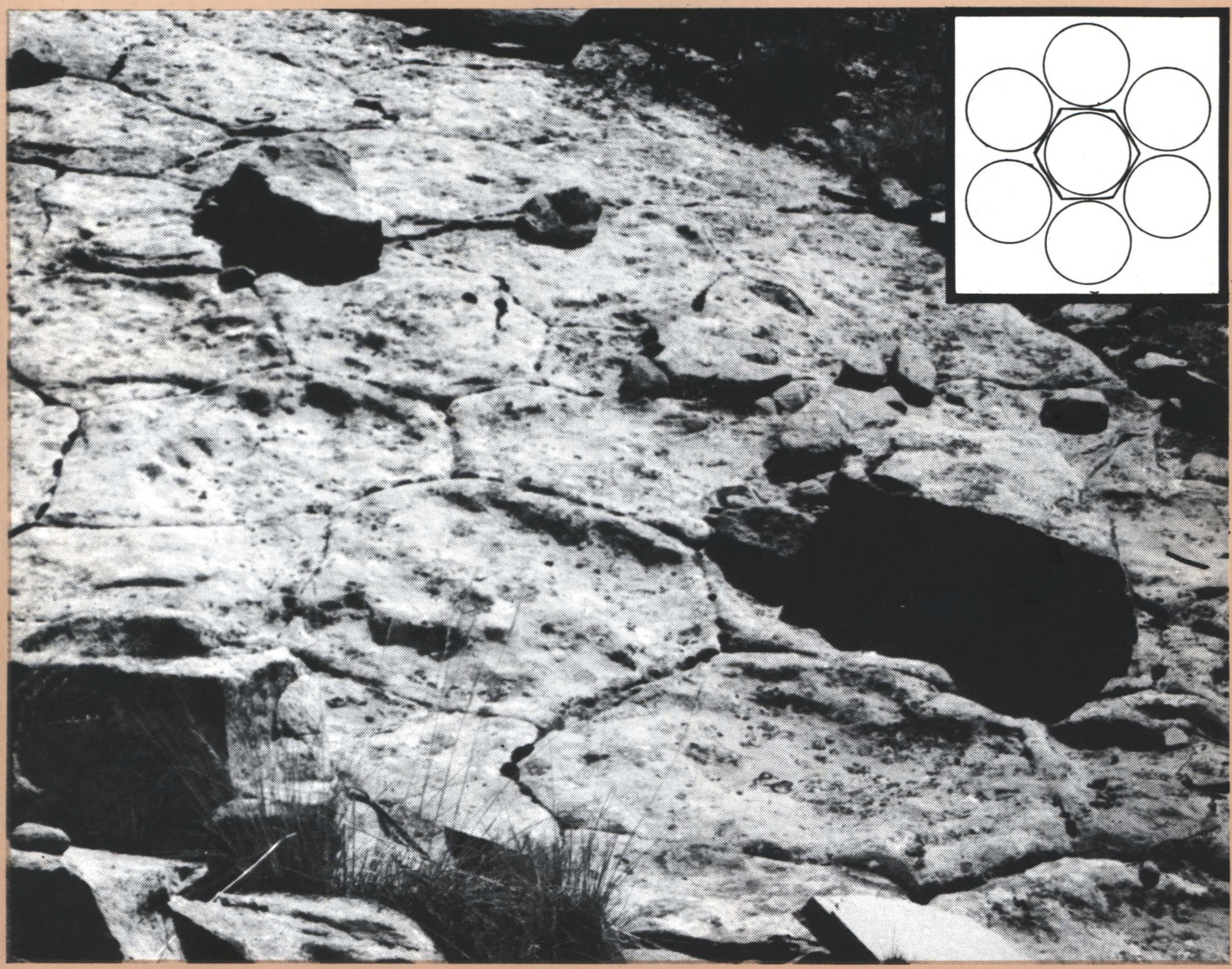
Pursuit

'Science is the Pursuit of the Unexplained'

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The Unexplained

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Natural formation of hexagonal cracks in Navaho sandstone (see "Destruction by Fire," page 162)

THE SOCIETY FOR THE INVESTIGATION OF THE UNEXPLAINED

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THE QUARTERLY JOURNAL OF THE

Pursuit®

SOCIETY FOR THE INVESTIGATION OF THE UNEXPLAINED

'SCIENCE IS THE PURSUIT OF THE UNEXPLAINED'

Contents

	Page
The Unknown Mummy *by Paul B. Thompson*	146
The Maya and the Synodic Period of Venus *by Stuart W. Greenwood*	147
The Premise *by Russ Reardon*	149
Where Have The Flying Saucers Gone? *translated by George Andrews*	153
An Experiment in Dowsing *by Ivan T. Sanderson*	157
What Uprooted Massive Chunk of Earth? *by Hill Willliams*	161
Destruction by Fire *by Evan Hansen*	162
The Peculiar Origins of Alex J. Hidell *by J. N. Williamson*	168
Encounters With The "Real" Jersey Devil *by Sydney Smith*	173
Effective Mass and the UFO *by Daniel Eden*	174
The Resch Poltergeist *by Walter & Mary Jo Uphoff*	177
Photographic Biofeedback? *by Eugenia Macer-Story*	178
SITUations	182
The Legend of Wind Cave *by a friend of SITU*	185
Report on Two Conferences *by Robert C. Warth*	186
Books Reviewed	187
Letters to the Editors	188
The Notes of Charles Fort *Deciphered by Carl J. Pabst*	190

Cover photo by Evan Hansen

Are We Taking Ourselves Too Seriously?

We received a letter from a member cautioning us "not to take ourselves too seriously." We didn't think we did but wondered if other readers would say the same to us. With this in mind we offer you here a few articles which are light but still give you something to think about.

For our long-time members who look forward to reading previously unpublished material by Ivan T. Sanderson we offer you his article on dowsing with a do-it-yourself theme.

For our domestic members there is another visit-it-yourself article, this time about Wind Cave in South Dakota.

And for our I'd-like-to-know-more-about-that-phoney-science-of-astrology fans we have the Alex J. Hidell article by J. N. Williamson.

We are also trying out some short stories or, if you prefer, long SITUation articles.

And if anyone still warns us against *taking ourselves too seriously* after reading The Premise by Russ Reardon, we will be very much surprised.

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The Unknown Mummy

by Paul B. Thompson

No other relic of ancient Egypt is as evocative of the mysteries of the Nile as the mummy. Prepared with lavish ritual and esoteric craft, the preserved bodies of the dead signify the sublime majesty as well as the hidden knowledge of the Egyptians.

Mummies have told us much about life and death in ancient Egypt. Modern pathological techniques have discovered that the Egyptians suffered from a variety of common diseases. The traumas of life—childbirth, injuries, the wounds of war—are faithfully preserved in the dry dark flesh of the mummy. Kings, queens, priests, and nobles were almost universally mummified and buried in elaborate tombs, where Osiris and the gods of the afterlife waited to greet them. The spiritual essences of the deceased, the *ka* and *ba,* were supposed to reside in the husk of the body for eternity.

Unfortunately, the treasures interred with the dead served to pique the greed of the living. Grave robbers plundered nearly all the Pharaohs' tombs, stripping away the gold and jewels, leaving the battered royal mummies mutilated and desecrated. During later dynasties, loss of royal authority encouraged the wholesale plundering of tombs. In the Rameside period (Twentieth Dynasty: 1168 to 1090 B.C.), the powerful priesthood of Amen attempted to protect the royal dead from complete destruction.

The mummies of the greatest kings of the New Kingdom (three of the Thutmoses, Seti I and Rameses II, female Pharaoh Hatshepsut, and many others from the Seventeenth to Twentieth Dynasties) were collected and reburied in the tomb of the otherwise obscure Queen Inhapi. Located behind the splendid temple complex at Deir el Bahri, Queen Inhapi's tomb became the resting place for dozens of royal mummies. The rock-cut tomb was closed and forgotten 30 centuries ago. Arabs discovered the cache in the late 1870s, and began selling off portions of the trove to tourists and peripatetic collectors of antiquities. The cache came to official attention in 1881, when archaeologist Emil Brugsch brought the mummies down the Nile to Cairo for scientific study.

The mummy cases were labelled with the names and titles of their occupants. Among the coffins of the mighty Pharaohs was a simple white wooden case. Upon opening, the body within was found to have been wrapped in a repulsive smelling sheepskin. Among Egyptians, this was a sacrilege. Wool was considered barbaric and unclean, and for a dead man to be swathed in it was an obvious, deliberate disgrace.

Naturally the study and description of the famous kings took precedence over the unknown mummy from Deir el Bahri. The wool-wrapped body was not closely examined until 1886. The mummy was unwrapped before witnesses in November of that year. A French observer named Mathey described the ghastly sight which lay beneath the woolen shroud:

> I can only say that no countenance has ever more faithfully recreated a picture of such affecting and hideous agony. His features, horribly distorted, surely showed that the wretched man must have been deliberately asphyxiated—most probably by being buried alive. There is evidence to back up such a dramatic theory, too. The body was buried without the usual embalming: the brain had not been extracted and all the viscera and internal organs were intact. The limbs were tightly bound, arms straight down at the sides and feet together without the slightest bend in any joint. I can only think of two possible theories to fit these facts: firstly that the man had been buried alive or, secondly, that he died of convulsions due to having taken poison.
>
> The mummy is that of a male, seemingly between 25 and 30 years old, well built and apparently without wounds or marks on his body. In general he is perfectly preserved, for all that he is extremely parchment-like and of a deep mahogany color.*

The unknown mummy poses a grim mystery. Who was he? How did he die? And why was he buried in such a puzzling fashion?

The man was obviously of high rank, or else he would not have been alongside the great god-kings of Egypt. His youth suggests he was a prince from one of the dynasties represented in the mass burial, from an era before the priests of Amen began secreting the mummies in Queen Inhapi's tomb.

He died horribly, either from suffocation or poison. If the man had died of natural convulsions, it is unlikely these would have been noticeable after death. Though not embalmed, the body was covered with natron, the mineral essential to mummification. This suggests the man was not buried alive, as it would be impractical to coat a living body with natron.

As for the sheepskin and anonymous coffin, so indicative of disgrace, there is an incident from Egyptian history whose applicability to the unknown mummy is hard to ignore. To understand this, we must return to the 12th century B.C., to the reign of Rameses III of the Twentieth Dynasty.

Rameses III is often called 'the last great Pharaoh' because of his vigorous building projects and successful military exploits. He reigned for 34 years, erected a massive temple complex at Medinet Habu, and repelled an invasion of the Nile Delta by the Sea Peoples.

In his old age, a plot was concocted against Rameses by one of his wives, Queen Tiy. Tiy enlisted her son, Prince Pentwere, and a palace guardsman, Pebekkamen, as co-conspirators. Other guards were brought into the plot. Magic was employed against the king, too; images of Rameses were made in clay and subjected to occult abuse.

The plot failed when loyal agents of the Pharaoh infiltrated and exposed the conspiracy. Forty soldiers, including Pebekkamen, were tried and summarily executed. Six women of the Queen's household were also put to death. Court annals state that Prince Pentwere died by his own hand. Of Queen Tiy, the mastermind, nothing is known.

Is the unknown mummy the treacherous Prince Pentwere? The blank sarcophagus and wool wrapping would be appropriate trappings for a man who plotted high treason and patricide.

Some Egyptologists are cautious of this identification. It smacks of Gothic tragedy or a Grade B horror movie. The conservative view of the unknown Deir el Bahri mummy is terrible enough; the mummy was a prince, who appears to have been sent to the embalmers in a state of catalepsy. As the mummification process was begun, he revived only to die in agony on the embalmers' table.

*Quoted in James Hamilton-Paterson and Carol Andrews, *Mummies*. London: William Collins, 1978. pp. 56-58.

(continued on page 149)

The Maya and The Synodic Period of Venus

by Stuart W. Greenwood

Our ancestors came from Venus. The human species is not indigenous to Earth, having arrived here in geologically recent times from a Venus that was once Earth-like but now lies dead beneath a hot and heavy atmosphere poisoned by volcanic emissions. All this is speculation, though the author has offered preliminary indication that there might be something to it[1,2,3]. The remote past of our species is a continuing puzzle, and it is just possible that progress in our understanding can be made by adopting such a specific viewpoint and following it through to its conclusion. Whether or not such an exercise proves illuminating, there is at least the satisfaction of having tried. It can be a lot of fun, too.

We need to be aware that the Soviet Union has launched three times as many probe missions to Venus as has the United States, so either the Soviets are motivated by an intuitive perspective regarding that planet or else they know something we don't. It could be beneficial for us to study the traditions and practices of the early inhabitants of this continent in present-day Mexico and Central America for possible insights into Soviet motivation regarding Venus. We shall consider here the evident continuing concern of the ancient Maya of the present-day Yucatan Peninsula with the Synodic Period of Venus.

The Mayan civilization in Central America exhibited levels of achievement in mathematics and astronomy rarely recognized today outside of the boundaries of the academic world. For those with a thirst for knowledge of what little remains of the records of their accomplishments, reference may be made to such sources as the classic treatment by J. Eric S. Thompson[4]. The prominence of the planet Venus in Central American mythology should be familiar to readers of this journal, but Mayan concern with the movements of the planet itself may not be as well-known. In this note we shall review Mayan treatments of the movements of Venus, and outline implications for the ancient astronaut hypothesis. We shall adopt some simplifications to focus attention on some underlying considerations that may have important implications for our understanding of their concerns.

Planetary movements

The Earth travels around the Sun in an approximately circular path, and also spins on its own axis. The period for one complete revolution around the Sun is 365 days. The nearest planet, Venus, orbits the Sun in a nearly circular path inside the Earth's orbit with a period of 225 days, and spins very slowly about its own axis[5]. Both planets orbit the Sun in the same rotational direction so that Venus periodically overtakes the Earth on the inside.

As Venus approaches and eventually overtakes the Earth, there comes a time when Venus lies between the Earth and the Sun. Venus is then said to be in Inferior Conjunction. Such conjunctions recur every 584 days (about 1 year and 7 months), an interval that is termed the Synodic Period of Venus. Several scholars have discussed the fascination of the Maya with the Synodic Period of Venus, a recent example being S.C. McCluskey[6]. McCluskey observes that after an interval of 157 Venus synodic periods a given phenomenon will recur at the same extreme point on the horizon, and that such extreme points were noted by the Maya, confirming their long-term observation of Venus.

Venus is a brilliant object in the heavens at times when it is visible from the Earth, and it is of course quite possible that this is sufficient reason for the attention devoted to it by the Maya. It is a curious coincidence that 5 Synodic Periods of Venus correspond to 8 Earth years — this fact was known to the Maya, but it appears to have no significance in connection with space flights. A puzzling feature of Mayan measures of time is a time interval of 260 days — this also is apparently not related to planetary movements or to space journeys. We leave studies of such matters to others, focusing our attention on the Synodic Period of Venus.

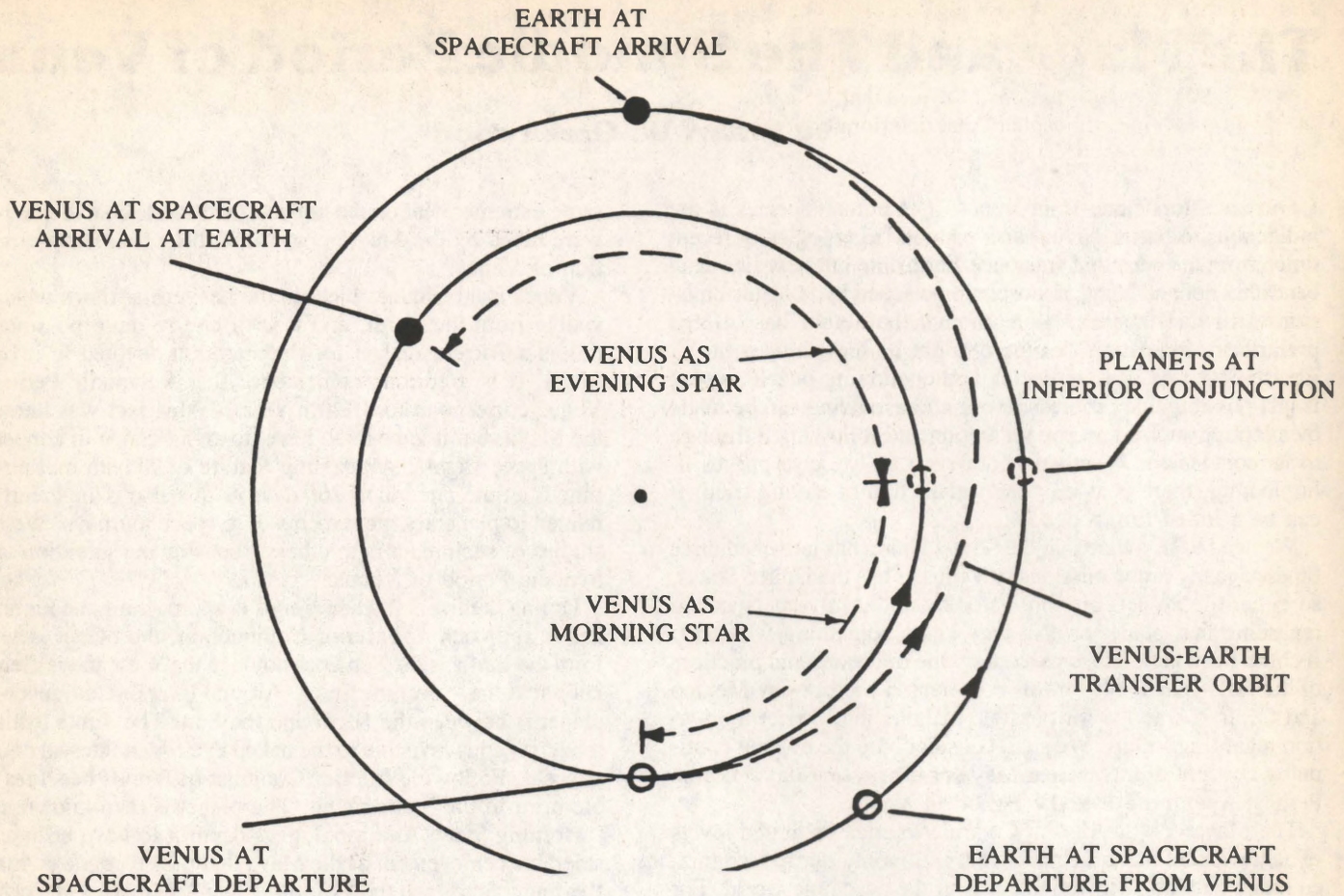
During the interval when Venus is approaching the Earth, and hence approaching Inferior Conjunction, the planet is visible from the Earth as the Sun goes down in the West and is therefore known as the "Evening Star." Around Inferior Conjunction the planet is between the Earth and the Sun. The Sun's brilliance renders Venus invisible to the naked eye for an interval of about a week[7]. Following Inferior Conjunction Venus becomes visible prior to the Sun's rising. The planet is then known as the "Morning Star."Anthropologists deem it to have been a considerable achievement of the Maya that they recognized that the "Evening Star" and the "Morning Star" were the same celestial body. Our interpretation involves an appreciation that they knew they were the same.

Space Flights from Earth to Venus

The Soviet Union and the United States have launched a total of 24 missions to Venus. To minimize the requirements on the launch vehicles, these launches take place when the Earth at launch is in a suitable relative position to Venus. This ensures that the velocity changes at each end of the journey are kept to a minimum. The launch is timed so that the probe arrives at Venus when it is approximately on the opposite side of the Sun to the Earth at launch.

It would take less journey time if the voyage could be accomplished when Venus was at the planet's closest approach to Earth, i.e., at Inferior Conjunction. However, that would impose an energy requirement that would be prohibitive in our present state of technology. Nevertheless, it serves to point up an important consideration in planning space flights to Venus. The interval between space launches for a given level of technology corresponds to the Synodic Period of Venus. The same argument holds for flights from Venus to Earth, though the launch dates will be different.

A study of the data on launches for probes to Venus confirms the above, with some variation resulting from the non-circularity of the planetary orbits and other factors. The situation is one of the basics in the orbital mechanics of space flight and is fully familiar to engineers and scientists involved in the Venus space programs. What seems to have escaped attention until now is the significance of all this in interpretations of Mayan interest in the Synodic Period of Venus. We propose to remedy this deficiency.



Planetary movements during minimum-energy Venus-Earth transfer (planetary orbits are assumed to be circular and coplanar, with a transfer orbit duration of 146 days).

The Maya and time

The Maya were fascinated with time. So much has been written on this that we shall not dwell upon it here. One aspect that deserves our attention, however, is that we tend to be most concerned with time when we are waiting for something to happen. Eric and Craig Umland[8] have some intriguing thoughts on this topic in their interesting treatment of the Maya in relation to the ancient astronaut hypothesis. The Umlands suggest that the Maya were extraterrestrials from another solar system who had been stranded on Earth, and were preoccupied with time as they awaited rescue.

Just as the Synodic Period of Venus is the time interval between space launches from one of the planets to the other, so is it also the time interval between the arrivals of space vehicles from one of the planets to the other. We are now in a position to offer a solution to both the Maya preoccupation with time and their concern with the Synodic Period of Venus. They were concerned with time intervals that would correspond with the successive arrivals of spacecraft from Venus. Whether these arrivals occurred only in the imagination of the present writer or whether they occurred in fact is open to further investigation. It seems probable that the Mayan observations of the movements of Venus reflected past concerns with these movements, and the pending arrivals of spacecraft. For possible clues to these concerns we look for evidence from mythology.

Central American mythology

According to C.A. Burland and Werner Forman[9], in a discussion of the Aztec gods, as far as the common people were concerned it was dangerous to go out in the evenings when the Evening Star was shining, for fear that his rays would send darts of illness or even death towards them. But to be shone on by Venus as Morning Star was a matter great good fortune. J. Eric S. Thompson[4] says that the Maya believed that the Morning Star was very dangerous at the time of heliacal rising (about four days after Inferior Conjunction); it was essential to know beforehand the exact date so that effective measures could be taken by the priesthood to save those in peril.

Quetzalcoatl, the benevolent god of the Aztecs (known to the Maya as Kukulcan), represented Venus as Morning Star. The Aztec god representing Venus as the Evening Star was Xolotl, described by Burr Cartwright Brundage[10] as a god of the malformed and the diseased.

Space flights from Venus to Earth would take place while Venus was an Evening Star during the early portion of the flight, with arrival at Earth in the period of Venus as a Morning Star. The first flights from Venus to Earth would probably use minimum energy orbits similar to that shown in the Figure. Later flights would be expected to employ higher energy orbits with the planetary positions at launch and arrival located closer to Inferior Conjunction.

One interpretation that could be placed on the mythology above is that while Venus was generally revered as the planet of origin, the impending arrival of later (and perhaps sick and deformed) escapees from the doomed planet was cause for alarm. The mythology tends to reinforce the idea that Venus once sustained an Earth-like atmosphere that deteriorated to its present condition in relatively recent times.

Concluding thoughts

The Maya have long posed a mystery to scholars. Perhaps we have been looking at their early civilization for too long with Earth-bound eyes. The answer to our origins may today lie on our nearest planet beneath an atmosphere now poisoned by emissions from its active volcanoes. A continuing examination of the apparent evidence on Earth of our arrivals here from Venus may prepare us for the discoveries that may await us when the planet's surface is surveyed by improved radar in forthcoming probe missions.

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The Unknown Mummy

(continued from page 146)

If this is what happened, why bury the poor fellow in an unmarked coffin? Why deny him the prayers and magical formulae other high ranking Egyptians relied on to ease their journey to the Land of the Dead? And, most puzzling of all, why clothe him in a shroud of despised sheepskin?

The truth will probably never be known. The mummy remains in the Cairo Museum, unexplained and unidentified after 3,000 years.

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The Premise

by Russ Reardon

Jesus Christ is physically alive and is now 61 years old in a spaceship.
— Russ Reardon

Here is the only new physical discovery about Christ in two thousand years, thanks to Albert Einstein's theorem of Relativity and certain biblical quotations. These have enabled me to rethink myself out of the sticky cobweb of a centuries-old religious cocoon (which itself may be the world's longest put-on).

The premise: with scientific insights available only since the seventh decade of this century, certain statements in the "Book" newly serve as grounds for my syllogism from which, their truth being granted, comes my proposition that Christ is physically alive and 61 years old in a "chariot of the gods" spaceship. ... That Enoch, Elijah, Moses, Isaiah, and Mary continue physically alive today. ... And Astonishingly, anytime during the next 8,000-plus years, they can re-appear on Earth (as they already have!) again and again, no more than 35 years older than they were 2,500 years ago when they "were carried up," "floated up in a gleaming sphere," or "ascended in a cloud into heaven." Even some non-biblical personages who were absorbed into the two-way stretch of elastic Time, continue physically alive today, in a spaceship traveling close to the speed of light.

In 1971 Einstein's theory of Special Relativity, which concerns time dilation, was proved a valid physical law and accepted as a scientific *theorem*. Without such sturdy support, my random disclosure — that folks "missing and presumed dead" more than 2,500 years ago are alive — would be met with scorn and disbelief.

What has to be grasped is: Time is not constant; Time is manipulated by speed; and, according to Einstein's theorem, "TIME ON A SPACESHIP TRAVELING JUST UNDER THE SPEED OF LIGHT PASSES MUCH MORE SLOWLY FOR THE OCCUPANTS THAN FOR PEOPLE ON THE LAUNCHING PLANET."

Meyers' *Handbook on Space* computes the time dilations from the Lorenz transformation formulas as follows:

Years in a spaceship	*Years on Earth*
1	1.0
2	2.1
5	6.5
10	24
15	80
20	270
25	910
*27	1985
30	3,100
35	10,600

*although 1,985 years have passed on Earth, only 27 years have elapsed for the travelers in a spaceship.

" 'Special Relativity' is often known as the 'twin paradox' because it is cast in the form of the story of the astronaut who leaves his twin brother on Earth while he flies off at near the speed of light for a long journey to the stars. On his return to Earth he finds his twin is an old man while he, the astronaut, is still in his prime. The astronauts' clocks, atomic and biological, have registered fewer hours and years than the clocks on Earth have done." (*Einstein's Universe,* Nigel Calder, Greenwhich House, New York, 1979, p.88).

Scientists Hafels & Keating of the University of Washington demonstrated this time dilation. Having set four cesium-beam clocks to within billionths of a second of an atomic clock at the Naval Observatory, they boarded a commercial airliner, clocks in hand. After two round-the-world trips at an average speed of 430mph, the mobile clocks registered a significant *loss* of time (actually, minus 59 nanoseconds) when compared with the observatory's fixed-base monitor clock on Earth. The time-loss experienced by John Glenn was more appreciable. Glenn, launched off Earth into orbit at a slow 17,000 mph, landed in the Pacific 2½ seconds younger than the rest of us. Thus, relative to their launching planet, the slowing down of Time occurs to objects and people moving at high speeds. Making John Glenn's transporter seem like a horse and buggy, an old prayer in one of the Books of The Dead quotes the exhortation of an earlier Time-traveler: "O world egg, hear me! I am Horus of millions of years! I traverse the *ages* and spaces which are endless!"

Let's examine Enoch's departure off Earth, "Enoch was carried away to another life without passing through death," the Book of Hebrews reports (11:5). Note "carried away" as in a vehicle. And, what would be "another life?" Only more of the same, like another apple in a barrel. But implicit is the phrase "without passing through death," proving he's still alive. The narrator of the Pentateuch (the five Mosaic Books) confirms, "the initiate Enoch lived to be 365 years old and did not die, but was carried up to heaven in a fiery chariot."

In a section called "The translation of Enoch" the last paragraph is especially interesting to all viewers of a space-shuttle launch: "To the right of him sparkled flames of fire, to the left of him burnt torches of fire, and on all sides he was engulfed by storm and whirlwind, hurricane, and thundering." (L. Ginsburg, *Legends of the Bible,* Jewish Publishing Society, Philadelphia) Thus did a biblical eye-witness, unknowingly but with 20th century spage-age accuracy, describe the takeoff of Enoch in a spaceship.

That our biblical personages are in a spaceship can also be deduced from the wording of II Peter 3:8, "That one day with the Lord is a a thousand years and a thousand years as one day," indicating that extraterrestrials came to our planet after a long journey. As if for emphasis, Psalm 90 repeats "For in thy sight a thousand years are as yesterday." To those who lived before Einstein — except perhaps a few initiates — such statements were totally incomprehensible. "The fact that this important point crossed the barrier separating the Old and New Testaments proves that it was not formulated by a human intelligence on Earth." (*The Lost Tribes From Outer Space,* Marc Dem, Bantam, New York, 1977, p.27)

I agree with Brinsley LePoer Trench's deduction, "Exceptional individuals capable of understanding and existing in a galactic culture have been taken to other places than the Earth." (*The Sky People,* Award Books, New York, 1970, p.59)

Elijah — "And behold there appeared a chariot of fire and Elijah went up by a whirlwind into heaven." (II Kings 2:11) And the one reason a promise in Melachi 4:5 could be kept, "Behold I *will* send you Elijah," was that Time passed much more slowly for him while he was on board a speed-of-light spaceship. And re-appear Elijah did, back on Earth in company with Moses (himself last seen on Earth 1,800 years before)! "And behold, there appeared unto them Moses and Elijah; behold, there was a bright cloud overshadowing them." (Matthew 17:3-8) A glance at Meyers' figures shows Moses only 25 years older — his time! Too many "beholds" for me; not enough "becauses" — which spaceships' crews pointedly neglected to explain. Frustrating?

Clouds — Cloud plumes hiding the vehicle(s) was all ancient eye-witnesses understood; ergo, they were "carried up in a cloud." The total absence of technical knowledge of a mighty unknown, such as an ET vehicle landing and taking off, was turned into the psychologically familiar, into a deity. These events were transposed into mysticism and religion. "The spirit of the Lord lifted them up." And, since no made-on-Earth spaceships existed, they came from elsewhere.

Yes, there have been many other physical ascensions and reappearances noted in all religions and civilizations. Obviously, the founders and purveyors of religions who *know* that these happenings are not what they represent them to be, twist reality into its exact opposite or continue to conceal it, right up to this day. Why? Do they assume we're "not ready?" I can accord respect to almost every creed, but I cannot impute to any of them a monopoly on Truth. Already "they" have much for which to apologize.

Moses — Apocryphal writings of the Old Testament and pseudepigraphics (in Univ. Jewish Encyc.) of the assumption of Moses into heaven, the latter including the ascension of Isaiah.

Mary — On August 13, 1950 by papal decree, Mary's *bodily* ascension into "heaven" was declared fact by Pope Pius XII (*Dogma Munificentis Simus Deus,* The Catholic Encyc.). It's one of the biggest holidays in Europe. But ... what of her subsequent round-trips to Earth? Although Pius XII must have known how these were accomplished, he has withheld comment.

Jesus Christ — Luke 24:51, "And it came to pass, while he blessed them, he was parted from them, and was *carried up* into heaven." Mark 16:19, "...he was *received up* into heaven." Acts of the Apostles 1:9, "While they beheld, he was taken up and a *cloud* received him out of their sight." In other words, when the smoke cleared, Jesus Christ, not yet 35 years old, was "gone." But only temporarily, as we shall see!

Others of lesser stature are also alive in time dilation. One Old Testament prophet disclosed this pertinent bit of history: "Then I, Ezra, was carried off and taken up to the place of my peers." Moslems affirm that their leader Muhammed ascended into the sky from the rock on which Isaac offered his son as a sacrifice. A 4th century priest, Berossus, describes yet another spaceship departure with kidnapped humans aboard: "Him King Xisuthrus they saw no more, but they could distinguish his voice in the air and could hear him admonish them ... that he was translated (that word again meaning 'thrust into the warp of time dilation') to live with the *gods*; that his wife and daughter with the pilot(!) had obtained the same honour." (*The Sirius Mystery,* Robert K.G. Temple, St. Martins Press, New York, 1976, p. 252)

Perhaps a word or two on the spaceships' "crews" is in order. In the Bible they were called "gods," "lord," "angels," "messengers," "Yahweh," and "Jehovah." However, the early Sumerians called them DIN.GIR, "the righteous ones of the rocketships." The Akkadians called them Ilu — or "Lofty Ones."

