, that more than 30 species of dolphins can be identified as belonging to the suborder *Odontoceti*, or toothed whales, of the suborder *Cetacea*. They evolved over 50 million years ago from land mammals that may have resembled the even-toed ungulates of today such as cattle, pigs and buffalo. Ocean species sometimes congregate in groups of several thousand, reminiscent of buffalo herds in North America. Kenneth S. Norris and Thomas P. Dohl of the University of California at Santa Cruz have suggested that dolphins may form close groups while they are resting in order to utilize the combined sensory abilities of all the individuals in the group to scan the environment for potential danger. (Dolphins, like bats, emit high-frequency sounds in short pulses. The sounds bounce off objects and the echoes return information concerning the size, shape, distance and even the texture of the objects.) In a closely organized school, each individual can hear the echo-location sounds made by other members of the group. Even though an individual member might not make many sounds, much information about the environment would nevertheless be rapidly and efficiently disseminated to all members.

It is also possible that a resting group swims close to shore in order to be in shallow water not frequented by deep-water sharks.

As to why marine mammals should choose to strand themselves upon the beaches of our world, however, we know very little. Whether the mystery occurs in Baja California or southwest Florida, we have come no closer to solving it than Aristotle, who wrote concerning marine mammals over 2300 years ago: "It is not known for what reason they run themselves aground on dry land; at all events, it is said they do so at times, and for no obvious reason."

SOURCE: The information included above has been extracted from an article in *Museum*, Vol. 9, No. 7, February 1978 (published by the Museum of Science, Inc., Miami, Florida) entitled "Mystery of the Beached Mammals," by Thomas M. Leahy;and from an article entitled "Dolphins," by Bernard Würsig, in *Scientific American*, Vol. 24, No. 3, March, 1979.

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DUST STORM RAINS DOWN ON SOVIET GEORGIA

According to the press agency *Tass*, widespread heavy dust fell like rain over Soviet Georgia during the first week of April, 1979. According to the experts, hot air currents over Iran, Turkey and North Africa swept up tens of thousands of tons of dust into the atmosphere and deposited it as a dust storm over the Transcaucuses.

SOURCE: *The New York Times*, April 8, 1979

CREDIT: Steve Mayne

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MONSTER LIVING IN SIBERIAN LAKE

Geologists, hunters and Siberian natives have all reported sightings of a snake-headed, animal-eating creature, said to inhabit the frigid waters of Lake Labinkir in the Siberian province of Yakutia, 250 miles north of the Soviet eastern coast.

The creature, well-known to local residents, has enjoyed wider attention, thanks to a best-selling book about Siberia, "The Oymyakonsky Meridian," by Soviet journalist Anatoly Pankov. Pankov said the first trustworthy sighting of the creature came in the 1950s when a group of geologists saw, rising from the surface of the lake, a long-necked creature with a snake-like head. The creature glided about and made a sound "like a child's cry" before it disappeared into the 150-foot-deep waters.

Other geologists, while walking on ice over the lake, claimed to have seen a long, grayish, unidentified animal under the surface.

Another incident involved a group of reindeer herders who claimed they saw "a giant pair of jaws" emerge from the water and "snap up" a bird flying along the lake's surface.

But, according to Pankov, the most spectacular sighting occurred when a hunter sent his dog into the lake to retrieve a goose he had shot. Suddenly a creature rose and caught the goose and

the dog. Undaunted, the hunter made a fire, placed some fiery coals atop a buoyant animal skin and shoved the 'offering' into the lake. The creature rose above the surface, snatched the prey in its mouth and submerged. Shortly thereafter it reappeared, making terrible noises and thrashing around wildly.

So far, the creature has eluded scientific explorers. Many expeditions have traveled to the lake since the 1960s, but all have failed to come up with any concrete evidence proving the 'monster's' existence.

SOURCE: *The Star-Ledger* (Newark, NJ), April 9, 1979
CREDIT: Bill Wirtis

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BLACK, GLASSY SPHERE: UFO FRAGMENT?

The accompanying photograph shows Edward Lunguy holding a 13-pound black, glassy sphere which Lunguy now keeps locked in a vault because he thinks it might be a fragment of a UFO. Formerly of Barberton, Ohio, Lunguy is convinced he saw a UFO one July night in 1972. He was backing his car out of the driveway when an orange ball appeared in the sky.

"It just sat there. Then it started moving real slow in a northeast direction. It started to gain some altitude, then all of a sudden, it blew up," said Lunguy.

Three weeks later, Lunguy was mowing the lawn when he came across the glassy black object tinged with amber. Although the object was kept and Lunguy's children played with it, it was two years later that Lunguy's wife Suzanne insisted he submit it for testing.

"There's no other explanation for it," said Robert Oldrieve, an investigator at the National Aeronautics and Space Administration's Lewis Research Center in Cleveland.

"This is the best UFO case I have come across. This is the only one that has a chance of having an artifact left behind, something tangible that can be analyzed," said Oldrieve who tested the object independent of his work with NASA.

Oldrieve reconstructed the event witnessed by Lunguy in 1972: "It was a big, hollow gossamer Christmas ornament sitting in the sky. Then it shrank, turned red and sprayed debris around."

Still, Oldrieve will not flatly agree that the sphere might be part of that debris. "It would be an excellent example of a UFO if it were not for the fact that he (Lunguy) did not see it fall and strike the ground and run over and pick it up," he said.

Oldrieve had determined the object's hardness at about seven on a scale of ten, as measured by a diamond, he said. He also said the substance was insoluble in acids and had the characteristics of the type of glass researched for NASA for use as rocket liners or heat shield.

"It's an artificial glass ... Its composition appears to be unique. It melts at a very high temperature, such as glass used for re-entry on a space-ship," Oldrieve noted. "We have such things, but there's no way a 13-pound chunk of it is going to come down in a farm field in Ohio," he said.

A specialist on UFOs from Northwestern University in Illinois recently arranged to study the object, and Oldrieve said he would submit any findings to NASA's Washington office.

"If I could verify its composition, we would be very excited about it," he said.

SOURCE: *Evening Journal*, Wilmington, Delaware, December 21, 1978
CREDIT: H. Hollander



Edward Lunguy holds the glassy object he thinks may be a remnant from a UFO. A steel tool used to chip away samples for testing was itself chipped in the process.

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TWO-FOOT-HIGH 'DWARFS' REPORTED FROM FIJI

(Although this report is from 1975, we consider it an oldie but goldie —ed.)

According to students from Lautoka Methodist Mission School, about 8 mysterious little figures two feet in height and

covered with black hair have been seen near the school. The figures, believed to be dwarfs, hastily moved away into nearby bushes when the children began to approach them. As the news spread, scores of neighbors rushed to the scene. The "dwarfs" could not be found upon further investigation, and seemed to have jumped inside a pit near a bush.

Since the first sighting, dozens of people have gathered near the pit in the hopes of seeing the dwarfs. Some sat there for hours with sticks and torches, in the event the 'little men' might be harmful.

The head teacher of the Methodist School, Mr. Narayan, said he threatened the children with punishment for made-up stories, "but they remain firm in whatever they have said about the mysterious figures."

Apparently six different students, ranging in age from 10 to 14, actually saw the figures while returning home from school. One student said: "I saw his white gleaming eyes and black hair. I was frightened."

"One showed me his teeth and then ran away," claimed another student.

David, a student who apparently saw eight of the little people, wanted to speak to them but as he approached them, "the little ones ran away."

Mr. Peniasi Tora, a long-time villager who went to the scene after hearing the news, mentioned that when his forefathers first came to Fiji, they saw little men already living here.

SOURCE: *Fiji Times*, July 19, 1975
CREDIT: Malcolm Smith, Australia

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HOG DEATHS: ONE UP, ONE OVER

At 8 p.m. December 6, 1978 a 21-year-old Norway, South Carolina farmer, his wife and two companions saw a circle of white light, approximately 10 feet in diameter, hovering atop the trees over a hog pen.

The farmer, Richard Fanning, later said of the incident: "I have no doubt at all. I'll tell anyone. I was scared and I'm not scared of many things. . . . Never seen anything like it. It's the weirdest thing I've ever seen in my life. I'm an outdoorsman and I wouldn't have said nothing unless the other three people saw it too."

According to the four witnesses, after arriving at the scene they saw the large hovering light, and below it were two pairs of green and red lights each the size of a car headlight. The lights were accompanied by no noise whatever.

Fanning said, "That doesn't look right. Let's leave." As he began the drive homeward, he said, the light followed at the height of the car, keeping about 50 yards distant as the green and red lights moved alongside.