"Neither the Akkadians nor the Sumerians had called these visitors to Earth gods. It is through later paganism that the no-

tion of divine beings, or gods, has filtered into our language and thinking." (*The Stairway to Heaven,* Zecharia Sitchin, St. Martins Press, New York 1980, p. 86)

Whether called "Nefilim" or "gods," they looked like us physically. In 597 B.C., Ezekiel in 1:26 describes them as "a likeness as the appearance of a man." "Two men in white apparel," whose sudden arrival from nowhere is recorded in Acts 1:10, were no different in body shape or movement from other humans; any dissimilarities would have been noted by the apostles present. Even the brother of Jared, in *The Book of Mormon* was amazed to find the "lord" merely human: "And he saw the finger of the lord, and it was the finger of man, like unto flesh and blood. For I knew not that the lord has flesh and blood." Consider also this reference to what was referred to as an "angel" in Deuteronomy: "... and he ate." It is all too clear that ancients confused extraterrestrial humans with the omniscient God.

Evident also: the ETs didn't bother to correct their image; they probably enjoyed the ego-trip — or, what I like to call "the world's longest put-on."

A psychological profile of these ETs was offered by George Sassoon, holder of a Cambridge University honors degree in natural sciences. In a lecture at the sixth world conference of the Ancient Astronaut Society, in Munich, Germany, in June, 1979, he said:

> In fact, the *Lord* described in the books of Moses is clearly not identical with God. Many aspects of his behavior are very human. He is clearly neither omniscient nor omnipotent, he has fits of temper, he haggles with Moses like some bazaar trader; and Moses often gets the better of him. No, the *Lord* of the Bible is certainly not identical with omnipotent God himself; he is merely a living being who possesses immense technical resources, but is not greatly superior to ourselves.

Josef F. Blumrich, NASA design engineer of the Saturn V and author of *The Spaceshps of Ezekiel,* confirms their "awesome technology in estimating it will take us 25 years before we've developed fuel duplicating the thrust of the 'lords' 2,500-year-old spaceships."

Those above quoted observed that the crew(s) were most certainly NOT the amphibious half-fish, half-man creatures so naively described by other ancients quoted in *The Sirius Mystery.* Surprisingly, despite his well-earned reputation for exhaustive research, author Robert Temple supports this error with unswerving conviction. But he is contradicted on his own page 257: Photius, circa A.D. 840, said "... and that he was actually a man but only seemed a fish because he was clothed in the skin of a sea creature." I suggest Temple study his notes.

Remember the three words I added to previous notes on Christ's ascension — "but only temporarily"? Here is author Louis Pauwels' explanation of the "how" of Christ and Mary's several returns to Earth, and Erich von Däniken's chronology to tell us "when" and "where":

> Occupants in a space craft would notice nothing unusual — daily food and water and other amenitites would be provided, gravity simulated, and Time as passing normally. But, traveling at velocities close to the speed of light is a conquest not only of space but also of Time. The future becomes accessible to those aboard, which allows for a *real physical possibility of communicating with posterity.*
> (*Impossible Possibilities,* Pauwels & Bergier, Stein & Day, New York, 1971, p. 124)

So it's really no surprise to discover confirmation that Christ, Mary, and (as reported) Moses and Elijah, have been indulging themselves by frequently re-visiting Earth. But for reasons beyond me:

circa	303	Christ reappeared in Lydda, Palestine (now Lod, near Jaffa, in Israel)
	334	Christ reappeared at night in Amiens, France
	648	Christ reappeared three times at St. Jossesur-Mar, France
Aug	1060	Jesus and Mary reappeared in the village of Espain, France
	1170-1221	St. Dominic of Spain was himself *face to face* with Christ
Sept	1224	Jesus conferred the five wounds he had received (stigmata) on St. Francis of Assisi, at Monte La Verna, Italy
	1362	Christ gave St. Catherine a wedding ring while she was praying
	1632	Christ *showed himself* at Mercatello, Italy
	1893	Christ with Mary reappeared at Enghien, Belgium
June	1958	Jesus and Mary seen over Turzovka, Czechoslovakia, in an *equilateral triangle*

(*Miracles of the Gods,* von Däniken, New York, 1975)

Allow me, please to zap a few authors. Perhaps Hal Lindsay (*The Late Great Planet Earth*) could tell us which one of the above ten "comings" was the much-heralded, still-in-our-future SECOND COMING? Looks to me like the "second coming" has come and gone, ten times over — and without an Armageddon! Hal, stop putting down these discerning people of the eighties!

Rolling Stone magazine's religion correspondent Michael Thomas (The Shroud ofTurin, in issue of December 29, 1978) thought it quite an avant-garde idea that contemplating the DNA allegedly imbedded in the shroud might give a US team of biochemists the capability to clone Him. Readers, please note that the Original is very much alive today and visiting Earth regularly!

Then there are 489 fatiguingly researched pages comprising *Holy Blood, Holy Grail* by M. Baigent, R. Leigh, and Henry Lincoln (Dell, 1983) intended to support the climax of the book, that "Jesus" mummified body may be concealed in the vicinity of a castle in the Pyrenees!" (p.401)

Notice similarities below to recent UFO sightings (author's italics):

1604	Apr 6	Mary floating above the gound, Ingelstadt, Germany
1882	Jan 2	Mary on a *cloud* over Lyons, France
1917	Oct 13	Fatima, Portugal: 50,000 witnessed a stationary, yet looping, pale silver plaque; in it three witnesses saw Mary
1933	Oct 2	Mary surrounded by light and a greenish-red revolving Sun; Herzele, Belgium

1946	Jun 11	Mary in a *cloud* over Pasman, Dalmatia
1948	Nov 11	Man of Aspang, Austria, saw a *cloud* stop over the Konigsberg, become lighter and *split open;* from it "floated" Mary
1954		Eisenberg, Germany: Mary was seen "floating" in a gleaming *sphere*
1968	Apr 12	Egyptian photographer Wagih Rizk Matta photographed Mary in the sky over a Coptic church near Cairo *(Miracles of the Gods,* von Däniken)
1970	Apr 7	Bayside, New York: a circle of "brilliant light descending" formed in "terrible fires about the *ball;*" in it were seen Mary and Jesus (reported by Mrs. Vernoica Lueken of Bayside)

There they are — literally right on our doorsteps are these time-dilated cosmos commuters who have been identified by others, or have identified themselves down through the centuries thus far, as living, breathing, flesh-and-blood folk. A bit older yes, but physcially alive nonetheless! (But don't see me as so naive that I can't dismiss the reappearances as only "visions" of religious fanatics.)

Apparently these ascensions and re-appearances were not acts of an omniscient God; they were acts of extraterrestrials. We Earthlings should deal with this and know that we are dealing with reality. Dr. Luscher, a Ph.D. at Munich Technical University, explained: "The result of measurement in a system in motion, will be different from measurement in a comparatively static system. Einstein's theorem is an equation which *links* a comparatively static system (Earth) with a system in motion (spaceship)."

As to philosophical "therefores..." and religious "Now what?s," my premise that Jesus Christ is physically alive and only 61 years of age due to time dilation in a spaceship, is my challenge to men of letters, men of the cloth. I'm wearied by 3,000 years of evangelical ecstasies of ignorance, or deliberate deceit. Understandably, questions remain. With those extraterrestrials having all that technology going for them, why did (do) they persist in putting us on? Over the course of 2,500 years they have not disclosed where they come from, or why they come.

May I pose as a devil's advocate against my premise?

A) How are occupants passing the time of day for 30 years in a spacecraft?

Rebuttal: The Dogon tribe of Africa gives supportive evidence that a planet of the binary dog-star Sirius, 8.4 light years away, is the ETs' home. Sitchin, in his reading of the Sumerian clay tablets, has found graphic proof that aliens live on our solar system's outermost planet — Marduk — which orbits the Sun once every 3,600 years. Perhaps the spacecraft travelers sojourn there between Earth visits?

B) How about provisions (food, water, etc.) for a transit of more than thirty years?

Rebuttal: ETs fed 16,000 Jewish families for over forty years in the desert with their "manna machine," so there's one aboard. (*The Manna Machine,* George Sassoon, Rodney Dale, Granada Publishing, London, 1979)

C) All five of them in one spaceship?

Rebuttal: Maybe, but what's the difference? It beats trying to rationalize that a *cloud,* vaporous and gossamer, carried them up into the sky. Without pressurized cabins, humans can't stay alive above 30,000 feet! (Pages 54-55 of Blumrich's *Spaceships of Ezekiel* amplify this.)

D) Why kidnap them?

Rebuttal: LePoer Trench (op. cit.,p.4) clarifies. Today there are numerous reports of kidnappings by ETs.

While talking with you I just discovered two more Close Encounters of the Third Kind in the Bible. Though, thousands of years old, they match present-day descriptions of UFOs:

> Zechariah 5:5 — "Then I turned and lifted up mine eyes and looked, and behold, a flying roll. And he (an ET?) said unto me: 'What seest thou?' And I announced, 'I see a flying roll; the length is 20 cubits, the breadth thereof 10 cubits':" (The roll is 35-40 feet long, its width half its length.)

Evidently old Zech was standing beside a proud ET who had pointed out his ship in the sky.

Peter, in Acts 10:11,16, describes a spaceship:

> And he saw heaven opened and a certain vessel descending unto him, as it had been a *great sheet knit as the 4 corners.* ... and the vessel was received up again into heaven ... and behold, a *man* stood before me in bright clothing.

Interesting that fisherman Peter was so thoroughly familiar with seafaring *vessels!*

In closing, may I offer an apology? Since the need for apology seems to have escaped the attention of those aforementioned, I offer this apology in lieu of theirs: von Däniken only put Enoch *in* a spaceship (op. cit., p. 175). The Rev. Barry H. Downing only extrapolated Christ as *in* a spaceship. (*The Bible & Flying Saucers,* Avon, New York, 1970, p. 164) To this date, no writer in the UFO/ETI field has achieved to my Premise. They have failed to carry through to the theorem of time dilation, which says that *for people traveling near the speed of light, future time is the Past being funny in that in any present time, it (the Past) can co-exist with the Future.*

Recall the "two men" in white apparel, described in Acts 1:10? They positively guaranteed the re-appearances of all ten of those aforementioned! "THIS SAME JESUS WHICH IS TAKEN UP FROM YOU INTO HEAVEN, *SHALL SO COME IN LIKE MANNER* AS YE HAVE SEEN HIM GO INTO HEAVEN." That is as explicit as telling us that He will be flying Pan-Am during his round-trips!

Therefore, as in the past and far into our future, like a flat stone skipped over water, Jesus Christ (now 61 years old) and company will continue to dip in and out of our Earth time.

> I don't think I've compromised or belittled Jesus. His image has not suffered from the conclusions to which my research led me, for after all, a premise is an assumption — R.R.

HELP!!

I am researching the phenomena of "EVP" — Electronic Voice Phenomena — and have collected a number of anomalous voices on tape. If anyone knows where I could have these voices analyzed (by any method available, preferably voice stress analysis) or if you would like to join me in my research (southern California area), please contact me: Brian Black, 70 Almond Ave., Oak View, CA 93022 — phone (805) 649-9034 after 6 p.m.

The editors express much appreciation to SITU member George Andrews for translating this interview with Prof. Jean-Pierre Petit, a leading French physicist who has spent more than twenty years investigating reports of UFO phenomena. Professor Petit's interview by Marie-Therese de Brosse appeared in the October 26, 1984 issue of the French Magazine Paris-Match.

Where Have the Flying Saucers Gone?

Do UFOs really exist? In any case, they present a serious problem which should be dealt with in an unprejudiced scientific manner. This is the opinion of Prof. Jean-Pierre Petit, a physicist at CNRS (the French equivalent of NASA) who specializes in the mechanics of fluids. His opinion was emphatically stated on Michel Polac's "Right to an Answer" TV program. He does not think that the extraterrestrial hypothesis should be rejected without examining the evidence. His forthcoming book, to be published by Belin in the form of a comic strip, deals with this subject.

Jean-Pierre Petit is also the inventor of a genuine flying saucer which breaks the sound barrier without making a 'bang', using a method that does away with shock waves. (UFOs are known to travel at supersonic speeds without making noise.) Such a gifted researcher would have many interesting things to say, as Marie-Therese de Brosse discovered when she interviewed him for the readers of *Paris-Match*.

Marie-Therese de Brosse: At the moment, no one is talking about UFOs. Why do you choose such a moment to insist that genuine scientific research be carried out in this field, as you did last week on Michel Polac's TV program? Isn't this paradoxical?

Jean-Pierre Petit: UFO phenomena occur in waves. The last French wave was in 1979. Now we are in a period of calm, during which there are few reports. Nevertheless, the problem continues to be a real one!

M-T.B.: Do you think that the problem of UFOs should be taken seriously?

J-P.P.: My personal opinion is that it should. However, it suffers from denigration by scientists. For the last 30 years, this subject has been almost monopolized by hucksters and hoaxers, who are often the same people. A glance at the existing literature demonstrates that. Therefore this problem now has an extremely dubious reputation and very few scientists are tempted to study this most baffling of enigmas.

M-T.B.: Why have you taken this risk?

J-P.P.: I work in a field that is relevant to UFO phenomena. My specialty is the mechanics of fluids, and for the last decade I have been studying electromagnetic propulsion, or magnetohydrodynamics (MHD). I asked myself if it would be possible to make a flying machine that could travel at supersonic speeds without making shock waves. This is exactly what the flying saucers do, as described by many witnesses. For those who wish to know more about it, I have already had a book published by Belin entitled *The Wall of Silence* which presents the material in a way that can be understood by those without a scientific background. At first, my theories were greeted with scepticism by my colleagues. Last spring, the CNRS directors decided to have my hypothesis tested by the staff of the Institute of the Mechanics of Fluids at Marseille; they are the most expert in this field. The CNRS insisted on a definite answer, saying: "If this hypothesis is erroneous, explain to us clearly why. If not, if it is valid, you will endorse it." Three months later, my project was endorsed, and a CNRS research grant awarded to one of my students, Lebrun, who is now writing his doctoral thesis on the subject of UFOs with the approval of CNRS.

M-T.B.: Thus you have demonstrated that, in spite of conventional opinion, it is possible to fly at supersonic speeds without making noise, as UFOs seem to do.

J-P.P.: Yes, and when you look at the photos of my experiments, you see that my machines bear a striking resemblance to what UFO witnesses have described.

M-T.B.: Could you briefly explain your discovery to us?

J-P.P.: About 150 years ago, the English scientist Michael Faraday was the first to experiment with electromagnetic propulsion, now called magnetohydrodynamics, or MHD. During the 1960s interest in this idea revived in many different parts of the world. There was much theoretical work. Many experiments were carried out. What most researchers had in mind was a propulsion system for long space-voyages, such as interplanetary travel to Mars. Most of this research was abandoned when projects for manned space-missions to Mars or Venus were given up. However, I continued to work on it. One fine day, I dreamed-up a strange round machine. As it moved through the air, it created a magnetic field and a strong electric discharge, which made the air around it luminous. This discharge was created by using electrodes. Therefore the light was more intense near the electrodes.

M-T.B.: Could the well-known UFO "windows" be caused simply by electrodes?

J-P.P.: It's not impossible.

M-T.B.: But what is the use of your machine?

J-P.P.: Well, if you can build into a craft something compact and light in weight which can produce a very strong magnetic field and create a powerful electric discharge in the air, you can act upon the surrounding atmosphere with considerable force. It could be used to propel a flying machine at fantastic speeds, such as several thousand kilometers per hour.

M-T.B.: But then there would be an immediate 'bang'!

J-P.P.: Things are different with MHD. Instead of pushing the air behind it, the machine draws in what is in front of it, thereby creating a partial vacuum, into which it plunges.

M-T.B.: If I understand correctly, your MHD machine travels through the air like a mole tunnels through the ground. It makes a hole in the sound barrier! But where does the energy for propulsion come from?

J-P .P.: With a vacuum in front and atmospheric pressure behind it, a craft only a few meters in diameter can withstand pressure of hundreds of tons, which enables it to attain fantastic speeds.

M-T.B.: A diffused light, windows, fantastic and noiseless acceleration: exactly like UFOs. But all this must be merely science-fiction?

J-P .P.: Not at all! It could be catastrophic to create an intense shock wave at high speed and low altitude. You don't want to tear all the roofs off along your route when flying cross-country. When you exceed the sound barrier slightly, you break windows. At three to five times that speed, you destroy houses. If we survive the next fifty years, such noiseless electromagnetic

aircraft will ineluctably replace the present type of airplane, just as automobiles replaced horse-drawn vehicles. What we need to do to accomplish this is to make electric generators about twenty times ligher than we can make them at present.

M-T.B.: How many people are working on MHD in France?

J-P .P.: Two of us: my student Lebrun and myself.

M-T.B.: And elsewhere?

J-P .P.: In Russia, where I've been several times, more than five thousand highly qualified researchers are working on MHD. The smallest MHD research laboratory occupies as much space as a nuclear research installation and represents a similar financial investment. The Japanese, the Americans, and the Dutch are also at work on this venture, which will revolutionize the future of air travel.

M-T.B.: I see from the scientific papers you presented at the International MHD Congress in Moscow in 1983 that you had been doing experimental work. Was this financed by the CNRS?

J-P .P.: Nobody gave me any financial help. I was working under the most impossible conditions, using borrowed equipment. I was determined to demonstrate that this is a valid field for research.

M-T.B.: From what you say, you seem to be the only physicist who has studied UFOs. However, in the United States quite a few scientists have studied this subject, such as Professor Hynek, Jacques Vallee, and others.

J-P.P.: None of these ufologists are physicists. Therefore they were unable to understand from the witness reports what was going on. Discouraged, they all went astray — into erroneous parapsychological hypotheses. They finally split into two groups, the skeptics and the cult members, who 'study' UFOs by levitating tables, telepathy, and automatic wrting. The skeptics reduce it all to conventional science by explanations couched in terms of delusions. The skeptics are often the type of people who burn what they adore.

The cult members make me think of what the sociologists called the Cargo Cult. During the war in the Pacific, American soldiers established a small forward base on an island where the natives had never seen white people. Within a few hours the islanders became acquainted with bulldozers, jeeps, airplanes, Coca-Cola, chewing gum, hot dogs, and other delicacies. Every week an airplane brought equipment and supplies. For the natives, this plane was a symbol of abundance; to them it seemed like celestial manna. All of a sudden the Americans disappeared, whereupon the disappointed natives formed a cult to send their incantations to the heavens, imploring the return of the cargo plane. A decade later, astonished anthropologists discovered a real and thoroughly organized religion.

This UFO mythology, the 'psi' hypothesis, may represent a similar approach. Religious sects tend to flourish because they provide a source of substantial profit for the new priests.

M-T.B.: But in France, isn't there a serious research organization, GEPAN, which is associated with CNRS, and which was created to study this subject?

J-P .P.: It's time to dispel some illusions: GEPAN consists of one technician and one secretary. It is true that the results of police and military investigations are forwarded to this organization in Toulouse. It has received 1,800 reports since 1977. Many of them are worthless, being misidentifications of natural phenomena, or of meteorites or satellite reentries. Other reports are weeded out by the police, who do their best to eliminate fraudulent claims. For example, the famous Cergy-Pontoise case was never supported by the police, who made no mention in their report of Frank Fontaine's supposed abduction; he has since admitted it was a hoax, though quite well-arranged. About six months ago, during a telephone conversation with Mr. Velasco, who runs GEPAN, he told me: "It's terrible that when our investigations are completed, there is no further research done. The reports are simply filed away, and we know no more than we did before."

M-T.B.: Do you question the usefulness of GEPAN?

J-P.P.: GEPAN is a praiseworthy effort, for which we waited a long time. Unfortunately, when what was needed was a risk-taking adventurer like Indiana Jones, what we got was bureaucrats. Besides, this organization cannot carry out adequate research with the minimal funding it gets.

M-T.B.: Why don't the authorities show more interest?

J-P.P.: In my opinion, it's an instinctive rejection. Civilizations are like living beings. When two individuals meet, three attitudes are possible: coexistence, one devours the other, or they go different ways. The existence of another civilization is frightening, because if it is technically superior, it can enslave us. This is a persistent theme in science-fiction. But another possibility is even more alarming: If beings visit us without enslaving us, they may also be superior to us morally, socially, or politically. Contact could thus cause our primitive and barbaric social structure to disintegrate. As our terrestrial civilization is unable to coexist without shock, it chooses to reject the phenomena in a defensive reaction which could be compared to that of Dr. Zaius in "Planet of the Apes."

M-T.B.: You're not very complimentary to the human species.

J-P.P.: Let's look around us! Vast numbers of humans are dying of hunger while others are accumulating completely insane weaponry. We have only the slightest chance to escape being annihilated during the next five to ten years. Our science is in a state of total perversion. Everything humans are capable of inventing is first of all, and with the highest priority, applied to the arms race; 95% of human creative activity is channeled into this insanity. We are suicidal maniacs!

M-T.B.: Let's return to the subject of UFOs. Do you believe in extraterrestrial visitations?

J-P.P.: In dealing with this subject, the world 'believe' is meaningless. It is not a scientific approach. What I think is, that there is a real problem which needs to be examined by those capable of dealing with it.

M-T.B.: Let us suppose, as you seem to admit, that extraterrestrials have been visiting us. Why don't they make contact with our authorities instead of, in this weird and ridiculous fashion, with the so-called 'contactees'?

J-P.P.: If there was such a contact, numerous scientific and technical secrets would become known to the authorities, and would be immediately converted into weapons systems that would accelerate the disastrous process in which we are already engaged.

M-T.B.: According to you, this situation of non-contact could be deliberate. The extraterrestrials would be careful to leave as few traces as possible, even to the point of purposely confusing us.

J-P.P.: That is why certain phenomena, such as the Trans-en-Provence case (which I spoke of on the Michel Polac TV program, and which we'll discuss again in a a few minutes), are so important for us scientists. It means that UFO occupants do leave traces they are unable to conceal — durable biological traces.

M-T.B.: Don't scientists state that it is impossible to travel the fantastic interstellar distances?

J-P.P.: One hundred years ago, almost all the technology we take for granted today — microprocessors, nuclear energy, space travel, etc. — was completely inconceivable. Who knows what new discoveries science will make in the next decade, or the next century, concerning space travel?

M-T.B.: Witnesses claim to have seen humanoids of different sizes, more or less similar to ourselves, coming out of UFOs. What do you think? Are these jokes or hallucinations? Isn't such anthropomorphism suspicious?

J-P.P.: The fact that there is life on other planets is disputed less and less. Although today one may still hear famous biologists defend the idea that we are completely alone in the entire universe, these speeches reveal their total ignorance of what has been going on in astrophysics during the last twenty years. Astrophysics shows the cosmos to be a veritable culture medium. When a star bursts, which often happens on a galactic scale, the hydrogen and helium atoms are stacked against each other during the deflagration. All the heavier atoms are thus created in a fraction of a second. And these are the same atoms that are created every time, anywhere in the universe. The same scenario takes place again and again, infinitely. The atoms have a strong tendency to combine with each other and form complex molecules. The stars appear to be like spores creating parcels of life. For example, at the center of our galaxy there is a cloud of organic matter whose mass is equivalent to 500 times that of our sun, which is spreading out at the speed of 80 kilometers per second. This cloud was probably derived from a type of instability on a gigantic scale which affects the nucleus of the galaxy. Life elsewhere improbable? What a joke! The cosmos is a magnificent culture medium. Another point is that nature seems to lack imagination. For example, we see there are only about a hundred different atoms. Everything that is not stable disintegrates and dies, as if these atoms were not permanent. Life-forms on other planets should resemble life-forms here.

M-T.B.: You don't believe in an infinite variety of possible forms of life?

J-P.P.: I believe that biochemistry based on carbon is extremely competitive, and in the functioning universe, what is competitive dominates. Some scientists are beginning to think that a sort of line exists which slopes to a greater or lesser degree toward an evolutionary axis. Imagine a mountain with a valley more pronounced than the others, toward which all water tends to flow. Certainly there will be variations, but they will be nearer than we thought a few years ago. What happened on Earth was that species were isolated from each other in certain areas such as Australia, for example, during long periods of time. In spite of that, aside from a few variations, animal forms are not so very different. There has been a clearly marked phenomenon of convergence in spite of differences in the environment.

M-T.B.: How do you see the extraterrestrials?

J-P.P.: The human form doesn't seem unlikely, with considerable variation in weight and size. Don't forget that on Earth the smallest dwarf was about 40 centimeters and the largest giant about three meters, which represents a factor of over seven-to-one in height and 400-to-one in weight! The extraterrestrials are on Earth. Besides the classic variations in humanity, which are substantial, consider such anomalies as hairiness, horny eyelids, reptilian skin, etc. Some of these are not perpetuated. Others give an idea of the variations possible in what may exist elsewhere. Some humanoid extraterrestrials might be marsupials, as are some of the higher mammals.

M-T.B.: Thus, extraterrestrials in some respects are similar to us — two arms, two legs, two eyes, two lobes of the brain.

J-P.P.: With a certain similarity in biological and social evolution!

M-T.B.: Then what would be the differences?

J-P.P.: There could be very important differences, derived from differences in basic environmental conditions. You realize that in our solar system, Earth is the only planet whose surface has undergone fragmentation and continental drift. There are no tectonic plate phenomena on Mars or Venus.

M-T.B.: What would a planet be like without fragmentation or continental drift?

J-P.P.: There would not be much contrast in altitudes, and no mountains since their formation is linked to telescoping tectonic plates. The absence of natural barriers would permit an intense mixing of species on the surface of a continent composed of a single terrain, leading to more uniformity. There would be only one humanoid race, speaking one language.

M-T.B.: Freed from cultural and linguistic barriers, would the inhabitants of such a planet attain a planetary form of government more quickly than we would?

J-P.P.: Yes! They would have a much greater chance of attaining the beginning of wisdom before discovering the really dangerous nuclear weapons.

M-T.B.: Why?

J-P.P.: Suppose that the only continent on Earth was Europe. Forget about Asia, Africa, the United States. With minimal differences, we would have attained our present level of culture. As European culture becomes more uniform, war is less likely to occur within Europe. The Franco-German wars are a thing of the past. Economic and social problems remain, but no longer a permanent danger of war.

M-T.B.: In other words, because of the continental drift, which brought about diversification of our cultures, we have attained an extremely dangerous technological development before being able to resolve our cultural differences?

J-P.P.: One can see how two planets, because of a completely plausible detail of this type, could have very different histories. Indeed, Earth is a real patchwork from the point of view of evolution and history. Some populations are in the 20th century, some in the Middle Ages, some still in the Iron Age. The chances of seeing everyone reach an agreement before it is too late seems very slim.

M-T.B.: At what distance might be the nearest system inhabited by superior beings?

J-P.P.: It's hard to say. Fifteen light-years, a hundred, more? No one knows. It should not be forgotten that two planets are able to communicate only if they are at equivalent degrees of civilization. Some have the potential for civilization but the process is only at its beginning. Others could have self-destructed ten or a hundred thousand years before our time. Since 1934, we have been sending out electronic radio messages which would, without question, be picked up at great distances by antennas similar to ours. Since the 1950s we have had abundant UFO sightings. It is possible that extraterrestrials living at a distance of 15 light-years from Earth, picked up our radio messages in 1949 and decided to come take a look. That is a guess.

M-T.B.: How long would the trip take?

J-P.P.: I don't know. Does the word 'trip' make sense in such a context?

M-T.B.: We've been listening to radio waves from all over the universe for many years, but we've never received an intelligent message.

J-P.P.: Not having received anything is not proof that there is no other civilization in the galaxies. It is possible that Earth

is being bombarded with multitudes of radio messages which our scientists are incapable of understanding. Some people have expressed this idea: "If extraterrestrials existed in our galaxy, they would have swarmed across it and colonized it." That is typical anthropomorphic rationalization. No one here seems capable of imagining that it is possible to simply observe Earth without intervening. We think immediately in terms of colonization, conquest of resources, and occupation by force.

M-T.B.: On last Saturday's TV program you mentioned the mysterious Trans-en-Provence case as being of exceptional importance. Would you give us a detailed description.?

J-P.P.: About 5 p.m. on January 8, 1981, at Trans-en-Provence, near Draguignan in the Var region, a Mr. Renato Nicolai was puttering around his garden. The weather was fair and there were no clouds. According to Mr. Nicolai, he was startled by a 'whistling' and saw a craft pass above the trees next to his garden; it landed with a dull thud on the hard and rocky soil. He described the craft as two and a half meters in diameter, of a shape resembling two bowls glued together. It was the color of lead and had legs resembling cement buckets. His curiosity aroused, Mr. Nicolai approached, staying behind cover until he was about twenty meters from it, then watched the object for about twenty seconds. Abruptly it took off with a slight hiss and quickly disappeared in the sky, leaving a clearly marked circular trace on the ground.

M-T.B.: There have been hundreds of such sightings, haven't there?

J-P.P.: Yes, but this case is unique in UFO research. By a stroke of luck, samples of vegetation were collected under good conditions by intelligent and conscientious police officers who, in spite of some confusion and delay, got these extremely valuable samples to a laboratory where one of the foremost experts in the world on traumatism in plants could examine them — Professor Bounias, Director of the National Institute of Agronomy at Avignon.

M-T.B.: What did Professor Bounias find that was so disturbing to those who are skeptical about UFOs?

J-P.P.: One of Professor Bounias' specialties is the effect of radiation on plants. As soon as he received the samples, he submitted them to a most rigorous and sophisticated series of analyses, the result of which was irrefutable evidence of clearly marked and totally inexplicable changes. For example, some young sprouts had the characteristics of old age. The second stroke of luck was that the phenomenon persisted. Indeed, it was not until 39 days after the incident that GEPAN decided to take samples systematically every meter from the center of the circular ground-mark.

M-T.B.: Why did GEPAN, which the police are supposed to alert in all such cases, wait 39 days before acting?

J-P.P.: As a rule, GEPAN does not investigate a case if there is only one witness, or when it has rained after marks were made on the ground. When the police were called to the site, they phoned GEPAN, and were asked if it had rained there. The answer was that rain had fallen, so the investigators did not consider it worthwhile to visit the site. If the police had not taken samples which included the soil surrounding the roots, a precaution which permitted the plants to survive, this case would have been quickly forgotten.

M-T.B.: In this situation, can hoax or practical joke be totally excluded as a possibility?

J-P.P.: One can always invoke practical jokers. However, in this case, perpetrating a practical joke would have required exceptional resources. Considering the very sophisticated nature of the biological alterations in the samples examined, which would be impossible to reproduce under laboratory conditions with our present scientific knowledge, no ordinary chemical action could have produced such results. According to Professor Bounias, in order to act on the nuclei of plant cells, nuclear radiation at the potency of a million rads would be necessary. He conducted such an experiment himself, at the request of the CEA (French counterpart to our Nuclear Regulatory Commission).

M-T.B.: I suppose that such sources of nuclear energy are not found in nature, nor are they accessible to ordinary citizens.

J-P.P.: Fortunately not! Besides, Professor Bounias showed that the potency he used produced results very inferior to those measured from the Trans-en-Provence samples. One must also consider the extent of the area affected, about 300 square meters.

M-T.B.: So this Trans-en-Provence case is indeed the 'ironclad' case which upsets the UFO skeptics because the witness's account is of such minor importance when irrefutably objective evidence is available for analysis by scientific methods.

J-P.P.: When faced with a possibility, scientists first try to explain it in terms of known phenomena. So far, the Trans results cannot be satisfactorily explained in terms of known phenomena.

M-T.B.: In your opinion, aside from Professor Bounias's experiments, was the Trans case thoroughly studied by offical groups, such as GEPAN?

J-P.P.: Unfortunately, on-site investigations by GEPAN are carried out by personnel without scientific training.

M-T.B.: Aren't the GEPAN people scientists?

J-P.P.: No, and it is disastrous. Mr. Velasco, who is the head of GEPAN, has only an industrial certificate as an optician. That seems to me rather lightweight to deal with a problem such as this. In the Trans case, if a real scientist had been called in, he would definitely have carried out analyses that were much more numerous and complete. It is an authentic miracle that under such conditions enough of the samples survived to reach a highly qualified scientist like Professor Bounias. It is the scientists who should be called in for on-site investigations, because only they know how to conduct them.

M-T.B.: Since Trans, that is to say since 1981, have there been other such cases?

J-P.P.: A year later, in eastern France a strange craft landed in a garden near a witness for about twenty minutes. Plant samples of amaranth were taken that had been underneath the object and had been visibly affected. The stalks were cut and they were wrapped in plastic bags. By the time they reached Professor Bounias, the samples were so rotten that analysis would have been useless.

M-T.B.: In spite of these failures, you continue to support the extraterrestrial hypothesis to explain UFOs, beings who visit us without making themselves known. Aren't you discouraged?

J-P.P.: I have become used to seeing scientists use their knowledge to deny any possibility of extraterrestrial visitation. Everything seems to conspire to make this proposition impossible to prove. For example, some scientists say: "If UFOs are aircraft traveling at supersonic speeds, we should hear the shock wave go 'bang'. Since they are completely silent, that means they do not exist." Today the situation is turning around. The field no longer seems as arid as it did. UFOs do leave recognizable traces of their passage, and silent supersonic flight is becoming integrated into classic science through magnetohydrodynamics. Unexpectedly, there now appear to be substantial possibilities of resolving this enigma. It is certainly high time that it be done. But will it be done?



An Experiment in Dowsing

by Ivan T. Sanderson

Dowsing is not basically in my line except as yet another generally "unexplained," the investigation of which is my own private purlieu and also my duty as the director of our Society. Nonetheless, it has sort of forced its way into the biological union, as it were. Actually, the whole business belongs in the field of physics, or chemiphysics, but it is, nonetheless, a feature of both plant and animal life; and it was these purely biological aspects of the matter that eventually forced us to become involved. Let me mention these aspects briefly to demonstrate what I am talking about.

Every countryman, be he farmer, gardener, sylviculturist, or professional botanist, and just about everybody in eighth grade knows that the roots of plants, and particularly of trees, search out underground water supplies with the growing tips of their rootlets. Ditchdiggers and bulldozer operators are constantly amazed at the comparatively enormous distances that tree roots may probe horizontally before they turn down to find water. Nonetheless, it has not as yet been explained how they do this. Their search, moreover, is not random but directional and, as often as not, unidirectional.

This ability or capability appears to be inherent in the plant itself, though the stimulus — in this case standing or running water — comes from its environment and thus from 'outside'. Further, it appears to be primarily a function of the cells of the root system, as may be clearly demonstrated by using a "Y" cut from a root system along side one taken from a branch, as is the custom among 'professional' and all other dowsers to detect water. Try it some time; you will probably be most surprised.

Among animals, other than people, the exhibition of water detection is more subtle, less obvious, and so far less known as to be almost *un*known. Yet, almost all animals display an ability both to go unerringly to surface water and/or to search *from* the surface. How they do this has neither been explained nor properly investigated! Take, for instance, the incredible swarms of animals, from kangaroos and emus to tiny marsupial mice, and insects, that congregate around the temporary shallow lakes that fill up, from time to time, right in the middle of the great Australian deserts. They come from miles — sometimes hundreds of miles — around, unerringly and immediately when these lakes suddenly fill up, often after years of dessication. Consider also what has been observed of other desert animals in other deserts, and notably insects that have been observed meandering about, twiddling their antennae for hours before suddenly starting to dig or burrow furiously downwards. If you dig alongside them, you will almost invariably hit water, provided you go down deep enough. By the same token, jungle animals perform likewise — but *upwards*!

This may sound very startling, but it is seldom realized that in jungle areas, even with the highest mean annual rainfall, there are almost invariably long periods when no rain at all falls; and then, due to the guttering and run-off systems of the land-surface, which is caused by the torrential rains at other times, standing or running surface water is just as rare therein as in a desert. In fact, the only standing water available at all, as is only too well known to those who have been lost in true primary tropical forest during a dry season, is in holes halfway up the giant trees. The amazing thing is that all manner of animals congregate around such water-filled trees — for they are often hollow, like factory chimneys, and filled from ground-level to a hole where the first branches divide — but the really amazing thing is that these are not exclusively arboreal animals, or even climbers! I have found quantities of large, ground-living toads that do not seem to be able to climb a one-foot log, and even some tortoises that seemingly can't climb at all, high up in these trees that contain water. How do these sorts of animals detect this water?

Now, some people(s) have the same ability; and without using sticks or other devices. Notable are the "Bushmen" of Southwest Africa and the "Blackfellers" of Australia, both of whom have been properly observed in the act; and the results of which observations have been duly reported. Somehow these desert peoples go to both temporary surface water and to the locations of underground water just as unerringly as do the lesser animals. All kinds of suggestions have been put forward to explain this ability, but never to my knowledge that they may have a "built-in" dowsing apparatus. The average investigator feels safer when he suggests that the people follow animals, or that, in the case of the surface water, they can "smell" it, as it is borne by winds even to great distances!

I come now to some results of our contemplation of these facts. When we were forced to "do something" about this matter we searched around for some experiments we might set up that might produce some valid leads to proper scientific investigation. It then immediately became apparent that the first thing required was an examination of the *physical* factors involved in the detection of or attraction to water, on the parts of both plants and animals, for, without explanations of these "forces," or whatever you wish to call them, and which must manifestly exist, it was obviously useless to start trying to unravel the behaviour of said plants and animals. And it was here that we really got a surprise.

In initiating any novel search (and, even often research) you never know just where you are going to come out; while the most troublesome aspect of any such endeavour is "to keep on the beam" and not go wandering off on any of the innumerable side-roads that invariably open up as one goes along. Now, despite the fact that our interests fall wholly within the general field of the natural sciences, we have learned over the years that some of our best thinkers, with the widest range of ideas and the most "open minds" (though I abhor that term), are *not* scientists, but technologists, and notably the engineers and gadgeteers. (We happen to have a "stable" of "tame" ones to whom I always appeal before initiating any enquiry!)

On this occasion, however, I had cause to call in also representatives of a "breed" of which I have considerable suspicion: this is the psychological and other "mental" specialists: and this because everybody seems to insist that "dowsing" has a parapsychological basis, and that, to over-simplify the matter, the ability to dowse is exclusively the ability of the human subconcious or other "powers" of the psyche, or whatever you want to call the non-conscious or non-material side of a living entity. Not only have I always suspected this assertion, I have as near proof, within our current logic, that the very notion itself is rubbish, and for the simple reason that whatever the "power(s)" employed by the human, other animal, or plant body may be, the effects they produce are physical, and are therefore not only susceptible to physical analysis, but must be studied on a physical basis. In fact, I do not see what, if anything, psy-

chologists can contribute to *any* investigation of this sort any more than they can to anything else except emotions. Nevertheless, we called some in, even at the risk of their causing delays in the work and muddling the issue with their lunatic theories — which is just what they did until we got them to shut up, listen, and watch, before commenting or theorizing!

The real surprise on this occasion came, however, from the engineering department; and it was a double surprise. First, the whole direction of our investigation was given to us as it were, in a nutshell, by one of them at the outset and, secondly, our whole procedure from then on followed a line suggested by them and handled by them. The results not only astonished but infuriated the psych-boys, and considerably distressed all the laymen and most of the biologists for, as we came to realize, it completely confirmed our contention that the whole business is purely physical and one that need not have anything to do with any living thing — human or otherwise — and it appeared to oppose or cancel their most cherished beliefs — namely, that dowsing is a purely human attribute and somehow an operation of the psyche. That humans may play the part of a machine on occasion, or if required, is beside the point in this instance, and requires an entirely separate enquiry in which I contend we would run into just the same problem — namely, that whatever effects are observed would still be physical; susceptible to physical analysis; and wholly dependent upon physical laws. What we discovered in our experiments, moreover, lends great weight to this assumption.

Now, the basis of proper scientific enquiry is that the results of experiments may be and can be duplicated, reduplicated, and reproduced elsewhere, at other times, and at the wish of other investigators. In this instance *we* reduplicated them many times and with new and varying witnesses, though we had to use the same location. However, so precise, definite, and simple were the results obtained, that we decided not to publish them until we could persuade some other groups, equally qualified and using equivalent apparatus and as far as possible a similar location and set-up, but totally unknown to us, to run their own series of experiments. To this end also, we decided it not just prudent but essential that even the names of our group not be published in the first instance, in case others might contact them and be influenced by them.

When we decided to investigate this troublesome matter, we invited the following group to attend and assist both with ideas, practical implementation, supervision, and analysis. There were three biologists: one a teacher of general biology, working on his thesis in micro-plant-physiology; a doctor of human pathology; and the writer, acting as a straight zoologist. There were three engineers — two holding degrees in physics — an inspector of government arsenals; an electro-magnetics expert, owner of his own company making specialized electronic devices for the services; and a design engineer of top rank, who specializes in electronic circuitry and who moves from one large company to another in an advisory capacity to "get the bugs out of recalcitrant devices" as he puts it. This man has also specialized in the electric circuitry of the human body and the new developments in the field of mental and corporeal interference with it by radio and other E.M.I. effects. There were then a teacher in the department of psychology at a well-known college, and a practicing psychologist (*not* a psychiatrist or psychoanalyst). At one time or another two science writers and straight reporters were present. We also had four local citizens who made a practice of dowsing, and two of these — one of them a Town Clerk — practiced it professionally for well-diggers. Some dozen others witnessed the experiments from time to time. It was the first of the engineers who set us on our course, and by a statement made at the beginning of our first planning session.

The town clerk was widely known in the area for his ability to find water. He put on a demonstration for us before we sat down to the first meeting — finding, incidentally, water just where we finally had to dig a deep well three years later! First, he cut a "Y-twig" from one of our pear trees, and then demonstrated the difference between this and various other woods. But then he happened to mention that he had found a wire coat-hanger worked better than any twigs, even willows. This too he demonstrated, and it was while he was doing so that the engineer from the arsenal turned up. He is a quiet man and said nothing until we went into conference; then he opened up in not unscathing terms. The substance of what he said was as follows.

It is, he told us, somewhat of a rarity to find a proper plan of water or other pipes, or of power-lines laid under the thick concrete floors of arsenal buildings. However, he told us, his department, which is responsible for maintenance of such construction, long ago gave up the wearisome practice of digging up said floors to find the pipes. "All we do," he said "is have somebody, or anybody, just walk back and forth with two 'Ls', tracing out the paths of all the buried lines to their inlets and outlets so that we can spot the one needing attention. Only then do we call in the drills and go right for the trouble spot." At first we thought he was joshing the town clerk; but he offered to demonstrate immediately. And this he did right outside the house after only about half an hour's preparation.

We have a workshop well-stocked with supplies as well as tools, and from these he selected some lengths of copper, brass, iron, glass, and plastic tubing which he cut into eight-inch lengths. Next, he selected as many kinds of heavy wires and rods as were available, and he had me light up a bunsen-burner in our lab and bend two glass rods into "Ls," with one tine seven and the other five inches long. Meantime, he similarly bent the wires and rods of various substances, one of which was heavy welding wire. We then tramped out to the front lawn, which runs from the front of the house at an angle of about twenty degrees, to the road sixty feet away. As shown in Fig. I, there were two pipes buried to a depth of four feet under this lawn and running from the house, parallel, and directly down this slope to a well and a drain respectively. The first, when the pump in the house was at rest, of course, remained full of stationary water; the other pipe, which was also of iron, but of larger diameter, was either drained of all water or could be filled by turning on four faucets in the house.

Our engineer friend just walked slowly from right to left and back again from points A to B, holding the various sections of tubing upright in his clenched fists (as shown in Fig. II), but with matched pairs of "L" rods with their short tines in these tubes and the long ones pointing forward.

As he crossed the pipes, these "Ls" moved in various ways — either both to the right; both to the left; towards each other, forwards and inwards until they crossed, and then back again; backwards, until they pointed directly backwards or crossed over the operator's wrists; and in various other combinations. What is more, they always did the same thing, when passed over (a) the pipe full of standing water, (b) and empty pipe, (c) water flowing *up* a pipe, as to the pump, and (d) water flowing *down* to the drain; though the movements of the tines were, of course, different in each case. They performed exactly the same *with everybody*! (I am not saying here which motions they performed in which case, because this is one of the things that we most wish to have checked.)

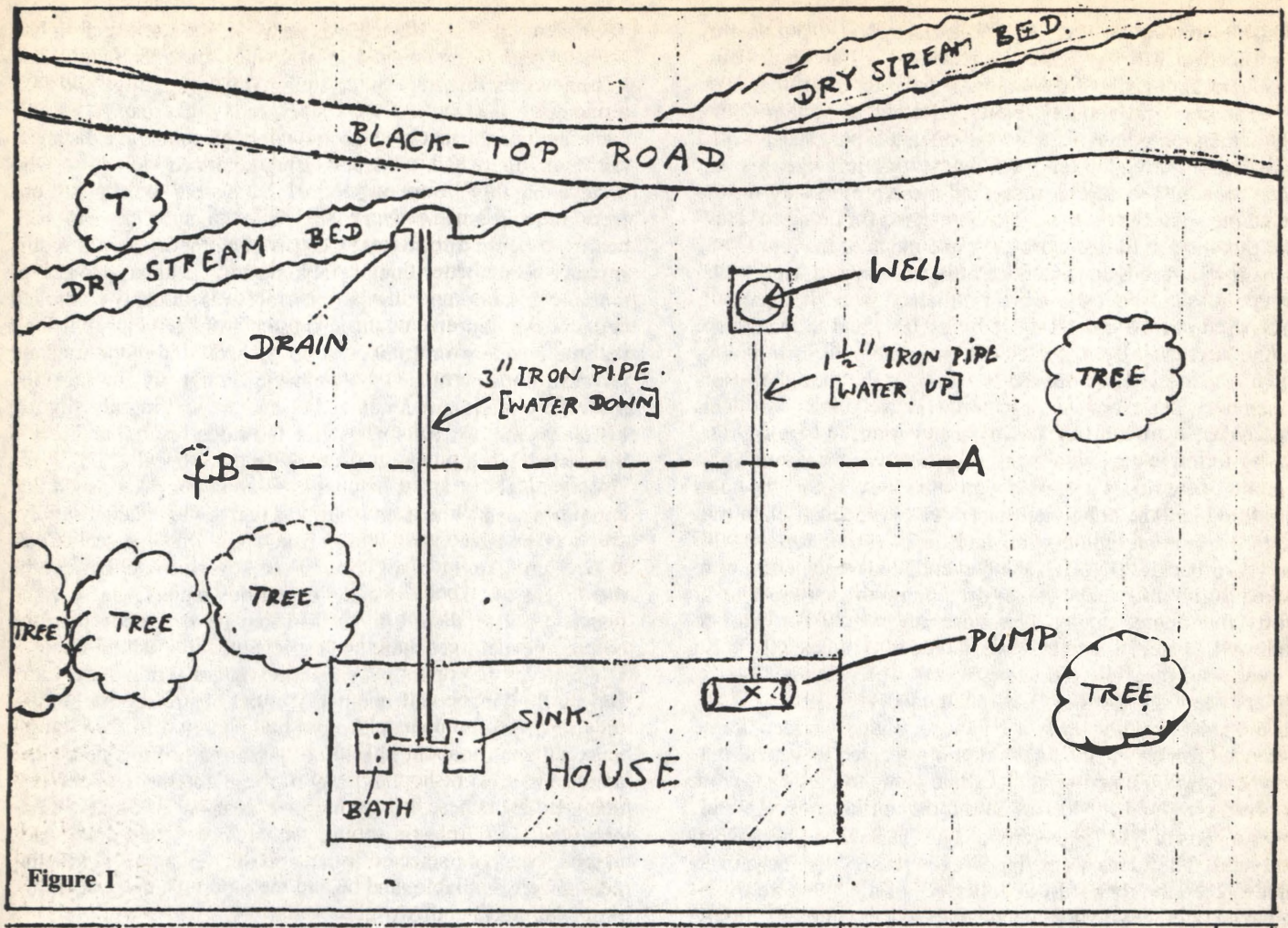


Figure I

Figure II

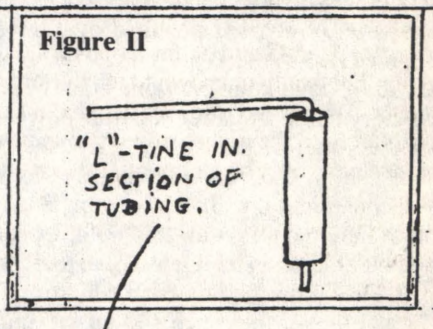
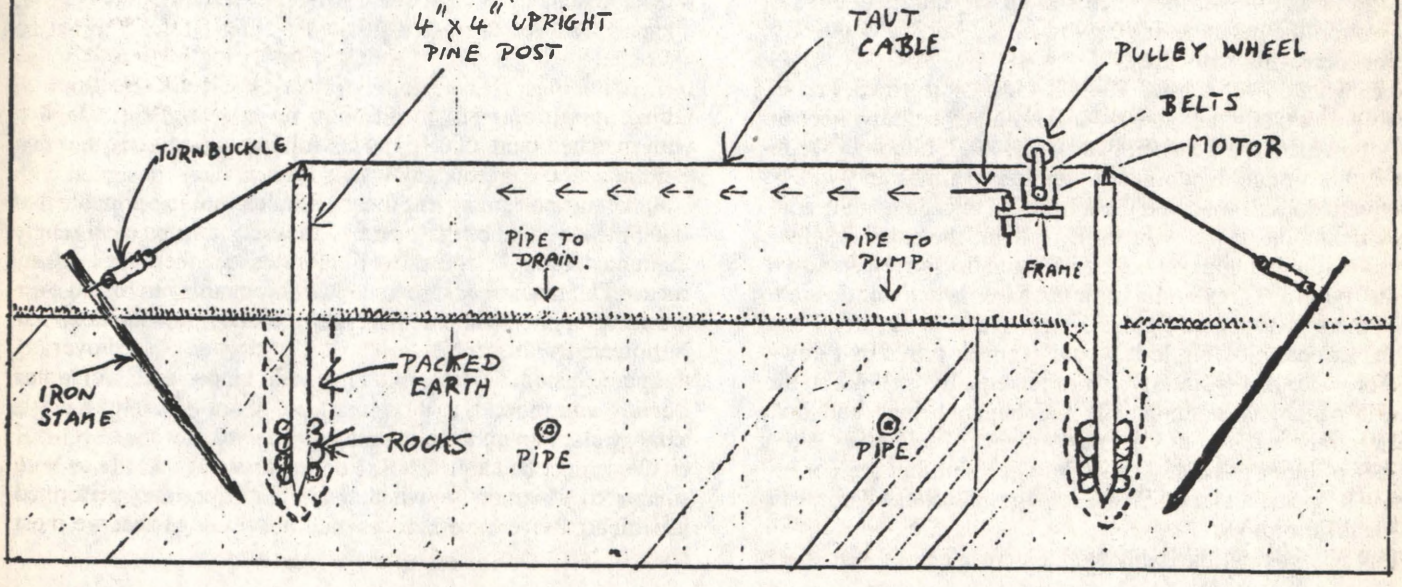


Figure III



This demonstration really shook up *everybody*, and notably the professional dowsers and the psych-boys; the latter being really very annoyed at first, though I have to admit that even they expressed grave doubts about their previous opinions quite early in the proceedings. I have to admit that I, personally, could hardly contain my glee, as it was something just like this that I had "wanted" to demonstrate, and these preliminary results offered me an enormously simplified method for doing so. Nevertheless, the rest of that work-day, and much of the night, was taken up with discussion and not a little argument, during which all the old saws about the *human* influence were dragged out.

The group broke up and retired very late, and they all slept late the next day. I did *not*. I was out collecting materials as soon as the local stores opened, so that, by the time the others reassembled, I had some construction work well under way. This consisted of a structure as shown, in elevation, in Fig. III. The four-by-four uprights were sunk four feet into the ground and their butts were firmly anchored with large rocks before the holes were filled in. The horizontal wire was quarter-inch plain (not braided) telephone guide-wire, and this was pulled taut with heavy turn-buckles (Fig. III) at either end, and these in turn were hooked to five-foot metal stakes driven into the hard ground at a forty-five degree angle. This wire ran exactly northeast to southwest. (Later, as a check, we moved it to run exactly north to south, but precisely the same effects were obtained — except for the angle of the "Ls" subtended.)

From this wire we hung a balanced, light, wooden frame suspended from a small clockwork motor geared to a small pulley wheel by two equalized belts. Below and to the front, pairs of tubes were held in slots in an almost upright position and, in these, pairs of "Ls" were dropped just as they had been when hand-held. The tubes were tipped ever so slightly forward in order to keep the forward-pointing tines of the "Ls" from being blown or otherwise directed to either side by other "natural" forces. The wire, of course, stretched over the same area and along the same line as A to B in Fig. I. The house is in a mile-long, low valley, containing only one other building, a cinder-block, two-story house a quarter of a mile down the road which runs down the gutter of this valley. Opposite the house, and on the other side of this road is a steeply sloping hay field.

When the construction work was completed, I herded everybody about a hundred yards up this field, armed with several pairs of binoculars and a small telescope; and, when they were all set up, I wound up the clockwork motor; released it; and then ran like hell over the fence and up to join the others. At first we ran the machine at very low speed but, subsequently, at ever-increasing velocities.

And, what do you know? The "L-rods" performed, and invariably, in exactly the same manner with this entirely mechanical set-up as they had when hand-held. And, although we repeated this simple experiment a number of times and with as many variations as we could think of, even to changing the compass orientation of the wire itself, we got the same results.

At first it might appear that the investigation gave conclusive results, but this is really far from the case; hence our desire to have others try to reproduce these experiments in as similar conditions as possible. While it would seem to prove that dowsing, for water that is, though it worked equally well for an air-filled iron pipe, has nothing to do with human beings, and looks like a purely natural physical performance, one has to take a number of other possible factors into account that are not immediately apparent and which are not currently allotted any status in scientific orthodoxy.

First, it is *possible* that, although no human beings were closely present while the device was at work, the construction had been set up *by* humans, and several who were specifically, and in some cases *intensely*, interested in the proceedings *and* their outcome. It is asserted by not a few today that man's "mind" can affect inanimate objects and notably machines at a distance. However, there is a tendency, I have noticed, for those who believe that this is possible, to feel that people so influence objects more in accord *with* their wishes than *contrary* to such desires. Should this be the case, any such theory would in this instance seem to lend considerable negative emphasis to acceptance of the notion that the performance was humanly controlled because the majority of those present were fervently wishing that the device would *not* perform by itself and without actual physical human contact. Second, we cannot say for sure that a similar experiment conducted elsewhere and in only slightly different circumstances must give the same results; and this is the main reason why we are making this appeal.

We have the funniest magnetic set-up at our place, such that compasses cannot be used at all, and one has to conduct surveys with a plane-table, starting from fixed points on large-scale Coast & Geodetic Survey maps. I don't see how this could affect the movement of "L" rods made of various metals, glasses, and plastics, but stranger effects than that have turned up in the course of experimentation; and especially with "natural forces."

The psych-boys put up a valiant rearguard action to the bitter end by thinking up all manner of other abstruse possibilities, ranging from the good old mass-hallucination to Carl Jung's mass subconscious, but I will not go into all of this here since none of the rest of us 'buy' any of these abstrusities; and particularly in the face of anything so clear-cut as what we had observed. Curiously, however, *the engineers* were quite ready to accept the possibility of "mind control," though still insisting that the actions and reactions *must* be purely *physical*, in the proper sense of that word!

The fact that "Y" sticks and wires, and even "Ls" also work with people — and by the way, we intend to try it with a trained dog sometime — would seem to boost the theory that animals, in the first place, are only machines; and electrical ones at that.

But there is another side to this coin. What of the water, and the iron? Here, the chemiphysicists, and most of the biologists, are with us in suggesting that both are surrounded by what are loosely called "force fields," though of just what forces none of them seem willing to state! Some have plunked for electromagnetic fields; but most of them, plus the engineers with whom we have spoken of this, seem to feel otherwise. But none of them has as yet suggested just what other "force" might be involved.

It is manifest that something changes when water starts to move; and it changes in different ways according to how it moves. The metal alone presents still other problems; but that certain specific effects are — or appear to be — observed with irons of various amalgams makes it much more acceptable that other metals could be detected by "dowsing," as is so constantly claimed. (When it comes to finding lost jewels, and artifacts made of all manner of substance, we have nothing to say because we have neither witnessed the performance, nor have we experimented with such.)

In conclusion, I would like to say that I have read, and in fact been forced to read, a very great deal about dowsing; but I in no way claim to know the literature properly, nor the intricacies of the subject in detail. Thus, I do *not* know — and I have been unable to ascertain — whether similar experiments to those described above have been carried out by others elsewhere. I

(continued on page 167)

What Uprooted massive Chunk of Earth?

by Hill Williams, *Seattle Times* science reporter

Somehow, in a way that baffles geologists, a massive chunk of earth has been plucked from a remote plateau in North Central Washington and put down, right side up, 73 feet away.

There is no evidence that humans had anything to do with it. Neither are there marks of machinery. The piece of earth, which remained largely intact during its move, is estimated to weigh at least three tons.

"All we know for sure is that this puzzle piece of earth is 73 feet away from the hole it came out of," said Greg W. Behrens, a geologist with the Bureau of Reclamation at Grand Coulee Dam.

The displaced chunk is an irregular pear shape, 10 feet long and 7 feet wide. Its thickness varies from two feet at one end to about 18 inches at the other.

The shape and thickness of the puzzle piece exactly match the hole that was left behind.

The mystery site is next to a wheat field on a farm operated by Fred Timm and his sons. Two of the sons, Rick and Pete, discovered the displaced earth on Oct. 18 while riding in the area rounding up cows.

They believe the event occurred sometime after mid-September when they were last there harvesting wheat.

Adding a bit of intrigue is the fact that there was a small earthquake in the aea during that month long period, at 8:24 p.m. Oct. 9, 1984. The quake, measured at 3.0 on the Richter scale. was felt in towns in the area but not at the Timm farmhouse a few miles from the mystery site.

The University of Washington pinpointed the quake's epicenter about 20 miles southwest of the displaced earth, and about four miles deep. But a UW scientist ruled out the possibility that the quake somehow could have popped out a piece of earth.

"Very, very unlikely," said Stephen D. Malone, a university geophysicist. "If the earthquake had done that, it would be the most dramatic and obvious thing ever reported that I'm aware of."

The Timms, excited by the discovery, called Don Aubertin, director of mining for the Colville Indian Tribe. The mystery site is on the Colville reservation in Okanogan County.

"There had been quite a roar with the earthquake," Aubertin said, "so we wondered if perhaps a meteorite fragment had impacted and ripped out a piece of earth."

Aubertin asked Bill Utterbach, a geologist retained by the Colvilles, to visit the scene. Utterbach's inspection quickly ruled out the meteorite possibility.

"There was no sign of impact," Aubertin said. "The hole was not a crater. It had vertical walls and a fairly flat bottom. It was almost as though it had been cut out with a giant cookie cutter."

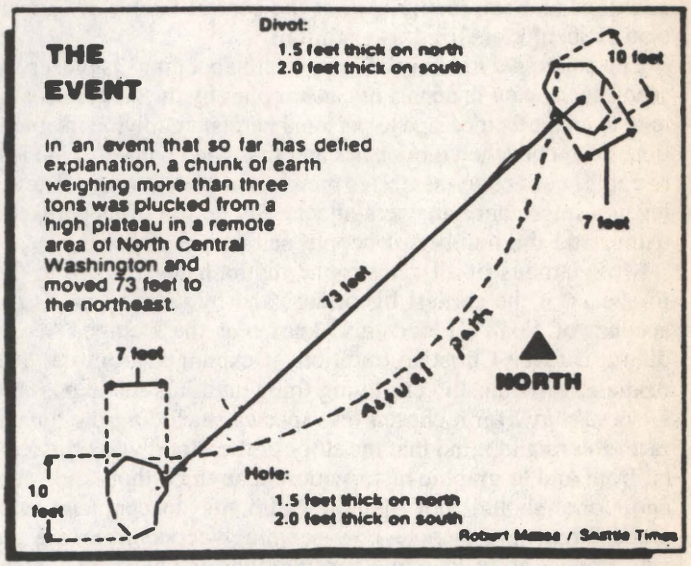
But, Aubertin pointed out, even a "giant cookie cutter" couldn't have left the hole the way Utterbach found it. Roots that had led to the vegetation in the puzzle piece dangled from the vertical walls of the hole, indicating they had been torn apart rather than cut.

There was no sign on the ground that the displaced earth had been dragged or rolled. But Utterbach did find something that added to the mystery.

"You'd think that, whatever the cause, the chunk would have traveled in a straight line," Aubertin said. "But Utterbach found where pieces had dribbled from the chunk as it moved. The dribblings traced an arc from the hole to where the chunk was found."

One possibility is that, if the chunk rose and fell in an arc as it moved, a stiff wind could have distributed the "dribblings" in a curve.

Behrens said the dense root mass in the puzzle piece probably helped hold it together. The chunk, as it was found, was rotated counterclockwise about 20 degrees in comparison to the orientation of the hole it left behind.



In the weeks since the event, the Timms' cattle have trampled the displaced chunk, destroying evidence of its remarkable fit with the hole.

The event occurred in an area with an interesting geological history. The plateau is 2,360 feet above sea level. The mystery site is in a small hollow, probably scraped out in the plateau's bedrock by the ice sheet that covered the area thousands of years ago.

The wheat field is dotted with huge boulders left by the melting ice sheet. Known locally as "haystack rocks," some are bigger than haystacks. Near the mystery site is a larger depression, described by Behrens as a "kettle," a geologists' term for a place where a mass of ice was buried and caused the ground to collapse as it melted.

It is an eerily fitting setting for what is apparently an unexplained natural phenomenon.

Behrens wondered if the earthquake's seismic waves in the bedrock had triggered concentric surface waves in the soil. If the waves converged, they might have ejected a piece of earth where they focused, he mused.

The UW's Malone agreed that focusing can occur. But it could not explain the source of the tremendous energy required to pluck out a piece of earth weighing tons and move it 73 feet.

"It really is a puzzle," Aubertin said. "None of us has come up with a plausible explanation."

Lindsay McClelland of the Smithsonian's Scientific Event Alert Network said he is not aware of previous reports of similar occurrences. But he was interested in this one.

"Be sure to let me know if you find out what caused it." he said.

Destruction by Fire

by Evan Hansen

Anyone who makes an honest effort to reconstruct a part of Earth's prehistory soon recognizes the unique contribution of mythology. While no mythology should be taken at face value, there is an astonishing amount of truth to be learned from it. From earliest times, children have questioned why things are as we observe them, and adults have answered as best they could within the limits of their experience. The questions and answers are passed along from generation to generation, naturally with additions and subtractions, until the central theme or conclusion is institutionalized as tradition.

The collective memory of important happenings is preserved with special care in annals of catastrophes by the survivors who tend to credit their escape to personal heroism or divine intervention. As recollection diminishes and first-hand witnesses are lost to death, collective memories merge into tradition at whatever level of importance an event attaches by reason of its climactic nature and the number of people and places affected.

Most famous of all catastrophe myths handed down to the forebears of the earliest historians, and by them to us, is the account of Noah's Flood, also known as the Deluge. According to Judaeo-Christian tradition, it expunged from the face of the Earth almost every living thing and thus made possible a "new start" for a chosen few species, including the human race. Bearing in mind that the story of the Flood was transcribed from oral to graphic history more than three thousand years ago, one should not quibble with its inaccuracies and embellishments but note how seemingly concurrent are the catastrophes embedded in other traditions and how much good evidence geology provides as to their reality.*

The Deluge was probably the greatest natural disaster that ever afflicted the Earth and its people, but other floods and other kinds of natural disaster are commemorated in all major traditions. Myths of destruction by fire are almost as numerous as the flood myths, and each encapsulates a core of truth, usually within a drab jacket of propaganda; only a few are so colorfully symbolic as to suggest a bit of pandering to those who expect entertainment before getting down to facts. Christian mythology, moreover, is often notional and future-oriented, whereas other mythologies serve only as receptacles for preserving archival views of the past. Many scholars say the difference turns on one word: persecution.

The Jews were subject to persecution for centuries — by the Babylonians, the Persians, the Egyptians, and the Romans. The first Christians were persecuted by both the Jews and the Romans. Persecution is possible only when one group is so much stronger than another that the weaker people see no chance for deliverance through their own efforts; rather than change their religious and social values to those held by their oppressors, the oppressed seek the help of a "higher power."