"I was going to the house to get my gun when all of a sudden the big white light made a U-turn behind my car and went back above the hog pen. Then the red and green lights turned around and started back. We watched, and after three or four minutes, all the lights went out."

Fanning said neither he nor his companions were under the influence of alcohol, drugs or any other substance. Fearing a repetition of the incident, Fanning and his wife spent the next two nights with relatives and returned on the third morning to feed the hogs.

Upon his return, Fanning said, he found one hog "standing up dead. I kicked him and he fell over."

A second dead hog was lying on its side, Fanning reported. Though apparently uninjured, closer inspection revealed that the entire jawbone had been removed "and the body was sort of like a sponge, with all the weight gone, kind of like jelly." (Fanning noted that the hog, alive, weighed about 200 pounds, but as remains, weighed about 50 pounds.)

None of the several hundred other hogs appeared to have been injured.

To Fanning, the sighting incident and subsequent events remain unexplained.

SOURCE: *The Times and Democrat*, Orangeburg, SC, Dec. 13, 1978. CREDIT: William J. Herrmann

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CHESSIE UPDATE – 30 YEARS AGO

Those witnesses who saw the Potomac monster (nicknamed Chessie) last summer are not alone. Thirty years ago Lewis Bray was discing his field with a small tractor when a rust-colored serpent, 10 feet long and 7 inches in diameter, emerged from a pond and moved across the field where Bray was plowing. Bray said the creature moved by undulating vertically like a caterpillar, instead of sideways like a snake. "I wanted to kill it to show someone," Bray said. "I figured I was up on that tractor, and it couldn't hurt me."

He then drove over the creature three times, and although the tractor weighed 4000 pounds and was equipped with discs, "I didn't even slow it down. It just kept crawling on," he said. As he was about to run over it a fourth time, it reared up "like it was going to fight the tractor, darting its tongue in and out," Bray added.

Bray became frightened and went home to tell friends and his family. "Everybody just laughed," recalls Bray, although several other area residents reported that they, too, had seen a large serpent in the area.

One farm worker, named Cockrell, reported seeing a large serpent-like creature at the time of Bray's sighting. Cockrell, who lives near a swamp that drains into a creek a mile from the Potomac, heard and saw the creature moving through the forest. Sticks cracked as it came through the woods, Cockrell recalled, and it scared him so badly that he just ran from it.

SOURCE: *Richmond Times-Dispatch*, August 18, 1979
CREDIT: #659

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HISTORICAL MIBs

Here are a couple of Men-In-Black cases from folklore, one from Norway and one from Monterey, California.

On page 310 of the AMS Press, Inc., reprint of Peter Munch's book, *Norse Mythology* (New York, 1970), the author describes a kind of goblin known as *vettir* in Telemark, Norway. They are no bigger than a child of ten, and they wear gray clothing with black hats. Note well, they have herds of cattle called *huddekroeter* (Huldre cattle). A Huldre is a type of goblin. They also have certain types of dogs called *huddebikkjer* (Huldre curs).

Another, weirder case comes to us from Randall A. Reinstedt's *Ghostly Tales and Mysterious Happenings of Old Monterey* (Ghost Town Publications, Carmel, California, 1977). On pages 47-49, Reinstedt mentions the mysterious Dark Watchers of the Santa Lucia Mountains of Monterey County, California. The Dark Watchers have been reported since before the 1930s. The author claims that famous writers such as John Steinbeck knew of the Dark Watchers and that that author described them briefly in his story, "Flight." The Dark Watchers appear as solitary male human-appearing beings who dress in antique clothing, sort of like Zorro. They wear black hats, black clothes, black boots and either black capes or long black coats. One case of a Dark Watcher was reported as recently as the mid-1960s by a respected retired high school principal on a hunting trip. Interestingly enough, the Dark Watcher vanished like a ghost when the startled hunter turned to point the being out to his companions.

CREDIT: Jon Douglas Singer

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BEARLY POSSIBLE

The two frightened foresters in Phillips, Wisconsin, were treed for two hours, but it was the black bear that put them there that wound up with the red face. The 250-pound animal sprayed itself in the face with a paint sprayer the men were using to mark timber. Roy Gilge and David Bentley were working in Flambeau State Forest when the bear appeared and sent them scrambling up a couple of trees. The bear rummaged through their backpacks and managed to set off the sprayer loaded with red paint, then wandered off.