The Jews sought relief in the prophecies that a "messiah" would deliver them from Rome. As a part of the deliverance process, destruction by flood or fire seemed inevitable, and preparing for it no less than a duty. An ancient myth was therefore resurrected, to turn an accounting of the past into an exhortation for the future. In his *Antiquities of the Jews*, book 1, chapter 2, verse 3, the Jewish historian Josephus relates the story of Adam and his immediate descendants; they were the inventors of astronomy and it was this knowledge that they resolved to protect:

> *And that their inventions might not be lost before they were sufficiently known, upon Adam's prediction that the world was to be destroyed at one time by the force of fire, and at another time by the violence and quantity of water, they made two pillars, the one of brick, the other of stone, and inscribed their discoveries on them both, that in case the pillar of brick should be destroyed by the flood, the pillar of stone might remain, and exhibit those discoveries to mankind, and also inform them that there was another pillar of brick erected by them. Now this remains in the land of Siriad to this day.*

Several Old Testament prophets added similar predictions of a future "day of burning," among them Isaiah, Ezekiel and Joel. Perhaps the most expressive of all was Malachi, who forecast in chapter 4:

> *For behold, the day cometh that shall burn as an oven; and all the proud, yea, and all that do wickedly, shall be stubble; and the day that cometh shall burn them up, saith the Lord of Hosts, that it shall leave them neither root nor branch . . . and yet shall tread down the wicked. For they shall be ashes under the soles of your feet. . . .*

Early followers of the Judaeo-Christian persuasion, believing that these events had not yet taken place, accepted such declarations as promises, or prophecies, of their deliverance from persecution; if Armageddon seemed a viable concept, the churches would confirm its eventuality as a tenet of their faith.

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Turning to the mythologies of people of ancient times who were not Jews, we find destructions by fire also numerous and dramatic, but nonetheless unprovocative; they convey no suggestion that history might, or should, repeat itself.

A tradition most familiar to readers of ***PURSUIT*** is the story of Atlantis, first recounted by Plato, the Greek philospher who lived around 700 B.C. He described an island of greater size, located just beyond the Pillars of Hercules (a name given in Classic times to the rocky promontories that guard the entrance to the Mediterranean, now called the Strait of Gibraltar). This island, known as Atlantis, was inhabited by a race of highly civilized people who had perfected almost every aspect of art, science and technology known to the ancient world. For centuries they dispersed their learning freely among all nations. But gradually, Atlantean attitudes changed. No longer content to preserve their "live-and-let-live" relationship with other nations, they turned their island into a military staging area. Armies were raised, trained and sent forth to conquer the people of Europe, North Africa and the Middle East. But terror begat terror; without warning, the entire island was destroyed in a single day and night by a catastrophic succession of earthquakes and volcanic eruptions. Nothing remained but a thick blanket of

*See the author's article "Geological Evidence of Noah's Flood," Part I in ***PURSUIT*** No. 63, Third Quarter 1983, pp. 98-105; Part II in ***PURSUIT*** No. 64, Fourth Quarter 1983, pp. 163-170.

pumice floating on the water, so thick that it blocked travel by ship for many centuries.

Ever since Plato wrote the history of Atlantis, other historians have wondered whether the account was factual, fictional or perhaps was intended as an allegorical footnote to Plato's *Republic*, the philosopher's greatest work, which embodied his design-plan for an idealized self-governing state.

It would be presumptuous of me to comment further on Plato's Atlantis saga; for the past two thousand years many fine intelligences have focused on its credibility problems and have soon turned away because of the total lack of archeological and geological evidence that a large island west of Gibraltar survived the last Ice Age to become the home of a technocratic civilization whose land, buildings and population were ultimately pulverized in a 24-hour holocaust that ended in oblivion.

A variation of the Plato story had the Atlanteans living on an island called Thera in the eastern Mediterranean. Granted that land and water in southern Eurasia underwent drastic rearrangements while the ice-melt receded northward at the end of the Pleistocene, there is no geologic evidence that another sea passage existed of sufficient size to be mistaken for the Pillars of Hercules, beyond which, Plato said, the island-paradise of Atlantis flourished until nine thousand years before his time.

Thera, moreover, experienced its destruction by fire well within the historic period. There is abundant evidence that sometime around 1500 B.C., a volcano known as Santorini exploded and blew much of Thera into the sea. The explosion may have been the most devastating in European history. Earth and rocks shot upward, then rained down; a massive tidal wave rolled in and flashed into steam as water hit the flow of molten lava and cut a crater more than five miles wide before gasping out its spent energy in clouds of debris-laden fog.

Some historians view the destruction of Thera and the disappearance of Atlantic as one and the same event. Others plead "no contest" but wonder whether the same geological evidence may apply as well, or perhaps better, to the "parting of the waters" which, according to biblical tradition, enabled the Israelites to escape by immediately closing over and drowning their Egyptian pursuers. Still other scholars believe that Santorini spread its pall of death over such a broad area of the eastern Mediterranean as to cause the disappearance of the entire Cypro-Minoan civilization.

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What about the mythologies of other cultures? The Black Death that stalked Europe for four centuries, the Great Fire of London in 1666, the conflagration that burned out Chicago more than two hundred years later, and the San Francisco earthquake, are happenings in our own recent past which enable us to understand how unexceptionally all history is punctuated by natural disasters: some, like commas, denoting pauses that accent the story line; others with paragraphs and chapters finalized by periods. Geology and mythology reiterate evidence that catastrophes have beset mankind ever since the beginning of human life on this planet. Disasters were surely no less devastating nor catastrophes less real for having occurred before the invention of the petroglyph.

Oral tradition should never be confused with true history; but if many traditions seem to lack the objectivity and exactitude of formal chronology, they often reveal those wondrous characteristics which have enabled the human race to continue beyond moments when it seemed most surely headed for termination.

The tradition of the Hopi Indians of Arizona is one of the purest because of the relative isolation of the Hopi from cross-cultural contamination. In concept, the Hopi tradition is one of the grandest. And even those who are unimpressed by Amerindian charisma should think hard before rejecting the geological evidence that seems to confirm much of the Hopi mythology as truth.

The Hopi say we are now living in "the fourth world," three previous worlds having been destroyed by the Creator as punishment for mankind's persistent disobedience. The first world was destroyed by fire; the Creator, Sotuknang, had warned of the burning, so those who had remained faithful to their instructions were sent below the surface of the Earth for refuge.** Then:

> *Sotuknang destroyed (the Earth) by fire because the Fire Clan had been the leaders. He rained fire upon it. He opened up the volcanos. Fire came from above and below and all around, until the Earth, the waters, the air, was all one element: fire; and there was nothing left except the people safe inside the womb of the Earth.*

This is an astonishingly accurate description of massive ashfall from a volcanic eruption. There is nothing mystical about it; volcanos were opened and fire did rage. Still to come were the destructions of the second and third worlds.

The Hopi have long known that the Earth is a sphere, that it rotates. According to the tradition, twin brothers had charge of keeping the planet turning smoothly. When the Creator decided to destroy the Earth a second time ...

> *Sotuknang commanded the twins Poqanghoya and Palongawhoya to leave their posts at the north and south ends of the Earth's axis, where they were stationed to keep the Earth properly rotating. The twins had hardly abandoned their stations when the world teetered off balance, spun around crazily, then rolled over twice. Mountains plunged into the seas with a great splash. Seas and lakes sloshed over the land, and as the world spun through cold and lifeless space, it froze into solid ice.*

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After an exile of many years, the twins were ordered back to their stations. Soon they had the Earth rotating as smoothly as ever; the seasons resumed their regular ways and the hearts of the survivors were filled with new hope as sun, moon and stars again cast their radiance from familiar directions.

The inhabitants of the third world greatly multiplied their population and expanded knowledge. Members of their Bow Clan built a vehicle that could fly through the air. The Patuwvota, as it was called, seemed to promise many benefits for the third-worlders. But a few opportunists conspired to pervert the new technology. They sent out the Patuwvota with troops aboard to steal land owned by others. Eventually all the nations and cities were building Patuwvotas and raiding each other. War and corruption spread chaos throughout the third world.

Once again the Creator determined to wipe evil from the face of the Earth, that mankind might re-learn the ways of good will, peace and progress. But wickedness had spread too far to permit the deliberate selection of special persons who would be allowed to escape destruction and become the progenitors of the fourth world. All who would listen were sent in search of

**As described in *Book of the Hopi* by Frank Waters (Penguin Books, New York, 1979).

hollow reeds in which to seal themselves with enough food and water to survive for a considerable time. Then ...

Waves higher than mountains rolled in upon the land. Continents broke asunder and sank beneath the seas. And still the rains fell, the waves rolled in. The people sealed up in their hollow reeds heard the mighty rushing of the waters. They felt themselves tossed high in the air, then dropping back into the water. Then all was quiet ... for so long a time they thought would never end, they kept floating.

As the flood-waters receded, the highest mountain peaks were the first to break through the surface, and on one of the tiny new islands thus formed, the fragile reed-boats grounded, one by one. When the voyagers dared to believe their long journey had ended, they unsealed their reeds and stepped forth on unknown land.

There was little to recommend it for settlement. The mountaintop plateau was too small and the rocky soil too infertile to support even a token population. Therefore (so we are told in a remarkable parallel to the Genesis account of the Noah's Ark landing), the Hopi ancestors sent out birds to look for land more suitable to their needs. But the birds returned with empty beaks, unlike their biblical counterparts who bore olive twigs to show Noah's passengers how near they were to the Promised Land. Undiscouraged, the Indians continued their journey, proceeding from one island to the next, stopping only long enough to rest occasionally and take sustenance from whatever wild food they could gather. With their course always set toward the rising sun, the travelers eventually reached a land of such limitless expanse as they had never seen nor dreamed of. Here they settled — the first humans to cross the threshold of America and the first inhabitants of the Hopi fourth world.

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Readers of ***PURSUIT*** are probably aware of the theory advanced in 1980 by geologists Luis and Walter Alvarez, a father-and-son scientific duo based at the University of California, Berkeley. They attempted to explain the sudden disappearance of the dinosaurs as a natural chain-reaction triggered by a single catastrophic event. The Alvarez theory proposed that the dinosaurs became extinct at the close of the Cretaceous epoch when a comet or asteroid hit the Earth, vaporized and literally threw rock dust to the four winds, which churned it in suspension until it blanketed most of the planet. The sun's rays were blocked and the Earth's surface cooled to a point below which natural life-supprt systems were no longer operational. The dinosaurs died, and about half of all other life forms died with them.

Geological evidence for this theory is a layer of dust, now only a few inches thick but found worldwide, at the level between the top Cretaceous rock and the bottom of the younger Tertiary rock piled above. Analysis of the dust layer has revealed a content of iridium much higher than that of most other earthly rock, but about equal to the iridium content of asteroids.

I have no argument with the Alvarez theory. We know that *something* killed the dinosaurs, and this explanation is supported by observable facts. Most important, at least for the purposes of this study, are the additional questions raised by the theory when we attempt to understand the effect of cataclysmic forces moving relentlessly over eons of time to destroy some parts of the world in apparent preparation for the building or rebuilding of other parts. For example, if a miles-thick layer of dust, represented today by the token remainder of a few inches, could have exterminated an entire class of ancient life, what would be the result of a volcanic eruption so massive that the ash now totals in excess of three thousand feet thick, over a distance of more than five hundred miles? That would be a destuction by fire like no other!

In the American southwest, the rock formation most easily recognized is Navaho sandstone, so-called because the Navaho Indian reservation is located close to the center of its principal formation. I do not know the extent of the area, but I have followed it for a distance of more than five hundred miles. In Utah, it extends northward almost to the Uintah Mountains. I have tracked it within a hundred miles of Wyoming, where it goes under younger rock. How much further it extends below the surface remains to be determined. On the southern border of Utah the Navaho sandstone is exposed almost to the Nevada border, where it again dips under younger rock for an unkown distance westward. In Arizona it can be traced to the middle of the state, ending at the Mogollon Rim, and if it goes further south, it will again be found buried under younger rock. It must also extend into Colorado and New Mexico, although I do not know how far.

Navaho sandstone is composed of red quartz crystals. The crystals are sharp, indicating they traveled only a short distance. The formation is Eolian, i.e. wind-formed, with clear dune-interbedding visible wherever the rock is exposed. The thickness varies; in the center it often exceeds two thousand feet. Atop the red sandstone lies another thousand feet of white sandstone, identical in every respect except color. The red color indicates the presence of iron, the white shows its absence. Contact between the two is distinct — but, where winds have blown together a mixture, inspection reveals no pink cyrstals. Thus the possibility is eliminated that the red coloration was caused by rusting or long submersion in water.

The dune appearance strongly suggests wind-formation, but the conventional definition of Eolian rock or comparing it to the "dry, windy conditions that prevail in the Sahara Desert" offers no explanation of what formed this sand in the first place. The crystals are uniform in size, too sharp to have moved very far from their place of origin, and there is no mixture with rock from other sources, as there would be in sand collected by wind or water.

The puzzle did not start to unravel until the St. Helens volcano blew up in 1980. Having obtained a sample of the St. Helens ash, I looked at it through a magnifying glass, expecting to see basalt dust. Much to my surprise, the specimen consisted mostly of small quartz crystals; perhaps ten percent were puffed-up like popcorn. Small amounts of basalt dust were present, but no more than one or two percent of the sample.

My questions were beginning to be answered: Quartz is formed from silica. Silica dissolves in water in the same manner as salt or sugar, but only under intense prssure and extreme heat. When the water evaporates, the silica precipitates as quartz crystals. All the necessary elements and conditions were present when an earthquake split Mount St. Helens. The sudden release of pressure caused the water to flash into steam. The resulting explosion released energy equivalent to the blast of a small hydrogen bomb. Sufficient water was present to dissolve silica out of the molten lava. When this was blown high into the air and the water evaporated, the quartz crystals fell as ash. Those crystals which were puffed up like popcorn told their own story: precipitated out while still under pressure; water trapped insided flashing into steam at the instant pressure was released; the steam rupturing the shell of the crystal without causing it to shatter. No wonder the crystals looked like popcorn; the same

process produced them in macro-scale as turns corn kernels in to mounds of lip-smacking goodness for movie enthusiasts and kids kept indoors on a rainy day.

As I was studying the St. Helens ash, memories of the Navaho sandstone explorations crossed my mind. I rummaged around and found a bit of the sandstone to place under a glass alongside the St. Helens ash. Would you believe I found no differences in basic structure between the two samples? Both were quartz crystals of uniform size, both still "sharp" crystals; about ten percent of both were puffed up like popcorn, and both had about one to two percent basalt dust. Suddenly I knew it had to be that the Navaho sand was extruded by a volcanic eruption similar to St. Helens', but on a scale so massive as to escape human comprehension. A single volcanic cone had expelled the ash, but the sandstone must have erupted out of a rift hundreds of miles long, and continued to erupt for centuries, perhaps even millenia.

Of course I tried to correlate my discovery with the Alvarez theory of asteroid impact. The result was negative. It would have been neat to find physical verification of the boundary between Cretaceous and Tertiary rock. But my Navaho rock is much older; it is, in fact, the transition rock between the Triassic and Jurassic, the latter being on the level next below the Cretaceous, as shown in Fig. 1.

If the Alvarez theory is correct, that a few inches of dust could exterminate dinosaurs, what would be the effect of three thousand feet of dust? Although our investigation is limited to a local formation in parts of four states (Arizona, Colorado, New Mexico and Utah), a volcanic eruption of such magnitude would certainly have global implications. The finer dust would be lofted so high into the stratosphere that centuries would pass before

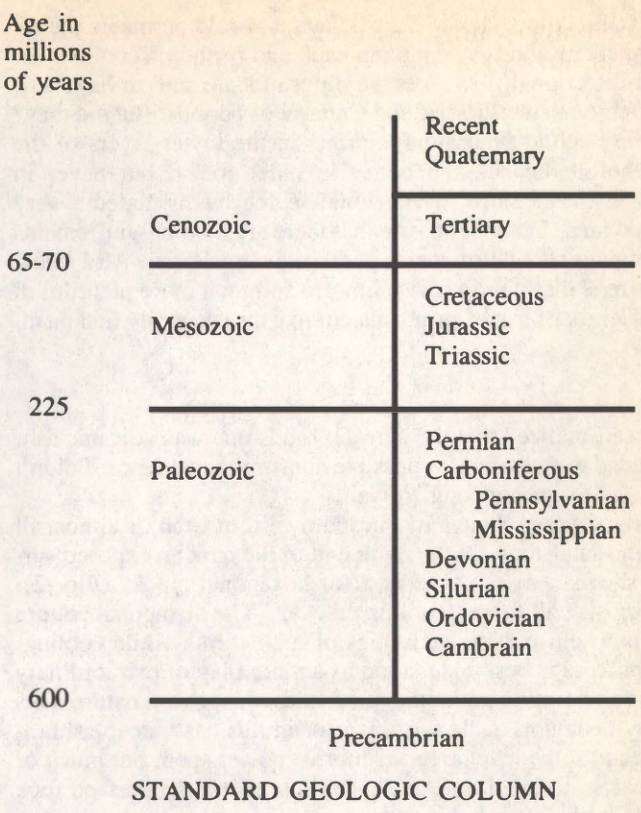


Fig. 1 Standard geologic column.

Fig. 2 Hexagonal cracks in Navaho sandstone at Snow Canyon State Park, Utah.



much of it came back to Earth. Gasses would permeate the atmosphere as winds swept them back and forth in a continuous, omni-directional flow. Yet the dinosaurs are said to have survived through the Jurassic and Cretaceous periods. But did they?

I have found dinosaur footprints in the lower layers of the Navaho sandstone, and bones in older rocks, but never in younger ones. Since my personal search has included a very limited area, I cannot be sure that there are no dinosaur remains in younger rocks elsewhere, perhaps even in Utah. All I know for sure is that dinosaur remains are so much more plentiful in the older rocks that even an amateur like me can easily find them.

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Once I realized that the Navaho sandstone was volcanic ash, I decided to stay alert for possible confirming evidence. I didn't have far to go nor long to wait.

Snow Canyon State Park, in southwestern Utah, is almost all Navaho sandstone. In the north end of the park an exposed surface shows a massive network of hexagonal cracks (Fig. 2). Geologists call them "cooling cracks." The hexagonal pattern occurs when massive quantities of rock shrink while cooling. The process is best understood as an interplay of extraordinary forces performing under the same rules that govern nature's ordinary behavior. A flow of lava, or in this case, deep ashfall, arrives at some level area, its motive power spent but much of its heat still sealed inside. As cooling starts, the surface rock begins to shrink, but the interior remains too hot to shrink. The relatively thin surface layer, rapidly cooling on top yet still receiving intense heat from below, is thus subjected to great stress which is relieved only when the temperature differential widens sufficiently for cracks to occur.

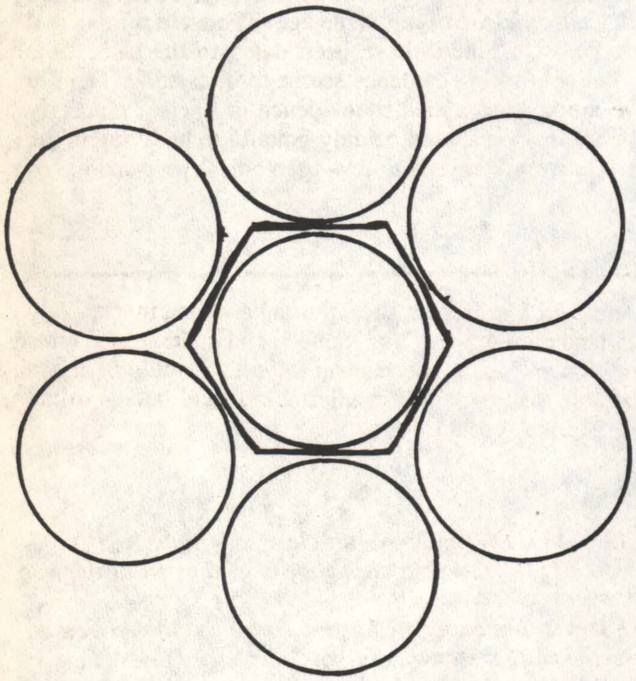


Fig. 3 Interstices in hexagonal form produced by pressure from contiguous circles.

The action visualized in Fig. 3 is one of shrinkage and compression of rock particles in the circular shape that nature seems to favor; if the surface cools uniformly, every molecule of rock will shrink equally. And however tightly the surface is crammed with circles, there will be interstices between them. The interstices will be hexagonal since that is the natural shape of the smallest gap between similar circles, or spheres juxtaposed on the same plane, which are subjected to enough pressure to keep them continuously tangent to each other. The industrious honey bee provides an everyday example: The "storage bins" it builds inside its hive are composed of round tubes, not hexagonal ones. As each tiny cylinder becomes stuffed, its sides bulge; as each cylinder presses against its neighbors, arcs become angular, hexagonal interstices are filled, and the familiar honeycomb pattern appears.

In various venues of Earth's natural wonderland, circular forms often transmute to angular forms under extreme stress. But the hexagonal cracks in age-old volcanic rock deserve special consideration — for what they are, and for what they tell us about the forces that made them.

The cracking starts because the exposed surface cools before air reaches the interior of the rock. Once cooling begins, it progresses inward, the inside cracks following the original pattern of the surface cracks. Eventually the cracks penetrate the full depth of the rock and the result is a series of tightly packed, roughly shaped hexagonal columns. In basalt, the formation is called "Devil's Post Pile." Single columns can be lifted intact from piles where access is not a problem and suitable equipment is available. Home-builders who have used them admit the basalt columns are difficult to work with, but no more so than the rough-trimmed trees used in log cabin construction. Navaho sandstone, however, is not a good building material. It is too massive and too soft; the columns are well-formed but tend to shatter or crumble when removal is attempted. A study of the cracks is most rewarding when done at a location where the hexagonal surface pattern progresses downwards to produce a vertical columnar array.

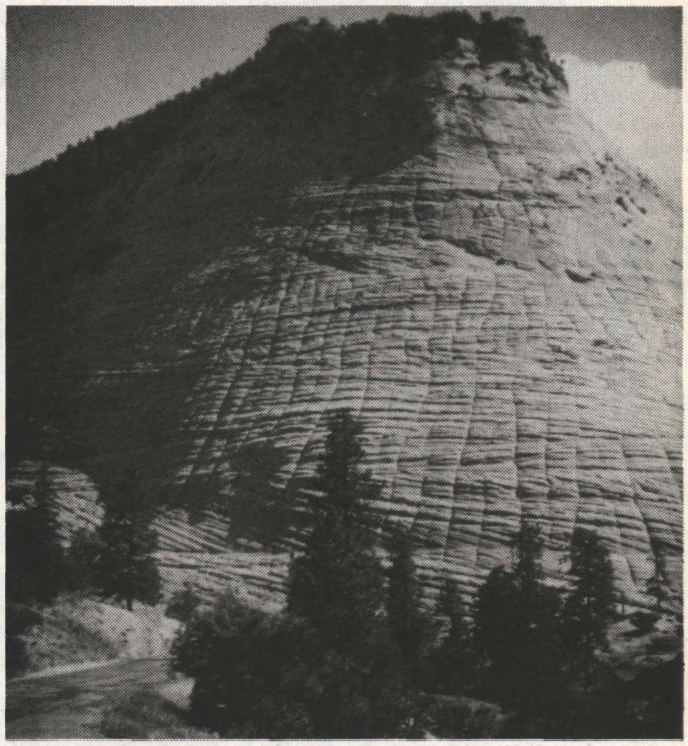


Fig. 4 Checkerboard Mesa in Zion National Park, Utah.

Checkerboard Mesa in Zion National Park (Fig. 4) offers one of the best side views of the vertical cracks. Millions of people have looked at this formation and it has been photographed thousands of times, but if anyone has seriously investigated how it was formed and why it presents such a curious appearance,

the answers have not been published. Clearly seen are the horizontal strata of many different angles, interlocking like slices of pie cut from circles and laid against each other. No question that these are wind-formed dunes. The vertical cracks run mostly through the entire mountain, but the few that go only part way invariably start or end at the place where the two dunes meet.

In order to show cooling cracks such as these, the sandstone had to fall from the air while powerful winds were blowing, to swirl the ash-drift into dunes. At the same time the individual crystals must have held so much heat that, once settled, they fused to form solid rock. If they had not fused almost at once, the grains would have slid past each other during the cooling process and no cracks would have been formed.

It staggers the imagination to try to visualize thousands of St. Helens-type volcanos erupting at the same time — ash falling over a radius of five hundred miles, to depths measurable in thousands of feet — gasses filling the entire atmosphere. Even if these were purely local events, the effects would be global. Were they local, or were they links in a chain of global events? After all, something of the sort must mark the boundary between Triassic and Jurassic rock. If the two are distinguishable, the change had to occur worldwide and should be identifiable. My knowledge of geology is limited and so are my opportunities to travel. I suggest that others try to follow this boundary in their respective regions. We need to correlate Navaho sandstone with formations of the same period worldwide. What was active, and what was stable enough for life to survive? Does any of the drama date the beginning of the Atlantic Rift — its opening up into an ocean?

Could it be that major catastrophes marked the boundaries of other periods? In Utah, all rock of Triassic and Jurassic dates was produced by some form of volcanic activity. Would a worldwide investigation of "boundary rocks" from the thresholds of all the periods tell us that "destructions by fire" probably occurred dozens of time in prehistory? And what can we learn from fossils?

Fossils are often described as products of petrification, but actual petrification of bone or wood is rarely evident. All the fossils I have ever found fit easily into one of two classifications. The most common type of fossil is simply a print in ordinary mud, some part of which later hardened into rock. No actual remains exist, apart from carbon stains or the occasional shell that still retains calcium. The other type of fossil does have remains of actual bone or wood but long since converted to silicate rock. In every case of actual remains, the surrounding rock is high-silicate "mud," similar to the mud-pot flows in Yellowstone Park. Assuming the mud was hot when the tree fell or the animal stumbled into it, the heat killed all the surface bacteria and thus prevented decay. Silica was already in solution in the mud, and it replaced, molecule by molecule, the wood or bone until the resulting rock reproduced the exact form of the original substances. I have not discovered whether petrification takes place in this way elsewhere, but in Utah I have never found fossil-remains in rock other than volcanic clay or ash. I suspect the only reason we have dinosaur bones at all is that some few of the animals wandered into areas of mild volcanic activity, and after panic and exhaustion defeated efforts to extricate themselves, they were slowly boiled to death.

As a resident of Utah, I am aware that evidence of ancient volcanism is here "carved in stone" for everyone to see and study. In Tertiary times, i.e. twenty to thirty million years ago, Utah experienced massive eruptions collectively classified as ignimbrites. These range from ashfall tuff to molten forms almost like basalt. Whereas basalt is a magnesium silicate rock (called sima), surface rock is an aluminum silicate rock (called sial). Our ignimbrite is sialic, so it must be re-melted surface rock rather than the deep sima rock found closer to the Earth's core. The sialic formation has two arms in a V shape, one arm pushing eastward across Utah, the other extending to the northwest into Nevada. Both are one hundred fifty miles long, with older rock at the north. The two arms meet under this valley, which carries the full formation from oldest to youngest. The formation is three thousand feet thick beneath us.

The Columbia River basalt flows of Washington, Oregon and northern California are of this same age. There are rumors that volcanic fields in Siberia have been dated to the same time period, but confirming evidence seems to be lacking. Here in Utah we are so surrounded by evidence of ancient planetary catastrophes that we should be duly grateful to be living in the present relatively stable period — geologically speaking, of course.



An Experiment in Dowsing

(continued from page 160)

feel that they should have been, because of their simplicity and very obvious, basic nature. However, the longer I live, the more I find that the simple and the obvious is so often completely overlooked; and in a case such as this, the buffs, almost to a man, seem to be obsessed with the idea that "dowsing" is an attribute of the human psyche, or at least the human body; and, what is more, to the exclusion of all else. That it could be a purely natural and universal behaviour of both animate and inanimate objects, interacting in certain special circumstances, usually puts said buffs into a very stubborn and often a rather nasty mood, in which logic does not prevail.

If such experiments *have* been conducted by others, I would very much like to hear about them and be given references to any findings that have been published. Then, if any of you might reproduce what we did, all we ask is that you have sufficient witnesses, keep careful detailed records, including timed motion pictures, and have your reports affidavited. Any such confirmation might prove very valuable to all of us; for, let us not forget, the U.S. Marines are already using dowsing in Viet Nam to detect land mines, Viet Cong tunnels, and underground arms and munition caches. A mechanism to do this would be much more reliable than even the steadiest hands and nerves of the toughest Marine veteran.

●

EDITOR'S NOTE: The above article was written by Ivan T. Sanderson, SITU's founder, during the closing years of the war in Viet Nam.

Much has still to be learned about dowsing. Should you attempt to repeat this experiment with mechanical dowsing, as suggested here by Sanderson, we would be pleased to learn of your findings.

We recommend that you contact The American Society of Dowsers, Inc., Danville, Vermont 05828-0024 for information on their activities. Their next annual meeting will be held in Danvillle, VT on September 10-15 1985.



The Peculiar Origins of ALEK J. HIDELL

by J. N. Williamson

In the numbing wake of President John Fitzgerald Kennedy's assassination and the subsequent shooting of his presumed killer, Lee Harvey Oswald, names of people unknown to most Americans prior to November 22, 1963 were instantly memorized. Other names surfaced — names of men and women who, whether actually or imaginatively linked to what happened in Dallas — seemed to be part of the same fateful procession.

Of striking interest to those familiar with astrology and other arcane crafts were a number of historic similarities between Kennedy, the youthful 35th President, and Abraham Lincoln, the 16th President;

—Each was shot in the head on a Friday.

—Each was succeeded by a vice-president named Johnson: Lincoln by Andrew Johnson, Kennedy by Lyndon Baines Johnson.

—Lincoln and Kennedy were elected in 1860 and 1960 respectively; they were shot by southerners born a hundred years apart: John Wilkes Booth in 1839, Lee Harvey Oswald in 1939.

—President Lincoln's secretary was named Kennedy; president Kennedy's secretary was named Lincoln. Each woman tried to steer her president away from his fatal destiny.

—Booth and Oswald — both with full names totaling 17 letters — were killed before being brought to trial, the former committing assassination at a theater and running to a warehouse, the latter firing from a warehouse and running to a theater.

—To the macabre fascination of the astrologically inclined was the infamous 20-year Jupiter-Saturn conjunction, which scarcely needs repetition except to remind us that no President elected in 1860, 1880, 1900, 1920, 1940 or 1960 has outlived his presidency.

•

In the aftermath of the Texas tragedy I was one of many who wondered, though seldom aloud, whether the person or persons allegedly involved in President Kennedy's murder were aware of these bizarre and enigmatic facts. What if members of a conspiracy knew about them — and believed in both national destiny and individual determinism? What if Oswald, or others, shared the views of the philosopher who made the following observations?

* In the destinies of the several cultures that follow upon one another...is compressed the whole content of human history.
* This is our purpose: to make as meaningful as possible this life that has been bestowed upon us...to act in such a way that some part of us lives on.
* The men of the "new order" upon whom every decline-time founds such hopes...(are) the newspaper-readers...the "educated" man who then and now makes a cult of intellectual mediocrity and a church of advertisement; the man of the theaters and places of amusement, of sport and "best sellers."

The philosopher thus quoted was born in one of those even-numbered, double-decade years of Jupiter-Saturn conjunction, to wit, 1880.

To the best of my knowledge, the alias used by Lee H. Oswald — ALEK J. HIDELL — received little attention from those with an interest in astrology or numerology. Perhaps personal perceptions are numerously influenced but never astro-oriented, or the reverse may be true; it doesn't matter. What does matter is a bevy of questions like these:

Is it possible that Lee Harvey Oswald chose his strange alias because of an undisclosed passion for the arcane? Did the ingenious fellow who believed HIDELL was an anagram of Robert Louis Stevenson's symbol of schizophrenic Jekyll/Hyde — have it right — or is that a little too much? Did Oswald work actively with Jack Ruby, the man who later killed him? *Why* was the made-up first name of Oswald's alias spelled with a K to end up as ALEK instead of the more usual ALEC or ALEX?