SOURCE: *Herald-News* (NJ) June 3, 1979
CREDIT: Fred Wilson

BOOK REVIEWS

by Robert C. Warth

***PATHWAYS TO THE GODS: THE MYSTERY OF THE ANDES LINES* by Tony Morrison and incorporating the work of Gerald S. Hawkins, Harper & Row, New York, 1979, 208 pages, $12.95.**

After Paul Kosok's discovery of the 'Nasca Lines' of Peru in 1941, Maria Reiche spent more than 3 decades studying those curious desert lines and designs. Now, Tony Morrison, a zoologist who has spent nearly two decades doing documentary work in remote regions of South America, has written a book about the Andes lines in cooperation with Gerald S. Hawkins, author of *Stonehenge Decoded.*

The book contains well over 150 black and white photos, maps and drawings pertinent to Mr. Morrison's theory as to the origin and intended purpose of the lines and figures. Some readers may disagree with certain conclusions that Mr. Morrison expresses but the evidence, as it is presented, must be reckoned with.

While Maria Reiche has spent half of her adult life calculating and measuring the many configurations, Morrison and Hawkins have used computerized data to assist them in their conclusions. Unlike Hawkins' findings with Stonehenge, Morrison concludes after consulting with Reiche and others that the creation of the lines, some as long as twenty miles, were not of astronomical or calendric significance.

Mr. Morrison gives a different aspect to the possible purpose of the lines, making this a significant book in the study of the mystery. An index and an excellent bibliography are included.

***THE ANDREASSON AFFAIR* by Raymond E. Fowler, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1979, 239 pages, $8.95.**

Since the reported experience of Betty and Barney Hill with occupants of a UFO in 1961, serious investigation of UFO contactee and abduction cases has been steadily gathering momentum. *The Andreasson Affair* will surely help to attract attention to these events. In fact, this reviewer has been approached by two individuals wishing to make known their experience with "humanoids" after having learned of the publication of this book.

Raymond Fowler, the author of *UFOs: Interplanetary Visitors,* has carefully recounted the experience of Betty Andreasson as told to an investigative team from MUFON (Mutual UFO Network) and details the conversation that was taped while Mrs. Andreasson was in a hypnotic trance.

Luckily for the narration, Betty Andreasson has artistic talent and was able to sketch many of the scenes inside the UFO and beyond as she saw them.

To help extend credibility to the Andreasson story, Raymond Fowler has given us examples of similar or related UFO experiences and comparison reports by such earlier-reporting abductees as Betty and Barney Hill, Charles Hickson and Calvin Parker.

Lengthy transcripts of dialogue between the investigators and the Andreassons, and some of the debriefing sessions, seem tedious in places but are necessary to the intended broad view of the "affair" by the author.

In all, *The Andreasson Affair* is a stepping stone to our understanding of the UFO phenomenon. Several appendices, a bibliography and an index are included.

***THE SEARCH FOR LOST AMERICA: THE MYSTERIES OF THE STONE RUINS* by Salvatore Michael Trento, Contemporary Books, Inc., Chicago, 1978, 284 pages, $9.95.**

We are proud that Salvatore Michael Trento is a member of SITU, for he has done an excellent job in reporting his investigations and collecting data on some of the thousands of pre-Columbian stone structures in North America.

These archaeological curiosities collectively are only now receiving the attention they deserve as clues about our country's former inhabitants. *The Search for Lost America* is a stimulating study of Trento's findings, mostly in the U.S. Northeast.

Mr. Trento is director of the Middletown Archaeological Research Center in New York. He is being assisted by many volunteers who usually can get to a newly discovered location within 24 hours to check it out. This voluntary cooperation is spreading through his efforts with this book and in various radio shows. He has devoted eight pages to acknowledgments of appreciation for the help he has received.

Mr. Trento gives us explanations as to what he feels many of the archaeological finds really are. Some of these are exciting and contradict accepted explanations that, in some instances, go back to the early English colonists.

This book is generously illustrated with photographs, drawings and maps. Appendices (including a 19-page listing of stone structures in various locations and a site fill-in information sheet, for those wishing to help in the search), notes and an index all help to make this an interesting and valuable tool toward our understanding of those who walked here before us.