I propose that the answers lie in a mixture of numerology and astrology stirred to an insane but clever boil by Oswald and Ruby. If evidence can be gathered that demonstrates a likely belief on the part of the still-enigmatic figures involved in the 1963 assassination of the President, we shall move nearer to the long-sought bedrock of truth. Let's start with a table of numerological values ("vibrations") assigned to the 26 letters of the alphabet and related signs of the zodiac:

A	Taurus	1			
B	Virgo	2	Aries	13	M
C	Neptune	11	Taurus	14	N
D	Scorpio	4	Gemini	17	F, PH, and P
E	Jupiter	5	Cancer	18	SH, TS, TZ
F	Gemini	17	Leo	19	Q
G	Libra	3	Virgo	2	B
H	Capricorn	8	Libra	3	G
I	Uranus	10	Scorpio	4	D
J	Uranus	10	Sagittarius	7	Z
K	Neptune	11	Capricorn	8	H, CH
L	Pisces	12	Aquarius	9	TH
M	Aries	13	Pisces	12	L
N	Taurus	14	Sun	21	S
O	Mars	16	Moon	20	R
P	Gemini	17	Mercury	1	A
Q	Leo	19	Venus	6	U, V, W
R	Moon	20	Mars	16	O
S	Sun	21	Jupiter	15	E
T	Pluto	22	Saturn	15	X
U	Venus	6	Nodes	10	I, J, Y
V	Venus	6	Neptune	11	C, K
W	Venus	6	Pluto	22	T
X	Saturn	15			
Y	Nodes	10			
Z	Sagittarius	7			

•

Numerologists add the number-equivalent of each letter in a person's name. If the total has three digits, the three are added; the same with four-digit totals. Then the base number is found in the preceding chart and the zodiacal sign is said to be active and, in a natal chart or horoscope, somehow influential.

Oswald usually signed his name "Lee H. Oswald." Substitu-

tion of numerical equivalents for letters produces the following sequence:

12 + 5 + 5 + 8 + 16 + 21 +6 +1 +12 +4 = 90,
and 9 + 0 = 9

Astrology tells us that 9 is adjacent to Aquarius.

To "count" a year, numerologists exclude the first two digits (denoting the century) and add the last two. Hence, 1963 becomes 6 + 3 = 9. November's eight letters, when translated, add to the same result:

14 + 16 + 6 + 5 + 13 + 2 + 5 + 20 = 81,
and 8 + 1 = 9

The name "Kennedy" contains seven letters which, when translated, add up to 63; 6 + 3 = 9, and our year-identifier is thus linked to a victim-identifier.

•

In the solar charts constructed for Kennedy and Oswald (with merely the sun rising, hour of birth omitted) we discover confirming information of an astrological persuasion. We find Mars — the planet of action, ambition, passion — in that most electrical and unorthodox of zodiacal signs: Aquarius. I think Oswald, too, recognized the data as signifying the start of the new Aquarian Age. Oswald, however, was a Libran, and persons born in the Venus-ruled sign tend to put things off, to seek close relationships and "talk a good game," but often find it hard to act.

Such is not the case with Aries, the sign which opposes Libra — *ruled* by Mars — and the sun-sign of Jack Ruby, the man who murdered Lee H. Oswald. It's not hard to see that this unsavory pair — the wandering dreamer and the wheeling-dealing police informant — had a mutual need for covert identity.

Jack Ruby's guilt was plain and unquestionable, but who knows or will ever fully understand what elements of parentage, education, experience, memories, even hopes, coalesced in Ruby's mind at the instant he killed the man who stood accused of murdering the 35th U.S. President? From years back, Jack Ruby was known to have admired Kennedy, and one should not forget the childlike importance some people place upon shared names. But a neurotic man who cannot get near the object of his admiration may feel abandoned, outraged by the love-object's changes of mind or human errors. Consider also the unreasoning youth who, 18 years later, grievously wounded President Reagan and then admitted the sole motive for his assault was to win the attention of an 18-year-old movie starlet. Oswald, who had lived behind the Iron Curtain, shared with Ruby a starvation for notice and approbation and was willing to settle for recognition by the professed enemies of his own country.

When they saw a need for an alias useful for joint actions or statements, available to either man for covert correspondence, each surely sought top billing. Most wanted criminals who change their names retain their initials or first names.

But after idle conversation turned to calculated planning — not for a political rally or hold-up but for the slaughter of a President — the risks were obvious even to thrill-seeking wrong-righters. Another name would be required which utilized elements of their own unique identities, along lines of self-perceived brilliance. So, I believe, they began — by deciding to *combine* their first names.

"LEE," an uncomplex three-letter monicker using the most common letter of the alphabet, was to combine with a matching three letters from Ruby's first name. A helpful consonant, the J, and another useful vowel, A, were chosen at once; that left the C and K of "JACK."

Using Scrabble titles, or perhaps scraps of paper with letters scrawled upon them, the two conspirators came up quickly with a choice between "Alec" or "Alek"— with an "E" in the Libran's name left over. Let's come back to that.

"D'you think either word has a secret meaning?" one man whispered to the other. Then, feverishly consulting a dictionary, they found...*Alec*, a Latin derivative reaching to the year 1520 — a word which means "herring." Why, a *red herring*, as in the then-recent public use of the term, meaning a false clue, one that sends searchers in a different direction! Perfection!

It was Oswald who insisted upon changing the "c" to a "k," I feel sure; in the tarot numerology herein employed, the two letters have the same value. But a "k" would complicate matters for someone tracing their thinking, Oswald believed, and it also paid covert honor to at least three Soviet cities: Aleksandriya, and Aleksin and Aleksandrov — the latter two near Moscow, one of them visited by Oswald himself!

"You have hidden us well," Jack applauds Lee, perhaps; "but we need a last name." And, with a smile spreading across his lunar face, he shows Oswald what he has found in the dictionary by beginning with the elementary word "hide": *Hidel*, or — Old English, and plural — *hydels*, the meaning of which is...*hiding place.*

Not at all coincidentally, finding "hidel" solved the problem of using the left-over "e" in Oswald's first name: by *hiding* it in the second name of the alter ego.

There was much left to trouble one or both members of this unfunny odd couple, even as they reveled in their cleverness. Remember, we are not reasoning backwards, as did the logical-minded code-breakers of the O.S.S. in World War II. We are adducing surmise from the twisted thinking of men who were, at best, fantasizing a plot to kill the President. At worst, we are second-guessing hateful paranoids, sociopaths or psychopaths.

With the EW dropped, the word-scrambled ALEK J. HIDELL satisfied ego without sacrifice of stealth. Was it strange, or simply inevitable, that those 11 letters would translate to a number value of 90, identical with the translated total of LEE H. OSWALD?

Does it all sound absurd, even mad? Of course. But try adding up the numerical values in your own name to see if it totals 90. Ruby's name did not. John F. Kennedy's name translates to 128 "values" which become 11, then 2. My name, J. N. Williamson, reduces to an 8, as does Ruby's. And what about the man who would become President of the United States in the event of John Kennedy's death? What of Lyndon B. Johnson? His name totals 171 in terms of numerology, and 1 + 7 + 1 = 9, the same as Lee H. Oswald's name totted up to 9 + 0 in the final addition.

In astrology, points of opposition (180°) and square (90°) signify stress, hazard, illness, not to mention sharp differences of viewpoint, even open enmity. Kennedy's Neptune, "his" planet when the values of his name are added, was opposed by the previously cited Oswaldian Mars in Aquarius. JFK's Uranus, ruler of the zodiacal sign of Aquarius, the planet of unexpected and sweeping change, was squared by Lee Oswald's Uranus. The Libran's natal Uranus "sits" directly upon the President's Jupiter, Mercury *and Mars* — in the Eighth House. That location of any horoscope is described by some astrologers as the House of Death.

Are there supportive data when one attempts to trace these convoluted paths and determine the precise identity of "Alek J. Hidell?" I believe so.

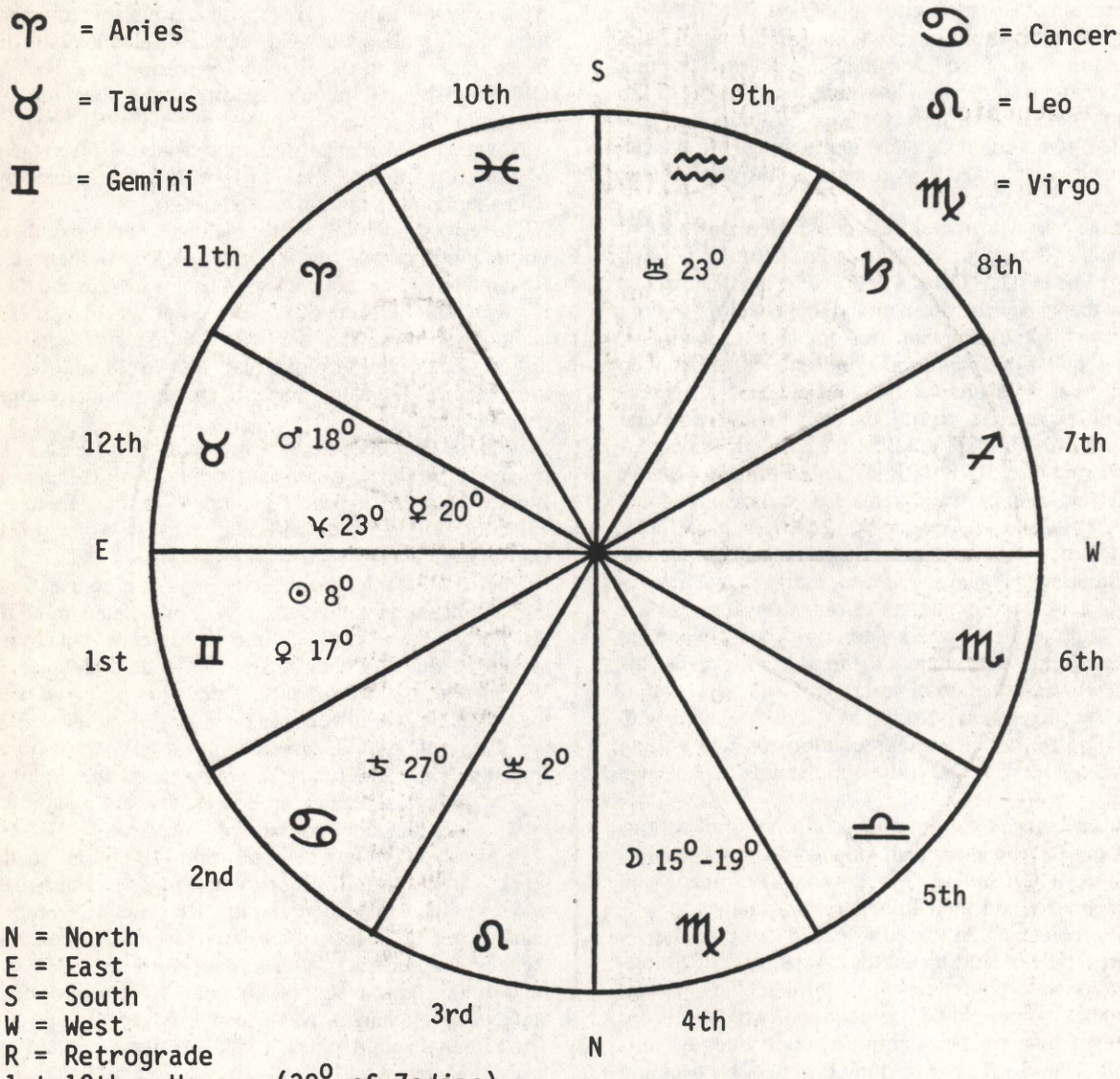
We have seen that, according to extremist soothsayers, John

F. Kennedy "had to be" shot in November — a 9 of 1963, another Oswald-matching 9. November, the eleventh month, begins the eleventh period by astrological count, namely, Aquarius, the Louisiana native's crucial sign, with his Mars there. Scorpio, consuming most of November, opposed the President's Jupiter in Taurus; if he did not perish immediately from his wounds, Kennedy would, within a matter of two days, find himself in the opposing Sagittarius period. Figured astrologically from Aries, he was shot on the cusp of the zodiacal sign which happens to fall on the *9th*.

The philosopher quoted earlier in this essay was born in Germany in 1880 and raised in modest circumstances. Even by the rigorous standards of those times, his higher education was no more than sufficient to prepare him for a teaching career in mathematics at the secondary school level. He was slight of stature and physically frail; his background, occupation, manner of speech and apparent lack of motivation hid an incredibly detailed knowledge of history and systematic philosophy. Then, in 1918, the year of John Kennedy's first birthday, the philosopher expounded his prophetic concept in volume one of

JOHN FITZGERALD KENNEDY

SOLAR CHART - MAY 29, 1917



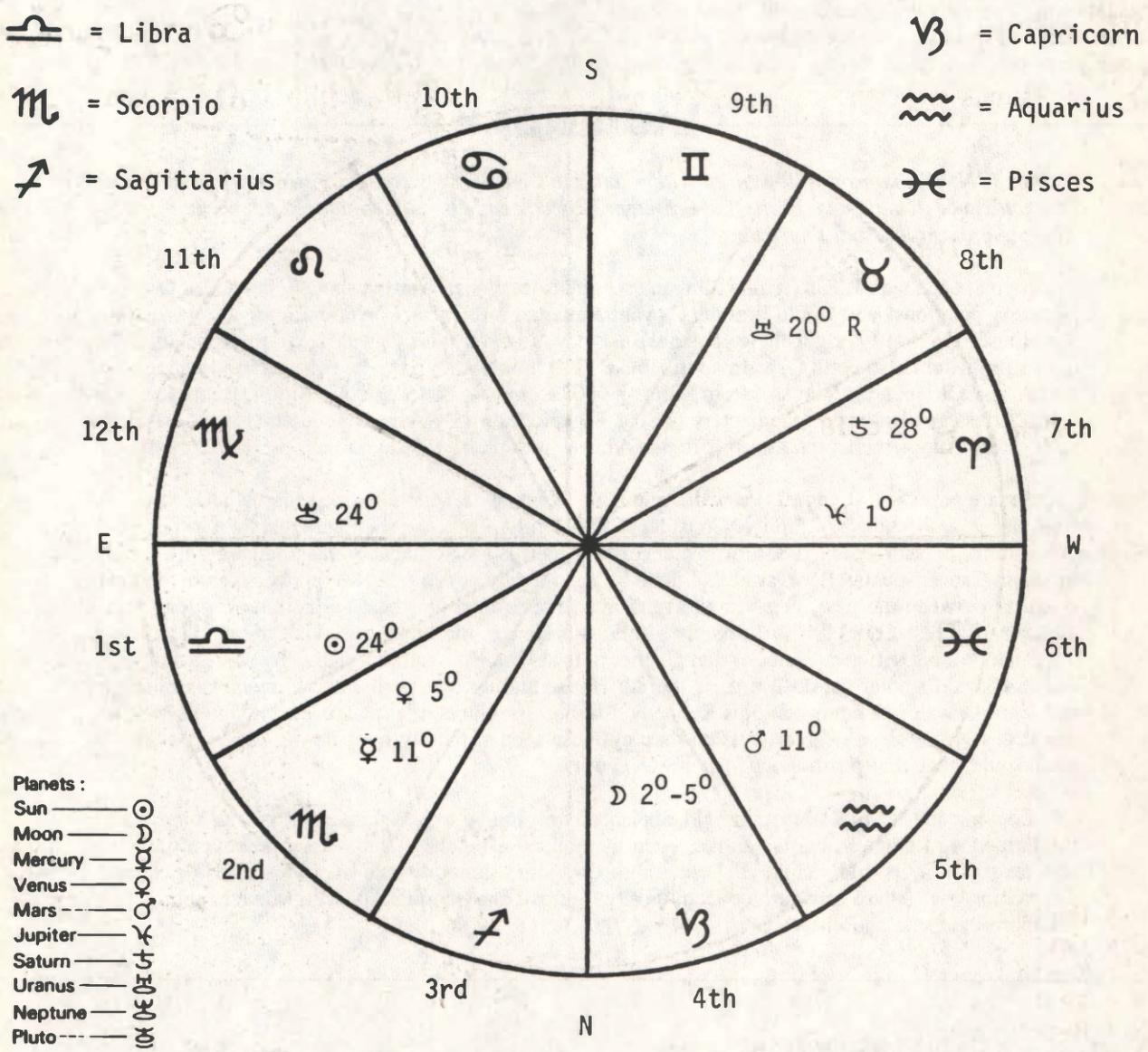
The solar charts were developed from the author's sketches. — Ed.

the book he titled *Decline of the West*; volume two was published four years later. This panoramic work

> "...predicted the disintegration of Western European and American civilization after a violent 'age of Caesarism,' arguing by detailed analogies with other civilizations and interpreting history as the life of nine organic cultures: Egyptian (3400 B.C.-1205 B.C.), Indian (1500 B.C.-1100 B.C.), Chinese (1300 B.C.-A.D. 200), Classical (1100 B.C.-400 B.C.), Byzantine (A.D. 300-1100), Aztec (A.D. 1325-1500), Arabian (A.D. 300-1250), Mayan (A.D. 600-960), and Western (A.D. 900-2400)...All cultures follow the same pattern of growth and decay in approximately the same length of time; they pass through the stages of pre-culture, culture and civilization, and are marked by identical crises. Alexander, for example, plays the same role in Classical culture as Napoleon in Western culture...Each culture has its unique 'soul' or pattern of experience and creation, expressed in its forms of art, thought and action. Thus the Western 'Faustian' soul is characteriz-

LEE HARVEY OSWALD

SOLAR CHART - OCTOBER 18, 1939



ed by a yearning for infinity..." (Commentary by Monroe C. Beardsley in *Collier's Encyclopedia*, 1974 ed.)

"All the great leaders in history go 'right,' " said the philosopher. It was no secret that John Kennedy had begun to espouse policies meant to lure erstwhile Democratic, Republican and independent voters from the powerful conservative forces mustering throughout the Southwest under the aegis of Arizona Senator Barry Goldwater.

In another prescient maxim the philosopher noted: "It is from the intellectual 'mob,' the spiritually unfit and the morally inhibited at its head, that the gangsters of Liberal and Bolshevist risings are recruited."

Lee H. Oswald was a dabbler at learning and an extensive though apparently aimless reader. We do not know whether he ever studied the philosopher's work or perhaps arrived at an analogous conclusion from other reading. Assuredly, Oswald would have found kinship with the older man's claim that Western society was "metaphysically exhausted," had entered a period of decline, and would inevitably disappear. In a book published ten years before John Kennedy became President, Crane Brinton* wrote that philosophers sought "a sign from the past, a sign of what lies ahead," and "for centuries ahead when no man now alive can ever check up, in the flesh, on these prophets." Most of them, Brinton added, "are prophets of impending doom."

A killer who not only resorts to numerology for the choice of an alias but also strives to stamp his name and number onto such horrendous handiwork might well have felt the influence of a prophet-philosopher. A social deviant, growing up alone, self-perceived as "different," could ask what Great Thinkers shared his name — and find the answer in a library or bookstore, in a volume titled *Decline of the West* by OSWALD SPENGLER.†

One wonders if either Lee Harvey Oswald or Jack Ruby ever discovered that philosopher Oswald Spengler was born on May *29th — the same day of the same month that John Fitzgerald Kennedy was born.*

* *The Shaping of the Modern Mind* (Mentor, 1953).

† Originally published in Germany under the title *Der Untergang des Abendlandes. Umrisse einer Morphologie der Weltgeschichte.*

ADDENDA

Author J. N. Williamson followed up with a letter to **PURSUIT** *'s editors in which he added details of significance to the "solar charts" of President Kennedy and Oswald reproduced on preceding pages. These are excerpts from that letter:*

If you began with JFK's Gemini Sun, and set up his natal chart just as I show it, but added Oswald's planetary positions, you would find the Oswald Aquarian influences I mention in the article in JFK's 9th House. Obviously, right there IS Aquarius. If you began with Oswald's chart, Kennedy's Sun in Gemini would also be in Oswald's 9th House. Still looking at Oswald's solar chart, where do you find Aries? Obviously, "across" from Libra — 180° from it — hence, an opposition. But before that, Libra/Aries can also be complementary (just as Scorpio/Taurus, Sagittarius/Gemini, etc.). Sooner or later, these complements tend to turn *to* just what you think of when you hear the word "oppose."

Square aspects (90 degrees) thwart, mutually, Kennedy's Moon squared his own Gemini Sun, from the solar 4th house of family. Consider JFK's family pressures; then note that he was born with demanding, pressure-packed Saturn *in* Cancer — which *is* the zodiacal *sign* associated with family. Saturn in Cancer squared Lee Oswald's Libran Sun and lightly opposed his Moon in Capricorn, denoting conflicts between the past, ideals, and aspirations, not to mention the Capricornian influence upon authority figures. Capricorn in Kennedy's solar 8th House, the house in which one tends either to "regenerate" himself and go on, or die. Capricorn is also called "father's sign," by some astrologers. But in Oswald's solar chart, Taurus is the 8th House and he was born when Uranus was transiting that sign. Oswald's Uranus conjoins Kennedy's Jupiter, or planet of expanding plans and hopes (they are at nearly the same degree), and on the day these men so fatally met, it was late in the Scorpio period with that Sun position *opposing* late Taurus.

Looking one last time at their individual planetary positions, we see Kennedy's Taurus-Virgo trines, the influence of smooth, craftsmanlike, even methodical efficiency. But we also see such thwarting squares (90°) in Oswald's chart as these: Libra/Capricorn (inner dispute over ideals and principles); Capricorn/Aries (sharp frustration over authority figures); and Scorpio/Aquarius (the tendency to bite-off more than one can chew).

J. N. Williamson, noted horror-fiction writer who worked as a professional astrologer during the 1960s, offered ***PURSUIT*** this change-of-pace article. Let it be said that neither Williamson nor SITU advocates the use of numerology in any serious investigation. Further, astrology is to many people only another syndicated horoscope column that appears in newspapers and tabloids.

However, we must point out, there are some data relating to astrology that must be considered unexplained or at least a curious collection of coincidences. Regardless of your point of view we hope you have enjoyed reading this article.

Encounters With The "Real" Jersey Devil

by Sydney Smith

During the summer of 1929 or 1930, I was up on the Sourland Mountains, above Hopewell, N.J., talking to natives of the area, trying to find out more in relation to the Jersey Devil.

That area was supposed to be the habitat of the Jersey Devil. Amwell Road led up into the mountains from Hopewell and met at a junction on top of the mountain at Featherbed Road. At this juncture, there was a large flat stone and upon it were three smaller stones, (elongated) pointing east from the top of the mountain.

These stones were named "Three Brothers' Rocks." The origin of the name, I have been told, was attributed to the murders many years ago of three brothers. No one was ever found who committed these murders.

I had gone to the area to verify some of the old stories concerning the Jersey Devil. One story was given to me by a man in his eighties. He related the story of Three Brothers' Rocks, and vowed it was the work of the Jersey Devil.

During a later trip to the Sourlands another man, in his sixties, seemed to know quite a bit about the area. I asked him if he had ever heard of the Jersey Devil. He said he sure had, and could tell many stories about it.

I asked him if he thought it was a real Creature, and he said: "Why hell, man, I saw it as close as twenty feet on one occasion in the daytime. It was dragging a deer that must have weighed over one hundred pounds, dragging it like it was a jack rabbit. Sure it was real, and it was alive. Many people up here were afraid to venture out after dark; some would not go into the woods alone."

Another time, on a cold winter night, the old man said, the Beast (as he called it) "scared my horse, it threw me on the ground, the wagon broke in pieces and my horse was found two days later over near Stillman Village. When the wagon overturned, it broke the lantern and started a fire. I managed to put the fire out. Yes, that Beast was real and I believe still living up here someplace."

I interviewed another long-time mountain man. Pete Whitehead is his name and this is his story as he told it to me:

"You ask me, was there ever a Jersey Devil? There sure was. I feel that I had him in my house one cold winter night. (My wife can verify that, too.)

And I saw some kind of animal when I was a boy. It was in the wintertime on a misty morning. This animal I first thought was a cow, until it turned and looked at me ... then I saw what appeared to be a man on the front of the animal, only he was grown into the neck of the animal. It had horns, hands, four hooved feet, a tail and fire-red eyes. Call it what you want .. it was some kind of Devil."

A Visitor

In the fall, right before World War I started, a blight killed all the native chestnut trees in the county. Sourland Mountain was no exception. There were still quite a few nut-bearing trees left and money was still being made in gathering them up. When I was a boy they were plentiful. Every fall was chestnut time.

When I was first married, my wife and I lived in an old farmhouse on the lower edge of the mountain, not far from Amwell Road, Hopewell, N.J. We later had four kids.

During one fall evening, I hitched up the horse and went up into the mountains to gather chestnuts. It did not take long to gather what I could before it got too late. (We used lanterns).

I was about ready to leave when what I thought was a man dressed in black, with a black hat pulled low over his face, came up to me and wanted to know how far it was to town.

I said, "I'll be going into town shortly to deliver the chestnuts and you are welcome to ride in with me." The weather was changing cold and I wanted to get home as soon as possible.

I asked the stranger his name and where he was coming from, but he did not answer me. Neither did he speak coming down out of the mountains. I thought if he didn't speak that was his business.

When we neared my house, I told the stranger that I had to stop at the house to get something that I had to deliver in Hopewell, and that I was going to get a heavier coat.

I said, "You are welcome to come in out of the cold and sit by the stove in the kitchen." I went into the house first and he followed. I really did not pay much attention to his walk or dress, just that he was a little stooped over and dressed in black.

When I entered the kitchen, my wife was upstairs putting the kids to bed. I told her that I had a stranger in the kitchen who was riding into Hopewell with me as soon as I put on warmer clothes.

The kids safely in bed, she went downstairs to the kitchen. She had not been gone for a few minutes when I heard her scream and fall to the floor. I bounded down the stairs and saw my wife on the floor by the stove. But no stranger.

After reviving my wife and trying to get her settled, she told me what happened.

She came down from upstairs and did not see a stranger in the kitchen. As she reached behind the stove for a piece of wood from the woodbox, she saw two hooves of an animal protruding. Jumping back she saw the black hat and clothing, and saw the face of a man with "red eyes and horns" staring at her.

She fainted and remembered no more until revived. The stranger was gone, my horse was wildly thrashing in the yard. I reached over to the door and got my shotgun and with a lantern looked all around outside. It was gone.

From that night on, the deep odor of a barnyard smell stayed in the house. The kids could not sleep because of the odor and it just about drove my wife and I out of our minds. Even the water and cooked food had the smell.

We moved from there in a few weeks. That house remained vacant for a long time. No one stayed more than a few days. Eventually, the house burned down one night.

Reprinted, with permission, from *The Jersey Devil* newspaper, October 1984 and the author.



Daniel Eden has dedicated his article to SITU colleagues "L.F." and "F.W."

Effective Mass and the UFO

by Daniel Eden

Those who study UFO reports, in depth, are often awed by the remarkable ease with which UFOs can change their state of motion. For example, one such object, investigated by Dr. James Harder and Adrian Vance, seemed to suddenly jump from a state of rest to the fantastic speed of 16,000 miles per hour, in a time span of less than 17 milliseconds![1] This kind of abrupt change of motion surely boggles the imagination.

Some scientists have been so emotionally overwhelmed by this sort of reported acceleration that they argue that science should not get involved with UFOs. One physicist, writing in the journal *Science*, argued essentially that UFOs were so "contrary to accepted principles of physics" that all scientific government studies, either proposed or in progress, should be immediately terminated.[2] This is a bizarre position for a physicist, but the statement reflects the emotional impact that the UFO data has had on some scientists and government officials. Surely there must be some approach to the UFO data that does not require either that we abort our rational intellect, or that we flee in superstitious terror from the anomalies encountered.

Effective Mass as a Concept

One rational approach to the anomalous-acceleration problem has been suggested by several UFO researchers.[3,4,5] These investigators suggest that the abnormal accelerations reported for UFOs could come about if the objects (here assumed to be physical craft) could somehow alter their inertial mass.

In our mundane environment, the inertial mass of a given object is usually a fixed, unvarying constant, at least for non-relativistic speeds. However, suppose the intelligent operators of UFOs have discovered some technological principle that allows them to vary their inertial mass; the drastic accelerations then become natural and understandable. One researcher aptly put it this way:

> UFOs are able to reduce their inertial mass almost to zero. This would enable them to dart around like a fly with very little power consumption.[4]

In the discussion that follows, I will tentatively assume that this is precisely what is happening in some UFO cases. Furthermore, I will refer to this abnormal, or variable, mass as the "effective mass" of the UFO. *The effective mass is the apparent inertial mass that a UFO exhibits whenever it is undergoing an anomalous acceleration.* The term *effective mass* was no random choice; I borrowed it from an obscure field within Solid State Physics, where the term has greatly assisted understanding.

Effective Mass in Solid State Physics

In this branch of physics, the concept of an effective mass can sometimes be applied to the conduction electrons in a crystalline solid. Conduction electrons are those electrons which are not tightly bound to any particular atom within a crystal; they are free to move, as an electric current, whenever an electric field is externally applied to the crystal. For instance, place the crystal near the electrical field of an (electrostatic) Van de Graaf generator, to "move" the conduction electrons.

Some peculiar effects, not completely understood, take place when the electron's quantum mechanical *wave nature* interacts with the atoms in the lattice structure of the crystal. Somehow, the periodic array of atoms in the crystal causes the electron's wave aspect (its deBroglie wave) to reflect back upon the electron, which then causes the particle to act as if it had an abnormal inertial mass. When an external electric field is used to push the electron along in the crystal, the particle will sometimes act as if its inertial mass was much smaller than normal. This altered mass is called the "effective mass."

A short but highly readable description of effective mass can be found in the *Encyclopaedia Brittanica* (1974, Micro III, p. 840) under the heading "Electron, effective mass of." The article mentions that effective masses have been detected that were one hundred times smaller than normal. For more complete descriptions of the effect, see pertinent textbooks[6,7,8] and, for more advanced treatment of the subject, a paper by J.M. Luttinger and W. Kohn in *Physical Review* (97:869, 1955) is well worth reading.

When the concept of effective mass was first developed, it was viewed mainly as a theoretical curiosity with no application to the real world. However, in the years following World War II there was an explosion of technical advance in cryogenic (low-temperature) technologies which allowed physicists to directly detect these abnormal electrons. At very low temperatures it becomes feasible to measure electron-effective masses with cyclotron resonance techniques. Sometimes the term "cyclotron mass" is used instead of "effective mass," thus to acknowledge the novel technology involved. Short but easy-to-read references to effective-mass and cyclotron experiments can be found in the *McGraw-Hill Encyclopedia of Science and Technology* (1982, Vol. 2, p. 106 and Vol. 3, p. 839) under the headings "Band Theory of Solids" and "Cyclotron Resonance Experiments." Tables are available that list some typical values for effective masses for electrons, in such common substances as copper, zinc, silver, silicon, etc.

The theory behind effective mass is not without its critics. However, they are a sympathetic and reasonable group of gentlemen of the sort that every science must have to improve its efforts. See, for example, the Adams and Argyres article in *Physical Review* (102:605, 1956). Some physicists, such as J.S. Blakemore (in his 1974 book *Solid State Physics*), are a little uncomfortable with the idea that effective mass is "real." They prefer to think of the theory as a useful but essentially fictitious abstraction for describing complications in solids. If the UFO phenomenon should ever win "acceptability" in the physics community, the reality of effective mass would probably also be accepted; this, in turn, could influence the interpretations involved in the Solid State version.

The important precept now developing from all of this is that material objects, such as electrons, sometimes act as if they have an abnormally variable mass. The details of the process may be terribly complicated, and in the case of UFOs, perhaps completely unknown. But if in modern technology can detect such processes in the microworld of Solid State Physics, it is not im-

possible to imagine that *someone else* has discovered a similar *macroscopic* means to produce an effective mass.

Calculating the Effective Mass

I do not pretend to know how an effective mass for a UFO can be generated at a macroscopic level. However, the barrier theory provides a viewpoint from which we may gain useful insights into this unknown process. For instance, if a UFO is barrier oscillating, and can be captured on film (i.e. as a *coining* UFO), we are able to calculate its effective mass. I will try to explain how we can derive the equation for effective mass, and then I will apply it to some examples in the UFO literature.

In a 1983 ***PURSUIT*** article I described the term "coining frequency," f_c; it is related to the "barrier frequency" f_b as follows:

$$f_c = 2 \cdot f_b = \frac{1}{\pi}\sqrt{\frac{k}{m}} \qquad \text{(Equation A)}$$

where k = a natural constant, called the "barrier constant,"
m = the inertial mass, and
= 3.14 (approximately)

For any normal object (a rock, a human, or whatever) that happens to be barrier oscillating, the term m represents the rest mass (i.e., the normal inertial mass) of the object. However, for the UFO, which can somehow alter its mass, the term m is no longer its rest mass; it becomes, instead, the effective mass. By a little algebraic manipulation we can rearrange Equation A so that we will have an equation for the effective mass written in terms of the coining frequency:

$$m = k \div (\pi \cdot f_c)^2 \qquad \text{(Equation B)}$$

With this equation for the effective mass, we are now ready to tackle some actual UFO data. As long as the UFO is coining, and thus is interacting with the barrier force, we have a means of estimating its mass at any given time. Perhaps this will someday give us clues as to how the UFO generates a macroscopic effective mass.