***THE PHILADELPHIA EXPERIMENT: PROJECT INVISIBILITY* by William L. Moore in consultation with Charles Berlitz, Grosset & Dunlap, New York, 1979, 177 pages, $10.00.**

SITU members Bill Moore with Charles Berlitz have written a fascinating account of an alleged U.S. Navy experiment that caused the destroyer U.S.S. Eldridge to become invisible and possibly to teleport from one harbor to another and back, in the fall of 1943.

Bill Moore gives us some new and rather significant data that demands the attention of all who have heard rumors about this World War II "experiment." The names of a number of prominent scientists and witnesses such as Dr. Albert Einstein, Morris K. Jessup, Carl M. Allen and

our own Ivan T. Sanderson are mentioned; they were involved in the intrigue of this now legendary event, the author reports.

Mr. Moore will surely receive some criticism for the numerous assumptions or speculations he presents in the absence of hard facts, but he freely admits that much information may still remain unissued. There is no doubt that as the circulation of this book increases, new reports will come forth to tie together the answers to a number of questions yet unanswered.

There appears to have been more research done in writing this book than we have seen heretofore on the subject. Moore and Berlitz have done a commendable job in making this book intellecutally stimulating. It leaves the reader curious as to how much has been discovered that is still untold by our government, ostensibly for the sake of national security.



THE NOTES OF CHARLES FORT

Deciphered by Carl J. Pabst

ABBREVIATIONS

These abbreviations pertain to the Fort Notes which follow. Abbreviations used in the Notes which are not found here have been printed in the two previous issues of Pursuit *(Vol. 12, No. 1 Winter and No. 2 Spring).*

Acad	Academy
An Reg	*Annual Register*
A.U.S.	*Archives of Universal Science*
BD	*The Book of the Damned*
B Eagl	*Brooklyn Eagle*
Bib. Brit	*Bibliographie British ?*
Calif.	California
chars	characters
Conn.	Connecticut
(Cut)	Illustrated
Disap	Disappearance
E. Haddam	East Haddam
European Mag.	*European Magazine*
Inf Conj	Inferior Conjunction
Intro	Introduction
Jour Soc	*Journal of the Society for Psychical Research*
lbs	Pounds
L. An. Sci	*L'Année Scientifique*
(M)	[?]
mag	Magnitude
Mems. Boston Soc Nat Hist	*Memoirs of the Boston Society of Natural History*
n.w.	Northwest
Obj	Object
phe	Phenomenon
Ph. M.	*Philosophical Magazine*
Q. Jour Roy Inst	*Quarterly Journal of the Royal Institute*
Ref.	Reference
Religio-Phil Jour.	*Religio-Philosophical Journal*
S.	South
St. Bart	[?]
vol	Volume

1805

Aug 11 / E. Haddam, Conn. / 4 p.m., th. storm / 7 p.m., q. / BA 54.

Aug. 11 / 2 explosi[ons] / "Moodus" sounds / E. Haddam, Conn / (M) / Am. J. Sci 39/339.

Aug 12-Sept. 18 / Vesuvius / violent eruption / 9:30 p.m. / Scots Magazine 1805-946 / Good see 1806-329./ [Reverse side] L.T. 27-2-b / 28-2-d / Sept 3-2-b.

Aug. 27 [LT], 2-b / 28-2-d / Sept. 3-2-b / 6-3-a / 12-3-a / q. violent—Naples.

Oct 13 / Italy / I / [Light quake / BA 1911].

Oct 14 / Fireball / Shrewsbury / BA 60.

Oct 15 / Vesuvius / BA '54.

Oct. 21 / Fireball / Sweden / BA '60.

Oct 22,23 / Meteor / York / Symons Met. 3-4.

Oct 23 / Germany / Fireball / BA '60.



COURTESY OF AARON SUSSMAN

Charles Fort, c. 1920

Nov / (F) / near Calvi, Corsica.

Dec. 12 / [LT], 3-d / q (?).

Dec 30 / "Moodus" sound / one explosion / Am J. Sci 39/339.

1806

winter / Larvae / Silesia / (D-93). ★★

Jan 2-3 / China / II / [Medium quake / BA 1911].

Jan 20 / 12:15 a.m. / (19th) / (Fr) / Orgon (Bouches-du-Rhône) / q's and sounds like of cannon / BA 54.