The Oregon UFO Photo

At the Diamond Park Overlook on Highway 58, near the Willamette Pass in Oregon, a biochemist briefly observed a UFO on November 22, 1966. He snapped a photograph of the object. Instead of a single image on the photo, there were three different images of the object.

According to the barrier theory, this kind of effect could occur if the UFO were oscillating in and out of our world. The three images represent exactly three intersections with our world during the brief time that the film was being exposed. Adrian Vance, a photography expert, conducted extensive research on this case.[1] He determined that the UFO was about thirty feet wide and had a height of about seven and one-half feet at center, which tapered off toward the periphery of the craft. The exposure time of the photo is uncertain, but Vance puts it at about 0.030 seconds. Vance personally visited the site and interviewed the biochemist who took the photograph. In Vance's opinion, this was a "real" UFO event.

What is the coining frequency and the effective mass of this UFO? The coining frequency can be determined as follows:

$$f_c = \frac{\text{total number of images}}{\text{total time duration}} = \frac{3 \text{ images}}{.030 \text{ sec}} = \frac{100 \text{ images}}{\text{sec}} = 100 \text{ Hz}$$

Given this value for the coining frequency, and with an estimated value for the barrier constant k, we can thus calculate the UFO's effective mass, assuming that k is roughly given by $k = 6 \times 10^5$ kg-Hz^2.

$$m = k/(\pi \cdot f_c)^2 = 6 \cdot 10^5 \text{ kg-Hz}^2/(3.14 \ \ 100 \text{ Hz})^2$$
$$m = 6.1 \text{ kilograms}$$

This is a tiny effective mass for a thirty-foot-wide object that sometimes is said to leave physical imprints on the ground suggestive of a weight, at rest, of eight or more tons,[9] and further suggests that the UFO's "effective mass process" is incomprehensibly efficient.

It should be noted that these calculations and inferences are only tentative, not conclusive; the value of k, the barrier constant, is only approximate and has yet to be given a completely satisfactory value.[10] Nevertheless, there is a strong possibility that the barrier theory may eventually give us a highly precise set of values for the coining UFO's effective mass.

Approaching a Zero Mass?

On September 23, 1967, a retired school teacher named C. Dwight Ghormley snapped a photo of a UFO in motion near Sedona, Arizona. As in the Oregon case, this UFO also made a series of multiple images on the photo; Vance counted 144 images and the shutter speed may have been around 1/60 sec.[1] What is the coining frequency and the effective mass?

$$f_c = \frac{144 \text{ images}}{1/60 \text{ sec}} = \frac{8640 \text{ images}}{\text{sec}} = 8640 \text{ Hz}$$

$$m = 8.1 \times 10^{-4} \text{ kilograms}$$

Here the effective mass was even smaller than in the Oregon case. In fact, the mass quantity seems to be approaching zero in this instance. In general, the faster the coining frequency, the smaller the effective mass will be. Presumably, acceleration anomalies will be much more frequently observed for UFOs that have very high f_c values because they have less mass to push around than UFOs with smaller f_c values.

In both the Arizona and Oregon examples, the frequencies were extremely high. However, not all UFO coining cases involve coining that is anywhere near as rapid. Some coin faster and some coin slower. Adrian Vance notes the wide range of frequencies that seem to be "in use":

> ...of particular interest are the photographic recordings that show this machine disappearing and reappearing at a rate of from a few times a second to that of ten thousand times a second. The mechanism by which this is done is pure magic to modern physics, and the fact that anything can do this is both the greatest challenge and the greatest opportunity occurring to this science.[1]

Ivan Sanderson's UFO

The final coining case to be considered here is not a photographic case. It was a raw visual observation made by a highly trained scientific observer. This case has special interest because it was a personal experience of and also reported by one of the most remarkable naturalists of our times, Ivan T. Sanderson. In his 1967 book *Uninvited Visitors* the founder of SITU described the UFO he saw:

> ...a very definite, solid-looking ovoid ellipse. This was sort of flashing on and off, from almost total diaphaneity to complete solidity at about three flashes per second.[12]

Although no camera was available to record the event, Sanderson was able to make a number of scientific observations. What other naturalist would have had the presence of mind to search about for pebbles of differing sizes to objectively measure the UFO's angular extension?

If this event was a coining case, the frequency must have been

at or near the low end of Vance's frequency range (perhaps 3 Hz to 10,000 Hz). What would then be the coining frequency and the predicted mass for Sanderson's UFO?

f_c = "three flashes per second" = 3 Hz

$$m = k/(\pi \cdot f_c)^2 = 6 \times 10^5 \text{ kg-Hz}^2/(3.14 \times 3 \text{ Hz})^2$$

$m = 6.8 \times 10^3$ kilograms

If we take the time to run through the necessary conversion tables, this amount of mass turns out to represent a "weight" at rest of almost seven and one-half tons! This is an important observation because it puts Sanderson's UFO near the weight range described by Philips; from his study of imprints left in soil by departing UFOs, Philips estimated that the "typical UFO" might weigh somewhere on the order of eight to ten tons.[10]

Why is the calculated effective mass in this case so close to the rest mass? One intriguing possibility is that Sanderson "caught" a UFO before it had switched-on its strange, mass-altering, apparatus. In general, it seems that the slower the coining frequency, the closer the UFO's effective mass is to its rest mass.

Again, let me emphasize that the calculations and inferences submitted for the reader's consideration are tentative, not conclusive. Mainly, they are attempts to explore some of the possible avenues that may lead to eventual improvement of the barrier model. Applications of the barrier theory to UFOs and other phenomena should deepen our appreciation of the many subtle processes that take place in nature. The coining UFO is only one of these processes, but it may be just the one that points the way to our better understanding of the others.

Conclusions

We can use the barrier theory to derive an estimate of the inertial mass of any coining UFO whose frequency of oscillation can be measured. Preliminary calculations suggest that the UFO is able to achieve its fantastic accelerations because it can control this effective mass.

No attempt has been made here to explain how a UFO can generate a macroscopic effective mass; that there is some such technological process which can vary an object's mass seems all too obvious according to the UFO data. Despite our ignorance of the process, we can at least use the barrier theory to keep tabs on a technology that is both efficient and portentous.

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Notes and References

1. Adrian Vance: *UFOs, The Eye and The Camera* (Barlenmir House, Publishers, New York, 1977). Vance's work is not well known, but his book is one of the most enlightening ever to come out of the field of ufology. Vance has a solid background in physical science and photographic technology. He concentrates on the coining UFO cases; he examines more technical details of these cases than anyone else has attempted in any other published work that I know. He offers a variety of ingenious speculations of the cause of multiple UFO images, with particular reference to the concept of time-traveling UFOs. He also seems interested in the idea of higher dimensions and offers some cogent suggestions in this area.

2. William Markowitz: "The Physics and Metaphysics of Unidentified Flying Objects" (*Science*, Journal of the American Association for the Advancement of Science, Vol. 157, 1967, pp. 1274-1279). This is a debunking article aimed at UFOs in general and at Dr. J. Allen Hynek in particular. The author argues that UFOs should not be studied because they do not obey the classical physics of the 18th century. If that peculiar proposal didn't inspire controversy, the author's disparaging remark about "teleportation" certainly should. Unfortunately, this is probably the first time that teleportation has been mentioned in the Fortean sense in a mainline scientific journal.

3, James M. McCampbell: *UFOlogy*, (Celestial Arts, Publishers, California, 1976). This is a popular book on the subject. The author has a good background in physical science. He is the director of research for the Mutual UFO Network (MUFON). He suggests (p. 109) that the UFO "by some unknown means is capable of diminishing or nullifying gravitational and inertial forces..."

4. Jan Heering: "UFO Physics—Part I" (*Flying Saucer Review*, Vol. 22, No. 5, 1976). In this article and in two others, Heering documents some of the more profound physical effects of UFOs that have been described over the years. These articles are essential reading. One hopes that they will soon be reprinted and become more generally available to American readers.

5. Kenneth W. Behrendt: "A Detailed Model for UFO Propulsion" (*The Sixth Quark Journal*, No. 1, 1981; no longer published). The author describes an "antimass field" that somehow annuls most of a UFO's rest mass. He tries many different approaches but seems to bring us closer to solving ufology's myriad problems. The spirit of his inquiry is far more engaging than its substance.

6. Arthur Beiser: *Perspectives of Modern Physics* (McGraw-Hill Book Co., New York, 1969). This is an undergraduate textbook; it will be most helpful to those who have sufficient knowledge of calculus to understand the material as it is presented. A discussion of effective mass occupies pages 482-486. A table of effective mass ratios for various common metallic crystals is given on page 487.

7. Charles Kittel: *Introduction to Solid State Physics* (Third edition, John Wiley & Sons, Inc., New York, 1966). This is a very popular textbook for the undergraduate physicist. To capture the full meaning of Kittel's presentation the reader had best be armed with a fair knowledge of general physics and calculus. But even the casual reader will enjoy the valuable insights on effective mass to be gained from skimming this material, especially pp. 227-281.

8. Ali M. Omar: *Elementary Solid State Physics* (Addison-Wesley Publishing Co., Inc., California, 1975). This is another undergraduate physics textbook; it may be a little easier to read than the books by Kittel and Beiser. Omar tries (on pages 232-233) to make the concept of an effective mass seem reasonable.

9. Daniel Eden: articles in three consecutive issues of ***PURSUIT*** (Journal of the Society for the Investigation of The Unexplained, P.O. Box 265, Little Silver, N.J. 07739). (a) "Higher Dimensions and The Barrier, Part I" (Vol. 15, No. 4, Whole 60, Fourth Quarter 1982, pp. 149-154, 176-179). (b) "Higher Dimensions and The Barrier, Part II" (Vol. 16, No. 1, Whole 61, First Quarter 1983, pp. 8-10). (c) "Physics of Short Range Teleportation" (Vol. 16, No. 2, Whole 62, Second Quarter 1983, pp. 54-55, 58; and a letter to the editors, p. 92).

10. Ted Philips: "Landing Traces and Physical Evidence" (*Proceedings of the First International UFO Congress*, edited by Curtis G. Fuller and the editors of *Fate* magazine; Warner Books Edition, 1980, p. 58).

11. Author's note on estimating k: Ideally, the value for the barrier constant k should be determined from oscillation cases that do not involve UFOs. To initally determine k, we must be able to accurately measure f_c for a known mass. Once we know both m and f_c, k will be given by:

$$k = m \cdot (\pi \cdot f_c)^2$$

Unfortunately, good cases that can give us a value for both m and f_c are very rare, so the magnitude that I give for k at this time is far from ideal. I have sought to use human translucency cases like the Dr. Z example[9b] to determine the value for k. The mass for the human male can be fairly easily estimated, but f_c is another matter. I have sought to use human physiological limits like the critical flicker frequencies and flicker fusion rates to estimate f_c. But a single direct measurement of f_c in a human translucency case would be much more reliable.

12. Ivan T. Sanderson: *Uninivited Visitors* (Cowles Education Corp., New York, 1967). Whether your reasoning ranges across a broad spectrum of Fortean interests or focuses mainly on the ufological scene, this is essential reading for information and, yes, for enjoyment, too!



The Resch Poltergeist

by Walter & Mary Jo Uphoff

Our report was based on articles that had appeared in the press, and on phone conversations with John and Joan Resch, the parents of 14-year-old Tina who appeared to be the "active agent" in the case. We stayed at the Resch home May 23-25, 1984 in Columbus, Ohio, and learned that the Resches have been foster parents to about 250 children over the past 30 years. Many of these youngsters were handicapped or unwanted. Tina is one of two of these foster children they adopted to add to their own family of four.

The Noisy Ghost

Poltergeist is a German word meaning "noisy ghost." It is unfortunate that films like *The Exorcist* have sensationalized and exaggerated phenomena to the point where they become ludicrous — primarily because such sensationalism pays off at the box office. There is considerable evidence that whatever forces are behind observed physical phenomena are rarely malevolent or demonic. Some could even be termed friendly or "helpful" ghosts. In fact, parapsychologists have suggested two main theories to explain such activity. One view is that the phenomena are manifestations of psychic energies expressed through, or in the presence of adolescents who have subconscious pent-up emotional drives. It is true that such activities are often, but by no means always, associated with puberty. Another view is that whoever seems to be the agent or catalyst serves as a channel through which discarnate entities — some hostile, others benign or friendly — seek to make their presence known.

On Saturday, March 3rd, the monitor for a foster infant who has difficulty breathing was found to be malfunctioning. First, they called the utility company and later had Bruce Claggett, an electrical contractor, come to check out the home wiring. Before Claggett got near the breaker switches in the basement, the lights went out and later the microwave oven and the garbage disposal turned on when no one was near. When the lights went on "by themselves" he taped down the switches but the tapes disappeared and the lights continued turning on. In one instance he found the tape stuck to the wall several feet from the switchplate.

Eggs flew out and smashed against the ceiling when the refrigerator was opened; glasses flew through the air like trajectories and in some cases went around corners before they crashed. After a wild and bewildering weekend, the family went to a motel for Monday and Tuesday nights to get away from it all.

Mike Harden, the *Columbus Dispatch* columnist whose article about the events he witnessed at the Resches had attracted national attention, was so besieged by phone calls that he asked the family permission to arrange a press conference at their home for 1 to 2:30 pm Wednesday, March 7th. Tina, who had gone to spend the night with a girl friend, was aroused at six in the morning to come home to answer questions from reporters and photographers throughout the day; Tina had to repeat over and over what she had experienced. The house was so filled with people and audio-visual equipment that it was difficult at times to move around. Tina told us that she could not even go the bathroom without being followed. A somewhat "hyper" teenager, she became tired and irritated by interrogations about phenomena that she herself could not understand or explain. Everyone who came wanted "to see something with their own eyes." About dinner-time, in utter frustration and exasperation, she jerked a lampcord, tumbling a lamp from an end-table. That act was photographed and provided something to show on TV news. She did not realize that this act of aggravation would be seized upon by debunkers to claim that everyting that occurred was trickery, and that all that was witnessed by persons from the media, as well as Claggett, and other would either be dismissed or blamed on her.

Drew Hadwell, WTVN-TV, who photographed the falling lamp, was quoted in the UPI article as saying that this one instance of recorded fakery did not explain other bizarre happenings he witnessed. "I was seated at the kitchen table with Tina when all of a sudden the chairs spread out ... I don't see how she could have sent them out in three directions like that." Hadwell also said he saw a phone fly out at the girl.

The Once-in-a-Lifetime Photo

Fred Shannon, the *Columbus Dispatch* photographer,told us that he tried a number of times to get a photo of the phone flying through the air, but the movement was so fast he was unsuccessful. He then decided that there was some "intelligent force" behind the phenomena and that he was engaged in a "contest of wills." He set his camera for proper distance and speed and moved it down to his waist to a "rest" position, keeping his finger on the shutter button to "shoot" if anything moved. Had Tina sneezed, he said, he would have tripped the shutter. He turned his head toward the people congregated in the kitchen while "keeping an eye" on Tina, and the instant he glimpsed the phone beside her move, he pressed the button and got what he calls a "once-in-a-lifetime" photograph. He caught the phone in midair, the cord stretched in front of Tina, while she has her hands raised and has pulled back in the chair to avoid being hit.

Physical Research Foundation Enters

William G. Roll of the Physical Research Foundation, Chapel Hill, North Carolina, has investigated similar poltergeist cases through the years. He heard about the Columbus phenomena and came to the Resch home to observe at first-hand what was happening. He witnessed enough to convince him to invite Tina to Chapel Hill for observation, tests and experiments. Apparently the insights Tina got from her weeks spent at the Foundation quieted the "noisy ghost" because there have been no vigorous activities since her return.

Why Tina?

Some investigators of paranormal phenomena tend to attirubte the physical phenomena occurring in poltergeist cases (where trickery is ruled out) to the subconscious energies of frustration and hostility in an adolescent "agent" — the energies manifesting in vigorous and sometimes destructive ways. They call it "recurring spontaneous psychokinesis" (RSPK). Others are inclined toward the hypothesis that discarnate entities in some way use a living person — often, but not always an adolescent — to perpetrate mischief or to give evidence that they are still around.

(continued on page 184)

Photographic Biofeedback?

by Eugenia Macer-Story

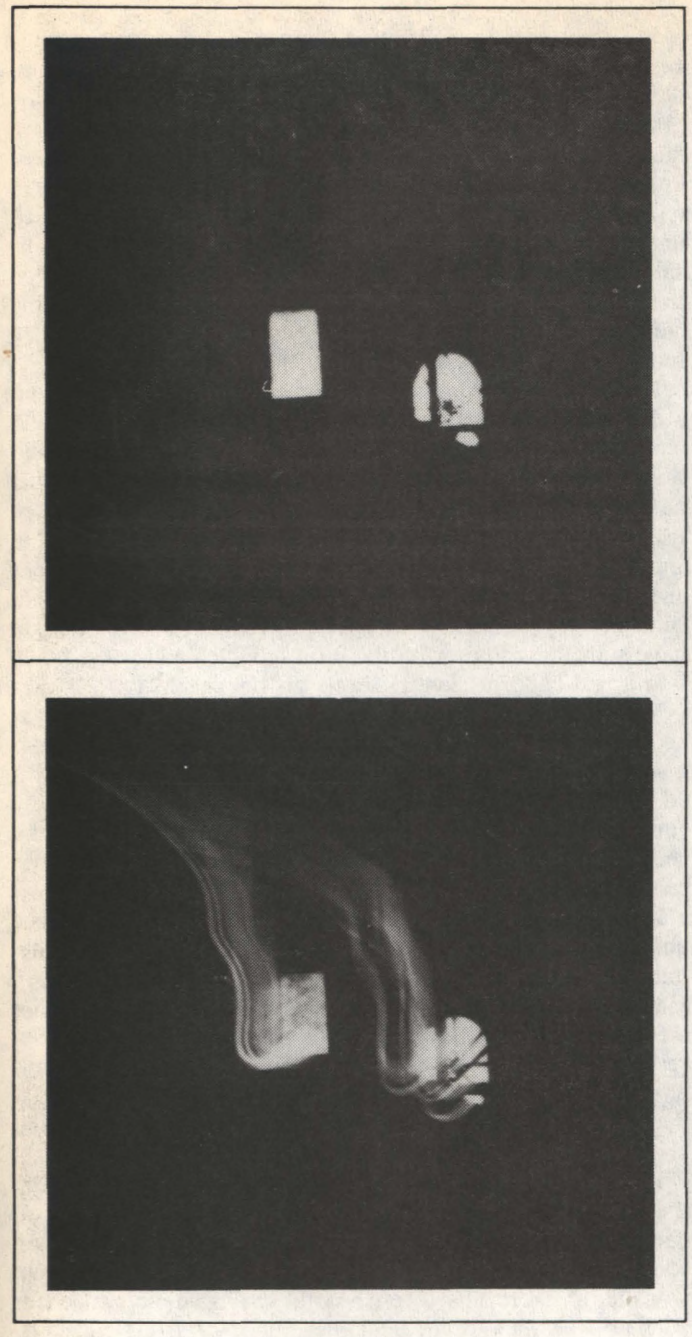
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Static Airbrush. Many commercial photographs are airbrushed by an artist to give a perfection of line which does not naturally occur in the featured product or personality. Airbrushing involves an alteration of the original photo by mechanical means; it is not a second photographic treatment, like re-photography or double-exposure or animation effect. Many UFO and spirit buffs—when they come up with unusual photos which show brights lights—assume that they have photographed a craft or energy form that is "out there" in interdimensional space. Instead, what they may be seeing is an effect electrically brushed onto the photo inside the camera by unusual electrical stress to the mechanism of the camera itself. If this is the case, then the cause of some UFO and spirit effects most probably lies in the individual consciousness and bioelectric mechanism of the participants in the photography session. Bermuda Triangle and geoanomaly buffs might also argue that the place itself, if anomalous magnetically, also figures in potential effects to film.

Electric Gods. Haiti is a place famous for voodoo, and is reputed to be "specially" geomagnetically. Photographs taken by tourist Gloria Rudolph of voodoo ceremonies in Haiti show dramatic streaks or orange and white light. These effects have been verified as unusual by professional photographers and are described in the book *Voudoun Fire*, published by Llewellyn Press, Minneapolis (1979). However, voodoo photographs taken by Maya Deren for her book *Living Gods of Haiti* do not show such fiery electrical effects to the film. (Under its full title *Divine Horsemen: The Living Gods of Haiti*, Deren's book was originally issued by Thames and Hudson Press in 1953 as part of a series on mythology edited by Joseph Campbell.) Inevitably, the conclusion must be reached that the effects to the pictures in *Voudoun Fire* manifested through the bioelectric field of Ms. Rudolph herself rather than through the exterior ceremony. This is consistent with voudoun belief which maintains that the gods, or "loa," are "carried" in the system of the medium, as the rider is carried by a horse.

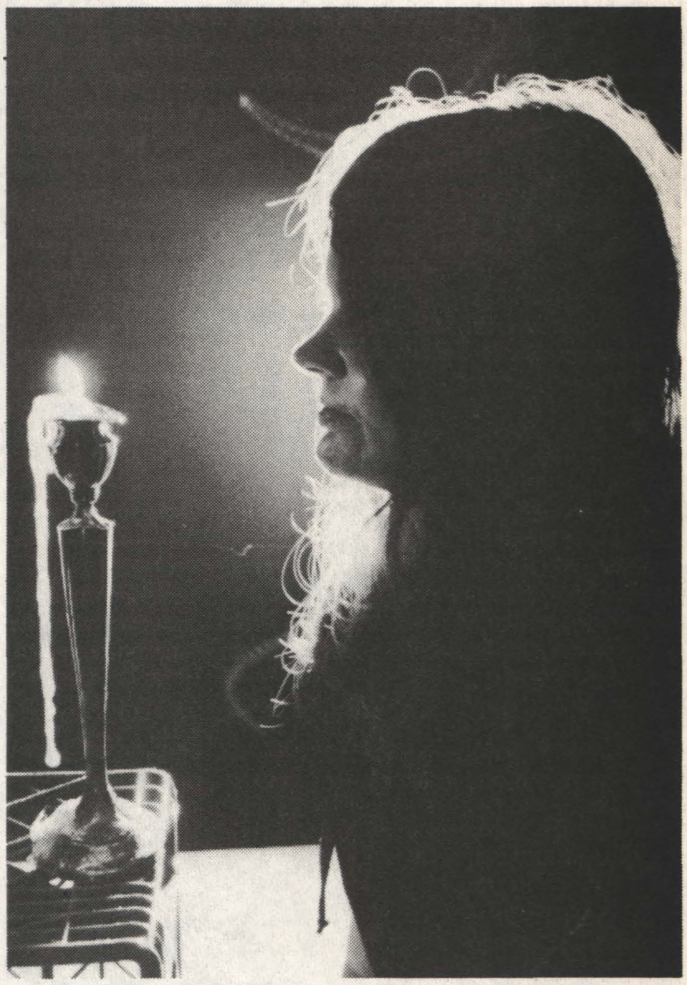






Flying Windows. A Polaroid photo which shows trails of light similar to those in the "Voudoun" examples slid out of the camera I was holding while I was focusing psychically on affecting a picture. Accidentally released by some electrical malfunction of the camera, which is powered by a battery pack, two pictures slid out in sequence after a single shutter-snap. The first picture was normal; the second showed the odd effects. Notice that the streamers coming from the "flying windows" seem not to be a single wipe of the light due to elided, quick exposure, but are a *use* of the light to make comet-like trails (contrails), some of which intersect toward the lower left-hand side of the photo. The overlay of the two contrail patterns seems to indicate that the extra photo is not a simple "dupe" made by rapid motion of the picture with an open shutter. The tiny "view" visible in the lower, square "flying window" also suggests that these unidentified windows are not a simple wipe-off.

Ghost Riders in the Sky. This leads to the analysis of other photographs of the supernatural according to the premise that the bioelectricity of the individual percipient, in conjunction with ghost or geomagnetic influence, may be affecting the camera but not the three-dimensional view seen in the picture. Such artifacts as nocturnal lights photographed by UFO buffs may fall into the category of effect to the camera rather than phenomena in the sky. This does not mean that the photos are "delusion"—only that the primary effect may be to the photographic emulsion rather than within the landscape.

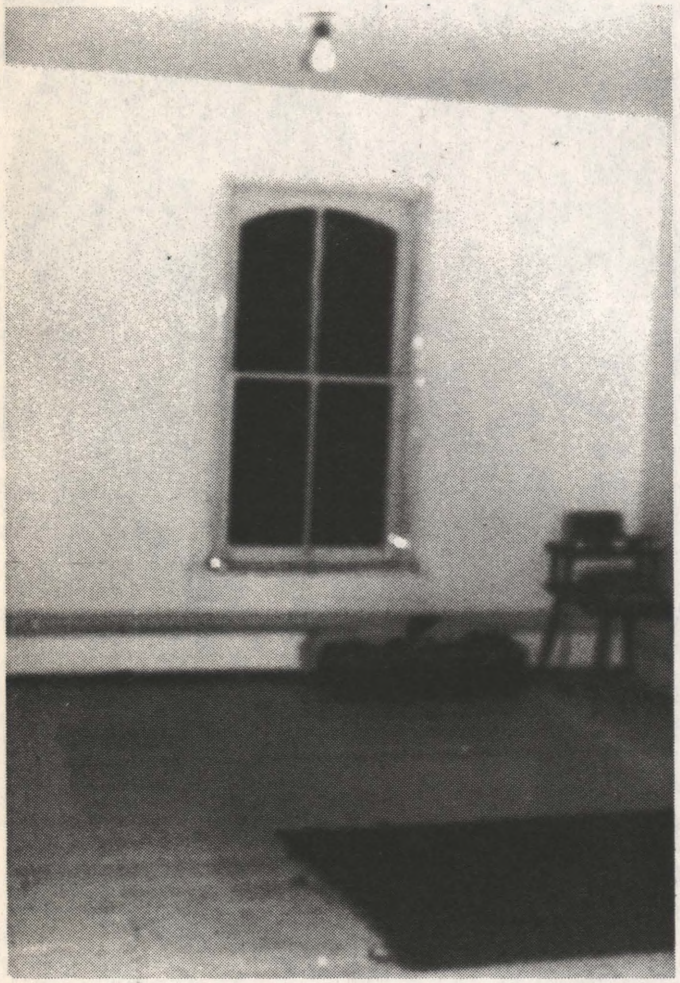


Electric Moth. Contrails are also visible in the "occult" photo of myself, taken while horsing around with experimental filmmaker Owen Land on my back porch in Woodstock, New York—an area famous for unusual phenomena of all sorts. This photo is a timed exposure of several seconds' duration. The lower, slim contrail could be one of the moths which had been alerted to my grandmother's silver candlestick. However, the upper wedge-shaped object over my shoulder is not an elided moth-trail, unless this zigzag track is from an electric model designed, perhaps, by NASA.

The zigzags look like electrical effects. The wedge is unexplained. In this case, Owen Land had the camera on a tripod, to steady it for the time exposure. It is not clear whether the electric moth is completely a product of camera anomaly or was really "out there" over my shoulder. Notice that the wedge shape of this electric moth resembles the "bow" shapes with contrails in the colorful voudoun ceremony. Obviously, spirits of this shape like to horse around with experimental filmmakers.

Was This Jesus? One of the oddest examples of photographic horsing around by spirits that I have yet encountered also occurred while I was living in Woodstock. In the early spring of 1984 I received an urgent phone call from someone named Richard, who told me that he had phoned the Woodstock Times newspaper and that one of the editors had given him my number. His house was haunted. Could I help him?

I told him I would be happy to visit the house. Then he added that the editor had told him that psychic forms sometimes "come out" in my photos. Would I take pictures at the house? I agreed to do so, and he arrived at my door at about 11 p.m. and drove to the scene of the haunting. Another psychic, Eve Otto, came along to take notes.



When we arrived at his house, Richard insisted that I take charge of the operation and go into the house alone with my camera while he and Eve waited in the car. He was genuinely distressed and frightened by the situation, but seemed to trust me. So I took my camera and went into the house alone.

I set the camera on the kitchen table and adjusted the flash. When I glanced into the living room area an odd "stillness" seemed to prevail, but no overt phenomena. I took several pictures of the kitchen and living room, then went into the front hall and paused beside the stairs. While there, I was overtaken by the presence of a young, female spirit-entity who kept repeating one idea: "I want to go home." I received the impression that she had been taken to Woodstock from Boston by train under false pretenses during the late 19th/early 20th century, and then murdered. I was overcome by the emotion of this entity and started back toward the kitchen. Eve Otto came into the house with Richard. I told them what I had experienced.

We went upstairs and into a room at the right of the staircase, where the entity seemed to want to show me a back window and to point out, across the back lawn, the site of a mass grave of "other victims." I took pictures of this window. When the film was developed, whitish circles and blotches showed up around the window frame. Richard told us he had been rehearsing with his rock group in this room, but had experienced unusual phenomena and states of mind, and moved the rehearsal across the hall. As we were entering the hallway that led to the stairwell, the entity began to repeat to me, mentally, the concept: "Ice room," followed by "I want to go into the ice room."

I asked Richard what this might mean, and he told me about a downstairs room that had been closed off and was cold. A child had once slept here, and Richard, who had met the child briefly, felt that his/her state of mind was affected oddly in that he/she wrote in strange Arabic-like doodles, and had asked Richard to get together with a group and "sit beside the fire and light candles." The child was related to the absent owner and was not in the house during the time Richard was the resident caretaker. As for the term "ice room," Richard thought it might have something to do with the furnace which had lately fallen into a bad habit of shutting itself off unexpectedly.

We went downstairs to the "ice room," which certainly was colder than the rest of the house. I had started to walk over to a window on the far side when I was ovecome by an entity filled with violence and hatred. It caused me to gesture toward my forehead and make a sign* against the forehead. This entity seemed different from the girl spirit and clearly related to more recent times.

I had the impression of a farmer who had owned the place and had died in the mid-20th century. He seemed violently unhappy with the current use of the house, which had been remodeled at considerable expense. It was later confirmed that the property had once been a farm, and that the house was a reconstructed barn. I took several pictures inside the "ice room" and was particularly attracted to an odd army helmet which I then photographed. All of these pictures came out normally and showed no unusual forms.

I advised Richard to leave the house if he felt threatened by the poltergeist phenomena he had experienced. The entity I had encountered in the "ice room" was violent and resentful, and Richard is sensitive and impressionable. I do not believe that so-called "exorcisms" come with any guaranty attached; Richard was open to the phenomena and was being harassed. I checked with previous tenants and discovered that one visitor to the house, an astrologer, had mentioned the "strange atmosphere" in the upstairs room where an art exhibit was in progress. However, no one except Richard had ever complained of a severe haunting.

Before leaving the house I went back to the upstairs room and did a further psychic focus. I had the impression that the young female spirit had been lured to Woodstock by a "black magick" group at the turn of the century, and that the remains of other victims of similar rape, murder and torture lay buried in the area of yard visible from the rear window.

Richard thanked me for coming and said he would move out immediately. He recalled that he had once been involved with anoccult group and therefore felt that "black magick" influence was a possibility.

A few days after my visit to the house (while the film was still being processed), Richard phoned from his parents' home and asked if I would be willing to have another member of the rock band come over for a talk. I agreed, and as we were discuss-

ing the arrangements, the phone disconnected itself physically from the wall. I had to race to another room and wait for Richard's second call to come in over the extension. (This interesting poltergeist event was witnessed by a client for whom I had been giving a psychic reading when Richard phone. It was funny. The phone jack literally dropped out of the wall box.)

Later, Richard arrived with the drummer from his band, who told me that, at his own apartment and not at Richard's haunted house, he had witnessed a dark-colored, small, human-like figure that glided across the ground and hissed at him. The only other memorable vision he had experienced, said the drummer, was of a tall, magician-like figure dressed in a robe with stars and symbols; it had appeared near his bed one night while he was still living with his parents at their home in the midwest. When he told the figure to "go away," it vanished.

The drummer said he thought he was psychic. We talked about psychic perception. I told him I had felt urged to locate a "magickal" symbol on my forehead during the visit to the haunted house. Then he volunteered information about an unusual picture which he said belonged to Richard. It had a symbol at the center of the forehead! Later, when Richard showed the picture to me, I asked him to tell me what he knew of its history. First he said it had belonged to a warlock who lived in the hills near his parents' house; then he changed his story and told me the picture had really come from Boston. It belonged to a couple who were into negative aspects of the occult. Richard had once provided a place for the couple to stay, and they had expressed their gratitude by giving him the odd picture, actually a decal pasted on a wooden backing, inserted in a frame that formerly encased an aged mirror.

When the photos were returned from processing, Richard came to my house with two friends who wanted to look at them. He also brought along the picture on the wooden backing, with the symbol at the center of the forehead.

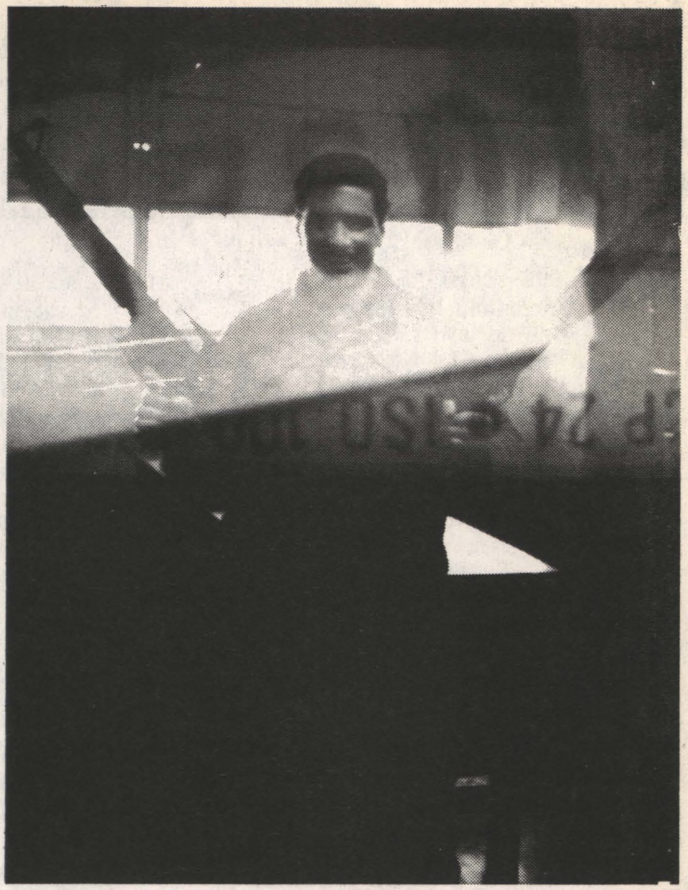
Among the photos was a curiosity which no one has yet been able to explain; the collaged snapshot of man holding an M-16 rifle in one hand and a shotgun in the other, with the number 1760 visible across his chest. He appears to be standing beside a work table with a row of small windows at his back, as in a garage. (See photo, this page)

There is no such room in my house, nor in the house that Richard was caretaking. Richard's companion insisted that the picture on the wooden backing was undeniably Jesus Christ because he had watched similar images of Jesus being sold at amusement parks he visited as a child. But his opinion of an altogether different picture was also exceptional. He said, initially, it seemed the inexplicable man with the guns was in an airplane hangar or standing beside an airplane.

Visually, in my opinion, and others, the sketch with a symbol at the center of the forehead does not look like Christ. It looks to people who have not seen a similar image of Jesus in amusement parks, like a somewhat sinister, bearded visage with deep-set hypnotic eyes.

Similarly, the man-with-guns photo does not have obvious characteristics of an airplane hangar. To me, with my background in UFO research, both pictures seem fundamentally unexplained. I regard this opinion of Richard's companion as a spontaneous mental interlinking between "supernatural" phenomena and airplanes. Also to be noted is the possibly related fact that the actor who portrayed a warrior archetype over many lifetimes in my play "Six Way Time Play" was then living at a 1760 address on a certain avenue in Brooklyn.

The three of us continued our discussions for awhile, and then I did a psychic probe on the origins of the enigmatic picture



with the sign at the center of the forehead. I saw voodoo ceremonies associated with the couple who had given the picture to Richard, particularly centered around the voodoo deity Ghedhe. Ghedhe is the voodoo deity in charge of the kingdom of the dead. When possessing one of his devotees, he likes to eat and drink via the mediumship of the person whom he "rides." His symbol is a cross within other designs.**

Richard's friend—who still feels sure that the picture represents Christ—did not want to believe that Ghedhe was involved with Richard's activities, but Richard admitted that on one occasion when his ex-wife had taken his picture, the Jesus-face of the mystery-sketch appeared in the developed photo *instead* of Richard's face. Richard's physiognomy hints of Ireland, does not resemble the sketch, nor does he otherwise identify with the apparent characteristics of the subject. Richard admits he does like to eat and drink a bit enthusiastically in his role as a rock musician. He accepted the possibility that he could have been possessed at some time in the past by a Ghedhe-like presence. Perhaps the presence associated with the "mystery Jesus" image—which was once used in occult ceremonies—activated an older presence in the house, possibly dating back to "black magick" rites held there at the turn of the century.

Richard was struck by the fact that I told him the spirit of the victim originally came from Boston, and that the Ghedhe-like picture had come from an occult group based in that city.

Richard hs since moved from the "haunted house" and seems to be well. I advised him to burn the wooden image of the "mystery Jesus," but I don't know if he did do this.

* Σ

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SITUations

In this section, mostly contemporary curious and unexplained events are reported. Members are urged to send in newsclippings and reports they deem responsible. Please be sure to include the source of reference (name of newspaper or periodical), city of publication, date of issue in which article appeared, and your first initial and last name (or membership number only, if you prefer to be credited in that way).

7,000-Year-Old Brains Unearthed in Florida

Two 7,000-year-old "well-preserved and complete" human brains have been unearthed just 15 miles west of the space shuttle launch pad, and scientists said the brains might provide unique clues to the evolution of human genes.

"The existence of two preserved brains from one archaeological site and 7,000-year-old DNA makes this a spectacular scientific contribution," University of Florida molecular biologist William W. Hauswirth told reporters at a news conference.

The discovery of the tissue was described as unmatched in the world because biochemical analysis has detected preserved DNA, the genetic blueprint of living organisms.

"This is the first human brain of this antiquity in the world to be so thoroughly analyzed," the scientists said.

The DNA should be useful in learning about gene evolution and possibly identifying viral diseases and cancer during that period, said archaeologist Dr. Glen H. Doran of Florida State University, Hauswirth and Dr. Philip J. Laipus, another University of Florida molecular biologist.

Hauswirth said they intend to use recombinant DNA methods to make copies of the preserved DNA and produce a complete set of prehistoric human genes that would be made available to researchers for comparison with modern genes.

The virtually intact male and female skulls were found at an excavation at a housing development known as Windover Farms near this community just outside the gates of Kennedy Space Center.

The skulls were buried about 12 feet below the surface, protected in an oxygen-free environment of mineral water, said Dr. Doran.

Doran, who heads the archaeological project, said the bog previously yielded bones of 50 to 60 men, women and children from about 5,000 B.C., according to radio-carbon dating. Well-preserved human bodies hundreds of years old have been found buried in bogs in England and Denmark.

Human DNA was earlier extracted from a substance found in four human skulls unearthed in late November, the scientists said.

While that material was being tested, the discovery of the two virtually intact brains "strengthened the results of the DNA tests," said Hauswirth.

The latest skulls are of a women believed to have been about 45 years old and a man about 27.

After the female skull was found, the scientists noticed what looked like a greasy material inside. Hauswirth removed the back of the skull, Dr. Philip J. Laipis tilted it slightly and the mass slid into his gloved hand.

"There was a stunned moment of silence — then the realization that it was a 7,000-year-old preserved human brain," Doran said.

An X-ray of the male skull that was shown to reporters revealed a mass inside which Hauswirth said contained "all major parts of the brain."

SOURCE: AP in the *Asbury Park Press* 12/15/84
CREDIT: #432

Gas Bubble may be Key to Triangle Mystery

UFOs, time warps, even the lost civilization of Atlantis, have been blamed for the disappearance of ships in the Bermuda Triangle.

Now a Canadian scientist has ventured another, less supernatural explanation: a giant bubble of flammable methane gas that escapes from the ocean floor to sink ships, and even down airplanes.

"This (gas) will come up ... and a ship will easily be sunk," said Don Davidson, a chemist with the Ottawa-based National Research Council.

Ships go down because the rising gas reduces the buoyancy of the water, said Davidson.

He said the flammable gas bursting to the surface could threaten not only ships, but also airplanes.

He is not sure, however, whether the gas could explode into flames, since it usually carries a great deal of water.

Some 100 ships and planes and at least 1,000 lives have been lost in the 200,000-square mile area bounded by Miami, the Virgin Islands and Bermuda.

Although the area sometimes is called the Devil's Triangle or Hoodoo Sea, government agencies, such as the Federal Aviation Administration, and scientists tend to chalk off the disappearances to natural phenomena.

Accidents result from freak storms, they say, or pilots inexperienced in ocean flying or instrument failures. And the fast-moving ocean currents tend to carry away the wreckage.

Davidson's theory, which is based on the nature of hydrates, his area of specialization, was detailed in *Science Dimension*, a publication of the Council. He wrote the article with Richard McIver, a Houston energy consultant.

Hydrates, Davidson explained in a telephone interview, develop from the sedimentary material of decomposing plant and animal life on the ocean bottom. These decomposed materials are the principal components of methane gas.

At 1,500 feet below the surface, where the water temperature is 36 degrees and the pressure is 750 pounds per square inch, these hydrates solidify. The process takes millions of years, he explained.

Below this solid lid, however, temperatures get warmer and warmer as the depth increases. Then, depending on variables such as ocean depth, at about 3000 feet below the ocean floor, the hydrates are "no longer stable."

"You can imagine a big reservoir of gas down there," said Davidson, explaining that the gas would be greatly compressed because of the water pressure from above.

"If anything cracks that solid barrier (of sedimentary material) in the way of an earthquake or some sort of motion," he said, "then it will release enormous quantities of methane from underneath.

"It can escape pretty rapidly," he said.

And then it's goodby sailing ship or Piper Aztec or, as happened almost 40 years ago, five Navy TBM Avengers.

While Davidson likes to ponder his "plausible" theory on the Bermuda Triangle, his professional interest in hydrates takes a more practical turn.

"There is no doubt that these hydrate deposits do exist on the ocean floor," he said, "and will be an enormous source of natural gas in the future."

SOURCE: *Detroit Free Press* 12/25/84
CREDIT: R. Nelke

Ice Chunk Crashes through Roof

Betsy Sansevero was resting in a chair in her home when a chunk of blue ice the size of a watermelon suddenly crashed through the roof of her garage, less than 20 feet away.

The ice, smelling of disinfectant like that used in airplane lavatories, shattered on the garage floor, narrowly missing Mrs. Sansevero's two pet dogs.

Louis Achitoff, manager of public affairs and planning for the eastern region of the Federal Aviation Administration, said an investigation was under way to determine if the ice might have fallen from a jetliner passing over West Islip, New York at the time of the incident.

SOURCE: *N.Y. Times* 12/21/84
CREDIT: Jon Singer

Church Commission Cites "Difficulties" Over Apparitions

A church commission, citing "disciplinary and theological difficulties" in the reported Marian apparitions in Medjugorje, Yugoslavia, has insisted to an end to organized pilgrimages to the site and to public statements by local priests about the events.

The commission, headed by Yugoslavian Bishop Pavao Zanic of Mostar-Duvno, also complained that "presumed healings" at the site have been publicized without adequate scientific documentation. The statement, dated Oct. 11 was made public by the Vatican press office Nov. 10.

The commission said it had not yet finished its work, and that it intended to further examine the apparitions. But it added that "already it sees certain disciplinary and theological difficulties in the messages of Medjugorje." It did not specify further what such difficulties were.

It was the second time the commission, established to investigate the apparitions, has asked that pilgrimages cease, at least temporarily. In March, the group asked priests and lay people to halt organized visits and stop presenting the "seers" — six young people said to see the Blessed Virgin — to the public.

SOURCE: *St. Louis Review*
11/16/84
CREDIT: R. Nelke

African Dust Linked to Miami 'Red Rain'

The drought in North Africa is sending more and more dust across the Atlantic, causing haze and "red rain" in Miami and the West Indies, a chemist reports.

"When we get rainfall during the summer months, we'll get a layer of red mud in our rain collectors, and Miami has no substantial red soils," Joseph Prospero, chairman of the University of Miami's division of marine and atmospheric chemistry, said.

Miami residents are familiar with red mud after showers and with summertime dust hazes that periodically cloud Florida's skies, Prospero said. "The new aspect is the dramatic increase in dust concentrations with the drought," he explained.

The amount of African dust last year in the air in Barbados, West Indies, was more than double the average during non-drought years in North Africa, Prospero said in a paper presented at the American Geophysical Union's fall meeting.

Since 1965, Prospero has recorded dust from Africa in Barbados, more than 3,000 miles from its source, and in Miami, 4,000 miles from its source. His earlier studies found that maximum dust levels occurred during the summer, when airborne concentrations are 10 to 100 times larger than during the winter.

But in his new study, Prospero also found that dust concentrations in Barbados during the winter of 1982-83 were 100 times above normal winter levels. He said the drought and the worldwide weather disturbance known as El Nino were responsible.

Prospero contends that the dust came across the Atlantic because the drought in North Africa had sharply increased wind erosion. Mineral studies prove that the dust came from Africa, he contended in his paper.

Frequent cloud cover over the Sahel — the drought-afflicted sub-Saharan band of North Africa — makes it difficult to distinguish dust storms from clouds in satellite photos, Prospero said, noting, "They're getting clouds but no rain."

Prospero said he didn't know how far the dust travels into the United States, since his only monitoring stations are at Barbados and Miami.

During the summer months, hot air carrying the dust creates an inversion layer that can prevent cloud buildup over Miami, but Prospero wasn't sure whether the dust reduced rainfall.

The latest droughts in the Sahel began in the late 1960s, peaked in 1972, then continually worsened from 1975, with Chad and Ethiopia the hardest-hit countries, Prospero said.

A similar increase in dust transport was seen at Barbados in the early 1970s after the drought of the late 1960s.

SOURCE: AP in the *Asbury Park Press*, NJ
12/7/84
CREDIT: #432

Voice Returns in Christmas 'miracle'

After 12 years of silence, Marie Hefferman can sing Christmas carols again.

The 25-year-old Wollongong, Australia, woman regained her voice after a coughing fit brought up a 1959 silver three-penny coin and some blood.

She lost her voice at a 1972 family Christmas dinner, which included a custom of coins in the pudding. "The doctor said it was a million-to-1 chance and I should have coughed it up straight after swallowing it 12 years ago."

After the coughing, "the doctors sent me to a speech therapist and, lo and behold, I started to talk again," she said.

The coin was lodged between her vocal cords, which prevented them from vibrating. X-rays failed to detect the coin because it was thin and rested in a horizontal position in her throat.

"It is a miracle and the best Christmas present anyone could ask for," said her mother, Veronica Orr.

SOURCE: *USA Today*
12/21/84
CREDIT: R. Nelke

Girl's Ability to Talk Makes Best Christmas Present

Shanda Baldwin, 11, had not spoken for nearly a year since her brain was damaged. Doctors expected her to remain speechless the rest of her life.

But several days before Christmas, Shanda gave her mother a holiday gift by wishing her a "Merry Christmas," an official said.

Shanda, of Mayville, NY, was considered a "little chatterbox" before Febraury 28, 1984 when a car in which she was riding became trapped in deep snow. The snow clogged the tailpipe, choking the passengers with deadly carbon monoxide.

Two other children in the car were killed. Shanda suffered severe brain damage that included oral apraxia, the inability to negotiate mouth movements. The girl also is confined to a wheelchair.

"When she came in here at the end of July, we didn't expect her to ever talk again," said Michael Plasha, spokesman for the Lake Erie Institute for Rehabilitation.

"The first real breakthrough was December 17 during a therapy session," Plasha said. "She said 'momma' and they (therapists) began to experiment ... and got her to say 'mommy' which is more difficult than momma. The next morning, she greeted her therapist by saying, 'Hi Linda, Merry Christmas.' "

Plasha said the therapist grabbed the girl and went to the phone to call Shanda'a mother, whose name also is Linda, in Mayville.

"Hi, Mommy, I love you," Shanda told her mother. "Merry Christmas."

"The mother feels this is the best Christmas present she could ever have," Plasha said. "It uplifted our spirits. Why she chose to talk when she did, we just don't know. ... They (therapists) really think it's a miracle."

Shanda will be at the hospital at least until May, Plasha said.

"She does like to talk," he said. "What we are working on is to fine-tune her speech."

Plasha said it was the first time that he has ever heard of such a quick recovery for this type of brain damage.

SOURCE: *The St. Louis Post-Dispatch*
12/30/84
CREDIT: R. Nelke

'Rain' Stirs Crocs to Amarous Acts

The noise of a simulated rainstorm makes lethargic crocodiles amorous and could be the long-sought-after incentive to make them breed, the zookeeper in Augsburg, West Germany says.

Peter Brettschneider says he has been playing recordings of a tropical rainstorm to the zoo's one male and three female crocodiles for 10 to 15 minutes at a time over the past week with notable success.

"They are clearly stimulated by the noise and sexual activity has taken place," Brettschneider said.

To date the Augsburg Zoo has never managed to breed crocodiles, he added.

SOURCE: *Reuters News Service*
11/25/84
CREDIT: R. Nelke

Sharp Gator Files Way from Pen

A 6-foot-long male alligator dived into his new pen at the Sawgrass Recreation Area in Fort Lauderdale, FL, and immediately began using his rough hide to file the pen's aluminum bars. It worked.

"He's trying to get out," onlookers shouted. "He's got his head through a hole."

It took only minutes for the alligator, a former resident of the Miami Serpentarium, to file his way to freedom.

Miami reptile handler Joe Wasilewski was putting the third of six alligators from the Serpentarium into the pen as part of an agreement with the Florida Game and Freshwater Fish Commission and Jim Swait, airboat concessionaire at Sawgrass.

"Well, that's it for the experiment," Wasilewski said in disgust.

For years, Wasilewski had kept his alligators, born and raised in captivity, at the Serpentarium.

But the Serpentarium closed a few weeks ago because of lagging attendance, and Wasilewski agreed to keep six alligators on display at Sawgrass and to give occasional lectures.

In turn, Swait built the alligator pen, the 20-by-16-foot floating gator haven featured a sun deck and a 4-foot pool.

SOURCE: *St. Louis Globe-Democrat* 10/9/85

CREDIT: UPI in the *St. Louis Globe-Democrat*

Is the Sky Falling?

A chunk of ice fell through the roof into the living room of the Jiminez home in Calumet City on May 30th. The chunk that weighed about 25 pounds and left a one-foot-wide hole in the roof was believed, authorities said, to have broken off a jet passing overhead.

SOURCE: *News-Democrat* Belleville, IL 6/1/84

CREDIT: R. Nelke

Doctors Successfully Remove 200-pound Cyst from Woman

A woman who weighed an estimated 600 pounds underwent successful surgery for removal of a 200-pound ovarian cyst after having refused medical treatment for more than a year, doctors said.

Helen Hollenbaugh was in stable but guarded condition after the operation at Lewistown Hospital, officials said.

The cyst, which contained 20.8 gallons of fluid was drained before surgery began, said hospital director Charles Harris. The draining was necessary to relieve pressure on blood vessels and organs.

"The mass has been successfully removed and the patient has been returned to intensive care," Harris said. The surgery team believed the cyst was benign, he said.

An ambulance crew had been called to Ms. Hollenbaugh's house after she complained of back pains and difficulty breathing, the hospital said.

"We got her down off the bed and onto the floor, rolled her onto the mattress and slid it out onto the staircase," said ambulance worker Richard Pennebaker.

But the handful of ambulance workers could not get the woman out of her house.

Rescue workers were called, and the crew "had to knock out a wall between the kitchen and the staircase to get her out," Pennebaker said.

As many as 30 workers were at the scene by the time Ms. Hollenbaugh was transported to the hospital, he said.

Harris said he had heard estimates that Ms. Hollenbaugh weighed as much as 600 pounds, "but we literally have no way of weighing this lady." He said the cause of the cyst was "unclear."

SOURCE: AP in the *Asbury Park Press*, NJ 12/18/84

CREDIT: #432

Chinese Girl Prefers to Live as Pig

Chinese doctors are studying the case of a 10-year-old peasant girl who prefers to live, eat and sleep with pigs, the *Canton Evening News* has reported.

The girl was suckled by sows. She shares the pigs' swill and sleeps in their sty at nights.

"The pigs never bite her and in fact, the temperamental porkers had only to hear her cry and they would come running to her side," said the paper. When people at her home in Liaoning province tried to tear her away from her porcine chums, she screamed, the paper reported.

Although the girl looks quite ordinary, she expresses her feelings awkwardly. Her speech is unclear and she grunts and snorts when she is hungry.

SOURCE: *St. Louis Post-Dispatch* 12/30/84

CREDIT: R. Nelke

Is Spandau Prison Haunted?

by Joseph W. Zarzynski

Spandau Prison is an immense dirty red brick fortress in West Berlin that is the cell block for "Prisoner No. 7," otherwise known as Rudolf Hess. Hess has been the sole inmate at Spandau Prison since 1966, but reportedly he is not alone as this old fortress is haunted.

Rudolf Hess was one of seven prisoners moved to Spandau in 1947 after the Nuremburg trials. Hess, Adolf Hitler's former deputy, was interned by the British after a madcap May 10, 1941 solo flight and parachute jump into Scotland on a personal mission to persuade the British to pull out of the war against Germany.

Hess has been the sole inmate at Spandau since 1966. However, recently one of the jail's observation posts has been haunted.

The Times of London reported on June 29, 1984, that one British sentry claimed he shot at a ghost and that, "One night a French guard inexplicably leaped to his death from the same post."

It is not surprising that Spandau Prison constructed in the 1870s as a military bastion is spooked. The stronghold served as a civilian jail before World War 2 and during the war was used as a clearing station for victims on their way to Nazi concentration camps.

SOURCES:

"Spandau marked for destruction when Hess dies," *The Times*. London. June 29, 1984. *The Murder of Rudolf Hess*. Hugh Thomas. London. 1979.

The Resch Poltergeist

(continued from page 177)

In trying to understand these phenomena reported from all parts of the world, the hypothesis that entities (or intelligently directed energies) find ways to remind us that there is more to life than we perceive through our senses, requires less imagination than crediting them to someone's subconscious. Admittedly, frustration and tension seem to be integral components in these cases, and an adolescent or sensitive adult may become the channel or activating agent. Tina had been getting clairvoyant impressions for several yaers before the physical phenomena erupted in March of this year. She had become more and more frustrated because her parents, unfamiliar with this kind of reality, understandably assumed that Tina was imagining or fabricating things, which further contributed to her frustration. She knew what was reality for her and was hurt by questions concerning her stability and integrity. It will be no surprise if we hear more about Tina and her developing gifts in the years ahead.

Speakers from seven countries will lecture at Dr. Walter Uphoff's New Frontiers Center seminar August 22-25 in Madison Wisconsin. The two major programs will be, one: Healing modalities, psychic phenomena and survival evidence; two: Alternate approaches to health care.

We highly recommend this meeting to SITU members. For the latest details write: New Frontiers Center, Fellowship Farm, Rt. #1, Oregon, Wisconsin 53575 or phone (608) 835-3795.

The Legend of Wind Cave

by A friend of SITU

Legend has it that, one hot summer day in 1881, a cowboy named Tom Bingham, as he rested on a hillside tending cattle, heard the whistling sound of a strong wind close by but felt no cooling breeze. The sound, he discovered came from a small hole in the ground just a few feet away. Fascinated by his discovery Tom told his friends of his experience, but they laughed at his story, for as everyone knew the ground in that area is solid rock. Fortunately, Tom marked the spot and returned to it often to wait for the noise to happen again.

Eventually he discovered the hole was a small entrance to a cave. The local Indians had known of it for a long time, Tom later learned. In fact, the Indian hunters believed the buffalo they killed for food were sent to them out onto the prairie, via this very same hole, by their sacred gods.

Bingham was even more confounded when he discovered that the wind would blow out of the opening at one time and be drawn back in at another time. It was as if the hillside was taking long breaths. Bingham enlarged the aperture and eventually explored the caves with some friends. The early graffiti they left on cave walls and ceiling is still evident.

As years went by, the word spread of this natural curiosity, passing stagecoach travelers stopped to see and witness the phenomenon. The legend of Wind Cave continued to draw ever larger numbers of curious people. Finally, in 1903, the federal government decided to protect this remote southwest corner of South Dakota by making it part of a national park. It was the first cave to be so designated.

In the 1930s workers of the then newly created Civilian Conservation Corps built steps and hauled cement in rubber inner tubes down intricate passageways to form paved and passable footpaths. Later lights were also installed to benefit the visitors. In 1969 nineteen-year-old John Scheltens stopped off at the cave on a Western trip. He became fascinated with the Wind Cave complex and later settled in nearby Hot Springs. He found that only about eight miles of passages had been explored and nothing had been mapped. Accompanied by friends, Scheltens began to explore and map as he went, finding the cave system far more complex than anyone had previously expected.

Most travelers to this Black Hill region, now, come to visit the sculptured granite faces of past presidents at Mount Rushmore forty miles to the north. Only about 10% of the more than a million visitors each year to Rushmore stop to visit the 44-square-mile preserve of Wind Cave National Park, many simply intrigued by the name on the road signs that introduce them to the park.

It is believed that the earth's crust buckled 60 million years ago pushing up, in alternate layers, the granite and limestone base. Subsequent action of an alternately rising and lowering water table caused the softer limestone to slowly wash downward between the granite masses. The acidic erosion and water seepage from underground streams formed, over thousands of years, the now beautiful calcite deposits and the cave configurations that often differ greatly from one cavern to the next.

Scheltens said so far he has mapped over 42.5 miles of caves and passageways. His experience as a civil engineer and spelunker has, naturally, been useful to him. The deepest exploration has been to 704 feet below ground level. he also found one cavern that is 2,800 feet long. Often now, on longer explorations, he camps underground for days in the constant underground 53°F temperature. The water table limits exploration downward and he never expects to explore it all in a lifetime, even with the aid of his colleagues.

Visitors to the cave are offered a choice of several tours in the underground labryinth. For the hearty there is a descent and, of course, the return of 740 steps; for the romantic, a candlelight tour to caves with such names as Big Harry's Place, Michael's Misery, Cracks of Doom, etc. The shortest is a walk of one half mile whereas the longest tour is four hours long to some remote crawl-on-your-belly regions. All of the tours can be out at the same time and each may never pass another, so vast is the cave system.

But most curious and perhaps most important to us here is the wind phenomenon which, according to Scheltens, is due merely to the difference in air pressure above and below the ground. He said study of the cave system and the duration of the wind or air flow indicates the 42.5 miles of caves mapped so far are only 2% of perhaps a two billion cubic foot air capacity of the underground space.

The wind at the cave entrance, according to Scheltens has been recorded between 55 and 60 miles an hour at times. This entrance was the only known 'breathing hole' for the complex until just recently when a small second fissure was found after more than a century.

Little is said of air movement except near the cave entrance but apparently Scheltens has encountered no noxious fumes or areas of low-oxygen content of the air. He also told this writer that he has never seen tracks of animals nor, in fact, any indication the cave was ever inhabited much less visited in the past by any other living creatures. Yes, there are lichens and cave bats near the entrance but nothing else in the life-supporting atmosphere of the apparently near-perfect encapsulation of the vast underground cave complex.

Of course, it can be rationalized that if there is no animal life in the caves, there are no creatures to use up the oxygen that has just been collecting for a long time thanks to the 'breathing' of the cave. And, underground acidic chemical reactions are generally not known to produce significant quantities of oxygen. But, at the risk of complicating a simple explanation we do feel there are more unanswered questions concerning this uncommon type of cave that need to be addressed. Therefore, we encourage our readers to visit the park and share their comments with us.

Regardless of all else, John Scheltens finds a major reward in all of this. He reminds us that relatively few new frontiers are left on this planet to be easily explored. To him, briefly leaving his everyday world to go down into a 'new' passageway waiting to be 'found' and knowing that he is the first human to light up and view a beautiful cavern for the very first time is a truly exhilarating experience. And who, after all, can honestly doubt this?



Report on Two Conferences

by Robert Warth

I was again pleased to be able to represent SITU this year in attending two major conferences.

The U.S. Psychotronics Association (formerly the U.S. Radionics Association) met this year on the campus of Oglethorpe University in Atlanta, Georgia, June 27 - July 1, 1984.

Significant lectures (some with demos or workshops) included: Riley Crabb "Harmony with Nature, Interplanetary & Intergalatic;" Samuel Lentine "Psychotronics, an Innovative Treatment of Allergies;" Paul Esch "Psychic Dentistry;" Marcel Vogel & J.T. Smith "Analysis of Psychoenergetics of Dowsing & Radionics;" Dennis Stillings "Cosmic Psychotronics;" Gary Fleck "Crystal Radionics;" B. Hero & R. Foulkrod "Awakening Consciousness Through Generating Patterns of Harmonic Sounds."

Eldon Byrd "Interactions of ELF, and EM Fields with Biological Processes;" R. Powers and N. Turner "New Geo-Magnetometer Detects Noxious Zones & ELF Fields;" Samuel Lentine "Psychotronic Alteration of Physical & Chemical Behavior;" Andreas Marx "Bio-physical Tests Determine Exposure of ELF, Radionics, Electro-puncture, Noxious Zones;" Mike Bradford "The Theory of Universal Dynamics;" J.G. Gallimore & Bob Beutlich "I Ching & Kabbalah with Time, Electric, Magnetic & Gravity Fields Yields New Resultant Fields;" Chris Bird "Alchemy of Life, Effects of DNA detected with Dowsing, Crystalization patterns;" Tom Bearden "Update on Soviet Psychotronic (Tesla) Weapons."

Elizabeth Rauscher "Models of Psychokinesis & Human Volitional Remote Interaction;" Peter Kelly "Crystal-Powered Psychotronic Tuners in Agriculture;" Bill Van Bise "EM Waves and Brain Waves and their Apparent Link with PK Phenomena;" Bob Beck "TESLA on 'Death Ray';" Philip Callahan "Ancient Mysteries, Modern Visions;" Thomas Valone "The One-Piece Faraday Generator;" Tom Bearden "Soviet Weather Engineering Over North America;" Andrija Puharich "The Potential Hazards to Agriculture of 'Greenhouse' Effect and it's 'Cure'." Curtis Wallace "Space Geometry;" Julius Soled "Chromotherapy;" Dick Benson "World's Oldest ϕ Map."

The theme of this annual Psi conference for 1984 held in Basel, Switzerland was "Telepathy and Clairvoyance." It was held in the magnificent new conference center that had opened just a few weeks earlier.

The language barrier was minimized since each listener was provided with earphones and a selector to listen to either German, French or English. Questions from the audience were a bit more difficult for the audience to hear and interpret.

The major lectures included:

Prof. Dr. Andrea Resch (Innsbruck, Austria), "Parapsychological Research on Telepathy and Clairvoyance;" Dr. Larissa Vilenskaya (USA, formerly from Moscow) "Investigation and Application of Telepathy, Clairvoyance and Psychokinesis in the USSR and in the West" and "Psi Development Systems;" Dr. Heinz C. Berendt (Israel) "Mistakes in and Misinterpretations of Psychic Impressions" and "A Qualitive Experiment of Clairvoyance;" Dr. Russell Targ (USA) "Remote Viewing" and "The Practical Application of ESP Researched Worldwide;" Prof. Dr. Herbert Pietschmann (Vienna) "A Possible Extension of the Scientific Method in View of Paranormal Phenomena;" Prof. Dr. Oliver Costa de Beauregard (France) "Implications of Relatively, Quantum and Information Theories for Parapsychology;" Dr. Rupert Sheldrake (England) "Morphogenetic Fields;" Dr. Walter Uphoff (USA) "Psychokinesis in the USA;" Prof. Dr. Werner Schiebeler (Germany) "How Can One Evaluate Mediumistic Statements?;" Mandred Kage (Germany) "Meditative Relaxation;" Coral Polge with Gaye Muir "Mediumistic Portraits With Clairvoyant Commentaries."