Jan 23-24 / Fr / Poitiers / 2 qs and sounds / BA 54.

Feb 11 / Fireball / Stockholm / BA '60.

Feb. 12 / Small q. / Emilia, Italy / BA '11

Feb. 12 / Emilia, Italy / I / [Small earthquake / BA 1911].

Feb 12 / (It) / Milan / Flashes / sulphurous odor / q / See for ref. 1805.

March 14 / Inferior conjunction Venus-Sun / (A 1).

March 15 / (Fr) / Alais / (D-74) / (metite) / Clay / (See Sept., 1814.) / [Reverse side] and Valence (Drome) / Bib. Univ 18/82 / Bib Brit 37/284.

March 15 / 5:30 p.m. / Metite / Alais / The substance dissolved in water. /

[Reverse side] Retrospect of Discoveries 1806/357.

Feb. 24-25 midnight, Santa Barbara, Calif. Small earthquake. BA 1911.

[Kiesewetter // Feb. 24-25 — (Should be March 24-25).]

Mar 25-Ap. 3 / Mexico / great q / [BA] '11.

March 30 Great earthquake in Peru. BA 1911-46.

[Kiesewetter // March 30 — (The great quake described in Peru occurred March 30, 1828, *not* 1806).]

Ap. 9-10 / Calabria, Italy / I / [Small quake / BA 1911].

May / Volc / Lemongang / Java / C.R. 70-878 / N.M.

May 17 / Metite? / Basingstoke, Hants / BA '60.

May 17 / See Aug., 1806. / Glastonbury, Somerset / stone 2½ lbs / Phil Mag 4/8/459.

May 19 / At meeting of French Acad, Ap. 16, 1838 (C.R. 6-514), M. Daussy gave data for thinking that there was a submarine volcano off Cape Verde about 0°.20′ S., and 22 W. (west of Paris?). If so,
[Reverse side] ab. 20 west of Greenwich. Reported by a sea captain, a column of smoke, 12 or 15 miles in N.W., he at 2.43′S. and 22°.55′ W. / Next—see Ap 12, 1831.

May or Ap 19 / Ship shocks / See Nov 8-9, 1868. /
[Reverse side] Feb 5, 1842 / Ap. 12, 1831 / Feb 20, 1861 / Sept. 10, 1868 / Oct. 13, 1878.

May 29 ab. / Vesuvius / BA 54.

June 19, 21 / Italy / I / [Small earthquake / BA 1911].

July 17 / 8 p.m. / broad daylight / Great met / 1/4 diameter of moon, over London / European Magazine 50-74 / BA '60.
[Reverse side] BA '60.

July 26 / Ball lightning down chimney and out by door / An Reg 1806/43.

Aug 8 / Krasnojarsk, Siberia / Tremendous shock. Violent storm. A mountain replaced by
[Reverse side] a lake. "The country was covered with volcanic ashes." / BA 1854 / BA '11 = III [Violent earthquake].

Aug 26-30 / Severest q in Rome since 1703 / B A 54.

Sept. 23 / Stonefall at Weimar, according to Baumhauer's Catalog but
[Reverse side] questioned in BA '60.

Oct. 6 / (q) / Gerace, Calabria / BA '54/64.

Oct 14 / Swansea, etc. / Met, great light / BA '60.

Nov 1 / Spain and San Salvador / great q / [BA] '11.

Dec 17 / Ulm / q / BA '54/65.

Nov-Dec / China / I [Small quakes / BA 1911].

Dec 1 / Lima, Peru / I / [Small quake / BA 1911].

Dec 22 / Fireball / England / BA 60.

1807

Jan 14-15 / Pau / (q) / BA 54/65.

Jan 22 / China / I / [Small quake / BA 1911].

March 4 / Op. Mars / (A 1).

March 6 / 9:45 p.m. / Metero / "immense ball of fire" / Glasgow / Scots' Magazine 1807-235.

March 6 / Geneva / Fireball / BA '60.

March 13 / Ichnow (Smolensko) / Metite / A.U.S. 3/26.

March 25 / [Meteor]ite / Timochin, Smolensk, Russia / F /
[Reverse side] See Bib. Brit. 35/362.

March 30 / France / I / [Small quake / BA 1911].

Aug 9 / Nurenberg / Fireball / BA 60.

Aug ? / Shore at Brighton and all the watering places on s. coast of England covered with ladybirds. /
[Reverse side] Sci Gos. 2/169.

Sept. 6 / Volc / Goentoes / Java / N.M. / C.R. 70-878.

Sept 30 / Comet / appeared 1st near sun / London / comet like star 1st mag / set nearly due west about 8 p.m. / European Mag., 52-319 / In France seen first, on 26th (p. 437).
[Reverse side] See Venus, Oct 15.

Oct 27 / [London *Times*], 3-d / Obj near sun / 29-2-a / [Nov.] 2-2-c / 7-2-d / 14-3-d / 31-2-b / Dec. 28-2-d / at Orkney / Comet.

Oct. 15 / Inferior conjunction Venus-Sun / (A1).

Oct 23 / [London *Times*], 3-c / Met / Manchester.

Nov. 10 / Italy / I / [Small quake / BA 1911].

Nov 18 / Algiers / II / [Medium quake / BA 1911].

Dec. 14 / Sound / over Weston, Conn / 3 distinct, violent explosions and stones fell. / Am. J. Sci., 2/28/303 /
[Reverse side] See full details 2/47/1-8. / or Dec 22?

Dec. 22 / (F) = this date? / Weston, Conn. / Listed in BA 54 as a q. accompanied by a meteor.

Dec. 22 / 3 a.m. / Dusseldorf / q. preceded by a rumbling sound / BA 54.

/ Silesia / Pölt / Jour Soc 9/ 26.

1808

1808 and 1802 / See Feb. 27, 1828.

[BCF, p. 409 / See 1802//.]

/ all year // Pignerol, etc.

/ At Carniola, Germany, red snow fell to a depth of over 5 feet. / B Eagl, 1891, Oct 25-14-6.

Feb / Mexico / II [Medium earthquake / BA 1911].

Feb 8 / (Cut) / Brioude (Haute-Loire) / several shocks / "The first shock was accompanied by a disturbance of the air — like that
[Reverse side] caused by a cannon shot. / Rept B.A. 54/66.

March 5-6 / *night* / Red snow / Switzerland and Italy (vast) / Q. Jour Roy Inst 7/189.

April 2 / Turin, Italy / III /[Violent quake / BA 1911].

April 2 / Quakes in many places in France, centering around Pignerol — but it was preceded by a loud sound in the air. /
[Reverse side] Ciel et Terre 16/463 / BA '11.

Ap 8 / 40 shocks had been counted by the 8th at Pignerol. / Sounds like explosions of
[Reverse side] cannon at Barga but no shocks felt. / Rept [BA] 54/70.

April 12 / In Piedmont, centering around Pignerol. In Rept B.A. 54/6 said
[Reverse side] that [note cut off]ough at 5:30 p.m. luminous meteors were seen. That in several of the communes of the Alps, shocks preceded by aerial sounds as of innumerable stones colliding.

Ap. 13 / q / Calcutta / I [Small] / BA '11.

Ap 14 and 16 / France and Switzerland / qs. / B.A. '11.

April 16 / Quake / Again at Barga and at La Tour, two detonations heard and a luminous meteor observed.

Ap. 19 / one p.m. / Great number of metites fell in the commune of Pievedi Casignano,
[Reverse side] in the Dept. of Taro (formerly the duchies of Parma and Placentia). / Archives of Universal Science 3-26.

Ap. 19 / Borgo San Donino, Parma, Italy / Metite / (F) / and Ph.M. 4/8/459.
[Reverse side] 40 miles east of Piedmont / Rept BA 1860.

Ap. 20 / qs in the affected area / 22nd, 8 p.m., a waterspout passed over Marenyas / at Barga, called a th. storm /
[Reverse side] BA 54.

April 20 / Etna / Scots' Magazine 1808-789 says that the day before people in Messina were much
[Reverse side] surprised to see the streets covered with ashes. Says the ashes had been driven by a strong south wind from the top of the mountain 60 miles away.

May 1-June 5 / Volc / Azores / BA 54.

May 13 / Shocks, rumbling sounds reported almost every day before 13th / a red cloud was seen
[Reverse side] over the country lying along the river Pelice / other occasional shocks rest of year.

May 17 / Italy / I /[Small quake / BA 1911].

May 18 / See April 2.

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