Of particular interest to the more than 500 attendees were the workshops and the discussions with performed experiments. These ranged from a panel discussion on, "The 6-dimensional Field Theory of Burkhard Heim in relationship to ESP," to a demonstration of firewalking by Larissa Vilenskaya. Equally popular were the experimental workshops, each conducted by a psychic. These included; Coral Polge, Gaye Muir, Karl Francis, Dorice Hannan, Ursula Roberts, Michael Colmer, Henriette Colmer and Joan Clark, all of Great Britain; Dietfried Markus of Germany; and Peter Nelson and Keith Harary both from the USA.

The conference had a considerably vast media converage since, I think it is safe to say, there is more sincere interest in these phenomena in Europe than in the USA at the present time.

The ultramodern conveniences of this facility in Basel will be available for future annual conferences, too. The only matter that I brought to the attention of the organizers was the remarkable absence of clocks necessary for the prompt attendance at lectures. One of the officials, somewhat embarrassed said, "The wall clocks are coming and will be installed shorlty, but after all who really needs them here in Switzerland, the land of world-famous wrist watches?"

As with most conferences, as much is learned in small group discussions as in the lecture hall and so it was, right up to the closing moments that ended with a Rhine river boat trip spirited beautifully with band music, cheese fondue, and some local Swiss wines.

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Editor's Note: Some important lectures of particular interest to Forteans will, with permission of the writers, be printed from time to time in ***PURSUIT*** as space allows.

Books Reviewed

THE FOUR MAJOR MYSTERIES OF MAINLAND CHINA by Paul Dong (Prentice-Hall, Inc., Englewood Cliffs, NJ, 1984, 213 pp., illus., $8.95)

Reviewed by Sabina W. Sanderson

This is a very odd book though it is valuable for Forteans in view of the long period during which nothing was allowed in or out of China. As the title indicates, the book is divided into four sections. I found the first two nearly unreadable; the other two gallop along just fine and seem almost to have been written by a different author.

The first section deals with UFOs in China and contains a number of reports of sightings but deals primarily with the 'history' of ufology in China, a tedious and dreary account of the battle between pro-and anti-ufology groups and individuals. There is one interesting chapter on UFOs in *ancient* China.

Section two covers psychic phenomena, specifically ESP (which they call EHF, "exceptional human functions"), but again devotes far too much space to the squabbles that arose between the convinced and the unconvinced. The experiments and testing described here can most charitably be called naive, though Stanley Krippner in an Afterword notes that the Chinese scientists have now instituted proper controls, statistical analyses, and such.

The "Third Mystery" — qi gong — was new to me. It is an ancient Chinese method of breath control with quite remarkable 'side-effects,' some of them real eye-poppers, if one can believe the reports.

The final section deals with "Wildman," China's version of the Sasquatch. Truthfully, I should have liked to have more on this subject — this section runs only 31 pages — but what there is, is worth having on record. There is an *official* search for ABSMs in China, and it is very possible that proof of their existence may come first from that country. The Chinese have, already, evidence (in the form of preserved hands and feet) of a hitherto unknown 'ape' in China — possibly a huge relative of the Macaques — though not yet of an ABSM as such.

There is a foreword by J. Allen Hynek (dealing exclusively with ufology) and, as noted above, an excellent Afterword by Stanley Krippner. There is also an index.

THE GEMINI SYNDROME: A Scientific Evaluation of Astrology by R.B. Culver and P.A. Ianna (Prometheus Books, Buffalo, N.Y., 1984, 222pp., illus., cloth $18.95, paper $11.95)

Reviewed by Sabina W. Sanderson

Messrs. Culver and Ianna are astronomers, and to be blunt about it, they take the astrologers apart. Unhappily, as they themselves admit, their book is unlikely to make a dent in the popularity of astrology. One of the reasons for this is that some parts of the book — in which they prove that the astrologers' methodology is all wet — are so technical that they probably will be really intelligible only to other astronomers, though their conclusions and the accompanying tablets are clear enough. (Just incidentally, the astrological house division systems most commonly used *cannot* generate a horoscope for anyone living above 66.5° North latitude — about 12 million people are thus deprived of their 'sidereal destinies.')

The authors begin by tracing the parallel histories of astronomy, which is a science, and astrology, which is not. This they then prove conclusively in a number of ways. As they note, "The 'bottom line' in any scientific description of a phenomenon in nature is its ability to *predict future events* or new experimental results." (emphasis mine) The authors collected 3011 predictions made by astrologers; 338 (11%) were correct, though I think the authors were overly kind here since they included as correct predictions that could have been based on "shrewd guesses," vague wording (my personal favorite, made some years ago; "Somebody famous will die in Southeast Asia this year!"), or "inside" information.

Astrologers, when confronted with a catastrophically wrong prediction, invariably resort to that cop-out of all time, "The stars incline, they do not compel." No natural law behaves that way. Indeed, rather than overhaul their totally inaccurate correspondences and methodology, "the astrological community has instead developed an impressive array of methods and techniques for the sole purpose of excusing or minimizing their predictive failures without even remotely threatening the basic 'truths' of the astrological gestalt. Such is not the road to the scientific credibility and respectability that so many astrologers for so many years have complained about not having."

There are references and an index. Unhappily, there are also a lot of typos.

THE SASQUATCH AND OTHER UNKNOWN HOMINOIDS, edited by Vladimir Markotic & Grover Krantz; Western Publishers, 1984, 335pp., Ilus. (Order from the publisher, PO Box 30193, Stn. B, Calgary, Alberta, Canada)

Reviewed by Sabina W. Sanderson

This book is identified as "Vol. I" of "The Research on Unknown Hominoids" so that, obviously, it is the first of an intended series. One hopes that subsequent volumes will prove equally good. It is an anthology and, as in all anthologies, the quality of individual articles varies somewhat, though here the overall standard is high. It is divided into seven chapters, each containing from two to six articles written by experts who were invited to contribute but given *carte blanche* on the subject so long as it dealt with unknown hominoids.

The first chapter is the weakest, dealing with "monsters" in a very general sense, from several viewpoints. One article really has nothing to do with unknown hominoids *per se*, and another even the editors admit does not "make any particular point."

Chapter II, "The Believers and the Skeptics," begins with a delightful piece by the late and lamented believer Carleton Coon, which counteracts the effect of Chapter I (on this reader in any case); an article by skeptic Hans Biedermann; and an excellent critique of both sides by Grover Krantz, who notes that he will "alienate almost everybody." I hope not, for his points are valid.

With these prelminaries out of the way, the book gets down to business. Chapter III, "Reports," includes material on the Soviet Union, China, Australia, and North America. Dmitri Bayanov reports on recent events in the USSR generally, while M.J. Koffman presents a "Brief Ecological Description of the Caucasus Relic Hominoid (Almasti)..." — her approach is so straight forward, she might be discussing the habits of the Arctic Fox or some other 'ordinary' animal; as Grover Krantz says in his introductory note, her manner "will leave many skeptics aghast." It even startled me a bit and I'm fairly blase on the subject of ABSMs.

John Green provides an excellent summary of published reports from China, including the discovery there of the mummified hands and feet of what is apparently a new species of ape.

Dmitri Bayanov reports on "The Case for the Australian Hominoids," drawing on material published in 1977 by Graham Jayner but including additional documentation and commentary. The earliest report from Australia is dated 1842, thus antedating Euro-American ones! Also, the reports of hairy bipeds come from both whites and aborigines. The main stumbling block here is how any ABSMs reached Australia — aboriginal traditions have it that they were there when the aborigines arrived. Bayanov addresses this problem but is not entirely convincing and ignores the fact that Asia and Australia haven't been connected for over 70,000,000 years. If there *are* ABSMs in Australia, this fact will throw Wallace's Line right out the window.

Grover Krantz provides a very useful summary of what we know about the Sasquatch and what ought to be done about the Sasquatch problem in the future. The latter is his personal view and it will be unpopular in some quarters, since he advocates shooting *one* specimen, a view I agree with. As he puts it, "If there is a need to protect an endangered species from extinction we must know what it is we are protecting, and from what and how."

Loren Coleman reports on "The Occurrence of Wild Apes in North America." This is much the same as the chapter in his book *Mysterious America* but certainly merits inclusion here.

Chapter IV, "The Biological and Psychological Aspects of the Sasquatch" includes two articles dealing primarily with footprints and one by James R. Butler who theorizes that the Sasquatch's ability to avoid contact with man is due to HSP (higher sensory perception) of some kind.

The footprint articles espouse diametrically different views on Sasquatch prints though both conclude that, apart of course from hoaxes, they are genuine.

Butler's theory is intriguing but did not convince me, in part because there are much simpler explanations.

Chapter V deals with the Patterson-Gimlin film in considerable detail and includes some truly fascinating information, not the least of which is the ingenious work of Russian specialists who determined once and for all the speed at which it was filmed: 16 frames per second. This was done by means of careful analysis of vertical oscillations caused by Patterson's walking and running while filming, something that caused moans originally. As Dr. Don Grieve stated (quoted in John Napier's book) "The possibility of fakery is ruled out if the speed of the film was 16 or 18 fps. In these conditions a normal human being could not duplicate the observed (locomotor) pattern, . . ." Had it been filmed at 24 fps, Patterson would have been making 6 steps per second — Olympic sprinters only manage 4.3.

Chapter VI, "Europe of Old" has to do with mythology and folklore. First, Vladimir Markotic presents a pretty good case for wondering if the Greek god Pan was an early hominid — deified by very early Greeks. He is unique in many ways and the suggestion that he represented surviving Neanderthalers is not so outlandish as it might seem.

"Creatures from the Bilogora in Northern Croatia" by Zvonko Lovrencevic is straight folklore and interesting though clearly not really related to ABSMs even though the creatures are described as hairy.

The final chapter, "The Problems of Origin," includes a paper by Charles Reed who considers various possibilities from a number of standpoints and finds *Gigantopithecus* to be the best but by no means certain candidate.

Grover Krantz does much the same thing but concentrates on Neanderthal Man, suggesting that there may have been greater differences between him and modern man than is generally assumed today.

There is an extensive bibliography, a glossary; and Notes on Contributors, complete with their addresses, but no index. This last was apparently dumped by the publisher since, in the Introduction, John Green is credited with compiling one; it would have been a useful addition. Also, someone should have done a better job of proofreading.

Letters to the Editors

Dear Editor:

Mr. Williamson's letter to the editor provides an interesting indepth astrological interpretation for the woodcut used in my article "A Sixteenth Century Spacecraft?" In ***PURSUIT***, Second Quarter 1984, Vol. 17, No. 2, page 74-75.

Speaking for myself, however, I was not primarily concerned with astrological symbolism. Instead I have tried to show, that if this wood cut had come down to us undated and without the contemporary explanatory text, it would lend itself excellently to an interpretation in modern ufological terms. On the other hand the accompanying text proves convincingly, that this woodcut was meant as an eye-catcher for an astrological forecast and not as a graphic representation of an early extraterrestrial visit.

Rather than conducting original research in the matter of the 1524 conjunction, I have relied on existing sources.[1] There is, however, no doubt, that said conjunction did actually occur in 1524 and that it was heavily publicized, thus creating a wide spread hysteria. Among other things some astrological writers (have they been the forerunners of our present day futurologists?) predicted a terrible flood which did, however, never materialize.

But no less a man than Albrecht Durer seems to have been seized by the common flood-hysteria. In the night between the 7th and the 8th of June 1525 he had a quite impressive dream in which he perceived great masses of water pouring down from the sky with a tremendous roar. Immediately after awakening he sat down and made a water colour painting of what he had seen, adding also a short verbal description.[2]

In connection with the theme of my article it may now be of interest that the downpouring waters in Durer's painting are depicted in the shape of a giant mushroom, giving rather the impression of a column of smoke rising from the earth. And, anyone looking nowadays on this painting for the first time and without any knowledge of its origin or the explanatory text would unhesitatingly identify it as the artistic rendering of a nuclear explosion.

1. e.g. Prof. Dr. Ernst Zinner,
Sternenglaube und Sternenforschung
Verlag Karl Alber, Freiburg/Munchen 1953
2. Durer's painting is in the custody of the Albertina, Vienna.

—Luis Schönherr

Dear Editor:

I want to say that I especially appreciated the article by Luis Schonherr in your latest third-quarter '84 issue. The author's concern for the subjective aspect of UFO reports is right up my line of special interest and I would like to contact this contributor.

I am one who believes that all "reality" contains some circumstantial elements, and that "reality" in the philosophical sense should be considered as a mind-dependent phenomenon and, I might add, with an inception in the subjective and only later setting up the subjective-objective differentiation. This viewpoint places me close to Berkley's philosophy. To me it seems that most persons have an inherent fear of such thinking assuming it leads to solipcism not realizing that it is a "universal" such as a sociologist might best appreciate.

Of one thing I am certain — that "seeing" is not perceiving. Consider a dog of the kind that loves to bark at moving cars. The picture on the dog's retina may to a large degree resemble my view of same. But to the dog, he sees no wheels, no windows, no special color, etc., etc. It is only by a long and hidden process of learning and evaluating (against the already known) that perception develops. No doubt the dog has a few perceptions of his own learning. It is somewhat the same for humans in our present state — we can perceive only against what we are familiar. In some past issue of ***PURSUIT*** there was mention of the difficulty of certain explorers to get the natives (who had never seen a sailing ship) to perceive it as such while it was moored amongst the trees and rocks in a distant optical view. Then also, the modern mind has a strong urge to perceive (perhaps to retain a feeling of sanity) and, just like with magicians, this condition can be deceptive.

—Harold A. Youtz

Dear Editor:

Spontaneous human combustion has fascinated me since I first became aware of it some years ago. I've read various speculations concerning the reason for its occurrence. I've never seen any mention of the possibility that it may have something to do with the energy called *Chi* or *Ki* in the martial arts. This is, I believe, the same energy that yogis and sages of the East talk about and have learned to master. It is a power that exists within all of us; only a few learn to increase this power, cultivate it, and control it. This power is limitless. It is the energy of the Universe at our fingertips.

I theorize that the victims of 'SHC' somehow inadvertently tap into this source of power, possibly through one of the chakras, the spiritual centers that separate one level of consciousness from another. Perhaps, because they have obviously not gone through a proper ritual (cleansing through proper diet and fasting to clear the channels to allow the free flow of this "current") and especially because they are unaware and not in control of what takes place, they are consumed by this energy that they unknowingly channel through themselves.

As support for my belief, I refer you to the chapter (which I recently discovered) entitled "The Techniques of Casting off The Body" from the book *Living With the Himalayan Masters*. The appropriate passage is on page 452 in my copy of the book.

Schopenhauer called access to ancient knowledge of India "the greatest privilege this century may claim over all previous centuries." I agree. The answers to many seemingly strange happenings may be available if we search in the right direction.

It is my hope that others more enlightened than I may take these thoughts and carry them the steps further that will take the solving of this mystery to its fruition.

—James F. Loretta

Dear Editor:

When powder is sprinkled on a vibrating square sheet, it flows to the diagonals. The diagonals define the lines where there is no vibration.

If a triangular surface is used, instead of a square, the powder flows to bisect the angles. What you see is a cross section of a pyramid.

Sound is a compression wave. This means that molecules are compressed to a higher material density along the nodal lines. The velocity of sound increases with density. Therefore, when the vibrations of the sheet converge into the nodal lines, they rotate their velocity 90° and accelerate along the lines. In other words, Pyramid Power is what conventional physical terminology would call hypersound.

All material structures vibrate sonically, so they are all sectored by nodal lines conducting hypersound. These are the meridians and ley lines of the tao, and the mysterious *chi* is scientifically established as hypersound. So are bioplasmic energy, elan vital, mana, orgone, and any other name that is applied by each new discoverer. A sphere will naturally sector itself sonically into harmonically defined geometry, so the terrestrial grid system could be calculated from a datum point at the Nile Delta without recourse to empirical evidence.

All the sonic vibrations in the material are brought to a focus along the meridians. Since energy is a function of velocity squared, it follows that the velocity of hypersound in any given structure will be a function of all the vibrations in its mass. If the mass is great enough, and if the meridians are fine enough, sonic energy will be accelerated to the speed of light. In other words, a structure with the mass of the Great Pyramid would transform the ambient sonic vibrations and random molecular motion of the desert heat into a current of electricity flowing along the meridians. The Pyramid is a solid state transformer. It is also a capacitor. It is also a tuned antenna. It is, in fact, a complete electronic machine. Clever people, those Egyptians.

Since the Earth is considerably more massive than the Pyramids, it should not be surprising that anomalous electrical phenomena occur along ley lines and at focal points of the grid. The vectors of sound, gravity, magnetism, and electricity are at right-angles to each other; they are successive dimensions of energy. A body as massive as the Earth produces stargates between dimensions at the focal points of its energy grid. Since energy rotates around dimensional boundaries at ley lines, structures will grow and disintegrate with greater velocity in these regions than in intermeridial space, and cities will be established on the grid whether or not the founders are learned in geomancy.

—T.B. Pawlicki

Dear Editor:

I certainly enjoyed the 3rd quarter 1984 ***PURSUIT***. Particularly timely was Bearden's STAR WARS NOW! It even gained national attention in the May 5th issue of *Newsweek*.

If I might add one correction, if I am correct, in the matter of just which mode will produce a high pressure area. The author states that the "Hot Spot" or produce energy will do this. I believe the hot spot will produce a low pressure area, the hot air being less dense, and a lower pressure will result. It must be remembered that low pressure areas are the anchor of weather fronts, and can be expected to produce storms, while a cold spot will produce a high pressure area and produce stagnant weather and such conditions as droughts.

—Ed Toner



The Notes of Charles Fort

Deciphered by Carl J. Pabst

ABBREVIATIONS

*	For some obscure reason, Fort cut a notch on the right side of the note.
A	Aurora
ab.	about
ac to	according to
A.J. Sci	*American Journal of Science*
(A l)	[?] Almanac
An. Reg.	Annual Register
Ast. Nach	[?] Astronomische Nachrichten
Ast Reg	*Astronomical Register*
BA	*Report of the British Association for the Advancement of Science*
Black Mt	Black Mountain
B.W.I.	British West Indies
Conn	Connecticut
CR	*Comptes Rendus*
(Cut)	illustrated
D-58	*The Book of the Damned*, page 58
det met	detonating meteor
Ec. Sun	Eclipse of the Sun
Elec	Electric
E Mec	*English Mechanic*
(F)	*Fletcher's List*
Finley's Rept.	Finley's *Report on the Characters of 600 Tornadoes*
Frgs	Frogs
Gents Mag	*Gentleman's Magazine*
Hist Astro	*History of Astronomy*
incip. volc.	incipit volcano
Inf conjunction	Inferior conjunction
(It)	Italy
J. des. Deb	*Journal des Debats*
Jour Frank Inst.	*Journal of the Franklin Institute*
Jour Soc	*Journal of the Society for Psychical Research*
lbs	ladybugs
L'Institut	[?]
L.T.	London *Times*
Lum obj.	Luminous object
Mag Nat Hist	*Magazine of Natural History*
Mechanics Mag	*Mechanics' Magazine*
Mems Geolog. Survey of India	*Memoirs of the Geological Survey of India*
met	meteor
Metite	Meteorite
Mo.	Missouri
N	North
N.E.	Northeast
N.M.	No More
no.	number
N.W. Provs.	Northwest Provinces
N.Y.	New York
obj	object
Obs	Observations
Op Mars	Opposition of Mars
p.	page
Pers.	Perseus
phe	phenomena
Polt	Poltergeist
Proc Amer Phil Soc.	*Proceedings of the American Philosophical Society*
Proc Irish Acad	*Proceedings of the Royal Irish Academy*
Proc Met Soc	[?] *Proceedings of the Meteorological Society*
Proc Roy Soc London	*Proceedings of the Royal Society of London*
q	earthquake
R	Reference
Ref	Reference
R.I.	Rhode Island
Sci Gos	*Science Gossip*
Smithsonian Inst Report	*Annual Report of the Smithsonian Institution*
Spon Comb	Spontaneous Combustion
S.W.	Southwest
Tenn.	Tennessee
th. storm	thunderstorm
Timb's	*Timb's Year Book*
Trans Ent Soc London	*Transactions of the Entomological Society of London*
volcs	volcanoes
W	West
Wld	Wild

(continued from PURSUIT *NO. 7, Third Quarter 1984, page 144)*

1839 March 23 / Burmah / Great q. Vast quantities of water and black sand thrown out of fissures.
[Reverse side] Volcanic eruptions in hills south of Kyouk Phyoo / slight tremblings then for a year / (BA 54).

1839 March 23 / — Ap 11, still more shocks / bet 3 and 4 a.m. / Ava, Burmah / great q. / A. J. Sci 38-385 / Great quantities of water and black sand
[Reverse side] thrown to surface of ground and strong sulphurous odor. Apr. 11th, last news received by the writer. / [Front side] (BA '11).

1839 March 25 / Volc / Ternate / Java / N.M. / C.R. 70-878.

1839 March 26 / Isere, France / shocks preceded by sound like distance
[Reverse side] thunder / BA 54.

1839 Ap. 5 / Florence / 5 p.m. / q preceded by very loud sound.
[Reverse side] Then the sky became clouded. / BA 54.

1839 [Ap. 8] / q / Highlands / [LT], Ap 8-5-f / Crieff — May 29-4-e / Glengarry — Ap 2-6-f / Bridgwater — June 11-7-a.

1839 Ap. 12 / Rain of mud / Constantine, Algeria / CR 8-715 / See 14.

1839 Ap. 12 / Algeria / q and sand / Finely powdered substance fell in Algeria. Upon 14th, a q. / C.R. 8-715, 768 /
[Reverse side] Philippeville / R — May 16, '46.

1839 Ap. 13 / Storm in Algeria / fall of hail or pieces of ice, described as falling in irregular masses / CR 8-763.

1839 Ap. 14 / q and sand / q in Algeria / ab 2 p.m.

1839 last of May / Dragon-flies / Germany / Mag Nat Hist, N.S., vol. 3 / See Weissenborn.

1839 May 2 / [L.T.], 6-d / 3 clusters of sunspots.

1839 May 5 / bet 11 and 12 / Aurora / few details / Nottingham / LT, May 13-5-b.

1839 May 5 / Brussels / Aurora / C.R. 8-807.

1839 May 7 / Parma / Fireball / BA 60.

1839 May 7 / Saint-Brice / Aurora / C.R. 8-807.

1839 May 8 / near Radham / Lum obj. / See Lum objs.

1839 May 16 / Wld man of the year 1836.

1839 May 18 / "pannetons" / fell around a coach between de Gournay [and] Gisors in such numbers the horses stopped. / 1901/1/303, La Vie Scientifique. ["hannetons"-Pabst; "pannetons" are May flies]

1839 [May] / Felt-like substance / Carolath, Silesia / D-58.

[BCF, p. 58:
A writer in the *Edinburgh Review*, 87-194, says that, at the time of writing, he had before him a portion of a sheet of 200 square feet, of a substance that had fallen at Carolath, Silesia, in 1839 — exactly similar to cotton-felt, of which clothing might have been made. The god Microscopic Examination had spoken. The substance consisted chiefly of conifervae.]

1839 May 22 / ab 11 a.m. / Bridgwater / loud report and shock / L.T., June 11-7-a.

1839 May 23 / afternoon / Maumee, Ohio / Tornado / Finley's Rept.

1839 May 24 / [L.T.], 7-a / At Vendome, France, a few days before, fall of a "waterspout." On
[Reverse side] one farm, 30 sheep drowned.

1839 June 6 / (Fr) / 8:30 p.m. / Cambrai / Evreux / Chambéry / Geneva / Lausanne / great met / CR 9-139 / Paris — 279.

1839 June 7 / 2 a.m. / Explosive sound and q / Meleda / BA '54/284 / [Reverse side] but see June 7, 1838.

1839 June 10 / Ica, Peru / I / [Light quake / BA 1911].

1839 [June] / Salvador / III / [Great quake / BA 1911] / ab June / ? / Look up.

1839 June 11 / q / Lancashire / See March 10, 1843. /
[Reverse side] At Manchester / Lloyds Weekly Newspaper, March 19, 1843.

1839 June 12 / 8:15 a.m. / q and sound like thunder / Lancashire / Roper, p. 34.

1839 June 16 / Mexico / q and mets / BA 54.

1839 June 16 to Dec. / (+) / (successive) (See Nov. 29.) / in Savoy / qs and one with light in sky / BA '54.

1839 June 18 / Ice and dark / Brussels / D-180.

[BCF, pp. 188-189:

We accept that sometimes fields of ice pass between the sun and the earth: that many strata of ice, or very thick fields of ice, or superimposed fields would obscure the sun — that there have been occasions when the sun was eclipsed by fields of ice:

Flammarion, *The Atmosphere*, p. 394:

That a profound darkness came upon the city of Brussels, June 18, 1839:

There fell flat pieces of ice, an inch long.]

1839 [summer] / Wet summer / Proc Roy Soc London 1850-15a.

1839 June 28 and 29 / Saratof Govern., Russia / II / [Medium quake / BA 1911].

1939 July 5 / [LT], 7-c / Locusts at Clunie, Perthshire / L.T.

1839 July 6 / Parma / Fireball / BA 60.

1839 July 7 / Arundel, Susse[x] / Shower of pieces of ice four or five inches in diameter enclosing hailstones. / LT, July 12-7-a.

1839 July 13 / Mexico / q and mets / BA 54.

1839 July 24 / Near coast of Lincolnshire — a cutter ran into numerous belts a[s] far as eye could reach of Aphides. / Sci Gos 1869.

1839 July 28 / Iceland / Smithsonian Inst Rept 1885-510.

1839 July 31 / noon / New Haven, Conn / Tornado / Finley's Rept.

1839 Aug. 1 / q — drought / Violent shocks at Martinique / Had been drought since January.
[Reverse side] Immediately after shock came rain which continued for days.

1839 Aug. / Maximum of Perseids / Observatory 46-169.

1839 Aug. 9, 10 / Great fall of Perseids / N.Q. 3-11-32 / N.M.

1839 Aug. 10, etc. / Great Perseids at Paris / 1000 in about 4 ½ hours / C.R. 9/375.
[Reverse side] At Parma, night 10-11, 819 in 6 ½ hours / also great in U.S. / C.R. 9-603.

1839 Aug. 10 / from 9:30 to 3:15 a.m. / at Breslau / 1008 meteors counted / [Reverse side] L.T., Sept. 2-2-f.

1839 Aug. 10 / Perseids / A. J. Sci 37-330.

1839 Aug. 11 / 8 to 4 a.m. of 12th / at Canton, China / 414 meteors / Athenaeum 1840/578.

1839 Aug. 12 / Swarms of Harpatus / near Dover / Trans Ent Soc London / [Reverse side] 1/5/proc. p. 24.

1839 Aug. 18 / Irkutsk, Siberia / III / [Great quake / BA 1911].

1839 Aug. 21 / (LT), 4-a / Mets.

1839 Aug. 23 / [LT], 3-f / Village of Federowk moved as if by a q.

1839 Aug. 24 / d'Auge, France / M. Lemercier, in C.R., 3/375 /
[Reverse side] Seeming great motion of Venus or Mercury.

1839 Aug. 26 / Coast of Albania / 9 p.m. / great met and train, 20 mins. / A. J. Sci 39-381.

1839 Aug. 27-31 / See 1805. / about 1 p.m. on 27 / Messina / a q a[t] 5 and 8 p.m. / other q's / and at 9:30 p.m. at moment of the concussions a reddish tint in the air — same day and until 31st in Calabria.

1839 Aug. 30 / Sunspot observed by Capt Davis / N.M. / Ast Reg 7-18.

1839 Sept. / Comet reported near sun, in Ohio / L.T., Oct. 8-8-a.

1839 Sept. 2 / 1 a.m. / Shock / Bristol / L.T., 9-3-d.

1839 Sept. 2, etc. / Many sunspots. A large cluster and 40 or 50 small spots appeared on 3rd. / L.T., Oct. 12-3-d.

1839 Sept. 2 / Bristol, 1 a.m. / S. Wales — q next night bet 11 and 12 great aurora (q and torrents) / LT — 9-3-d /.
[Reverse side] *Times* of 11th reported from Monmouthshire — had been stormy — rain falling in torrents — then violent shaking of earth and sound as if reports of many cannons.

1839 Sept. 2 / [LT], 2-f / Mets at Breslau.

1839 Sept. 3 / Auroral beam / A.J. Sci 39/364.

1839 Sept. 3 / This aurora seen at New Orleans. / CR 9/603.

1839 Sept. 3 / Aurora / Edinburgh / whole sky aflame / NM / LT, Sept. 7-4-f.

1839 Sept. 3-4 / from 10 p.m. to 4 a.m. / Sheet of fire and meteors / Year Book 1840 ///
[Reverse side] PLEASE PAY CASHIER [stamped].

1839 Sept. 4 / 1 a.m. / Piedmont / at Alexandria, Sept. 3-4, from 10 p.m., all night / brilliant aurora /
[Reverse side] C.R. 9/374.

1839 Sept. 5 / In a field near Peterborough fe!l a fireball, making a
[Reverse side] hole a foot deep. / L.T. 9-6-c.

1839 Sept. 10 / Fall River. / Clear starlighted night. Two black columns at first supp be smoke rising and toward each other northeast, other southeast. Streamer shot from them. They
[Reverse side] obscured stars. / LT, Oct. 9-5-c.

1839 Sept. 10 / Ghent / Fireball / BA 60.

1839 [Sept. 17] / spider / Letter dated Sept. 17, from Sikkur, on the Indus, tells of descent of a large cloud of spiders and their webs.
[Reverse side] "Maze within maze and fold within fold, an innumerable host of spiders." The morning was somewhat dark — there was distant rumbling of thunder. / "Mirror" 35-47.

1839 Sept. 20 / Fish, small space / India / D-84.

[BCF, p. 87:

Ferrel (*A Popular Treatise*, p. 414) tells of a fall of living fishes — some of them having been placed in a tank, where they survived — that occurred in India, about 20 miles south of Calcutta, Sept. 20, 1839. A witness of this fall says:

"The most strange thing which ever struck me was that the fish did not fall helter-skelter, or here and there, but they fell in a straight line, not more than a cubit in breadth." See *Living Age* 52-186.]

1839 Sept. 28 / [L.T.], 6-c or e / High Tide / Havre // 14-4-a / Ireland.

1839 Oct. / Comrie / See Ap. 30, 1921.

1839 Oct. / Comrie / See Aug. 21, 1845.

1839 Oct. / Comrie and Venus Inf. Conjunction Sun / May 7, 1865.

1839 Oct. 2 / Vulcan by De Cuppis / round black object that traversed the sun in 6 hours / C.R. 83-314.

[BCF, pp. 405-406:

Jan. 8, 1840 — sounds like cannonading, at Comrie, and a crackling sound in the air, according to some of the residents. Whether they were sounds of quakes or concussions that followed explosions, 247 occurrences, between Oct. 3, 1839, and Feb. 14, 1841, are listed in the *Edin. New Phil. Jour.*, 32-107. It looks like bombardment, and like most persistent bombardment — from somewhere — and the frequent fall from the sky of the débris of explosions. Feb. 18, 1841 — a shock and a fall of discolored rain at Comrie (*Edin. New Phil. Jour.*, 35-148). See Roper's *List of Earthquakes* — year after year, and the continuance of this seeming bombardment in one small part of the sky of this earth, though I can find records only of dates and no details. However, I think I have found record of a fall from the sky of débris of an explosion, more substantial than finely powdered soot, at Crieff, which is several miles from Comrie. In the *Amer. Jour. Sci.*, 2-28-275, Prof. Shepard tells a circumstantial story of an object that looked like a lump of slag or cinders, reported to have fallen at Crieff. Scientists had refused to accept the story, upon the grounds that the substance was not of "true meteoric material." Prof. Shepard went to Crieff and investigated. He gives his opinion that possibly the object did fall from the sky. The story that he tells is that, upon the night of April 23, 1855, a young woman, in the home of Sir William Murray, Achterlyre House, Crieff, saw, or thought she saw, a luminous object falling, and picked it up, dropping it, because it was hot, or because she thought it was hot.

For a description, in a letter, presumably from Sir William Murray, or some member of his family, see *Year Book of Facts*, 1856-273. It is said that about 12 fragments of scorious matter, hot and emitting a sulphurous odor, had fallen.]

1839 Oct. 5 / — 14 h / Venus Inf conjunction Sun / (A1).

1839 Oct. 6 / noon / Constantine, Algeria / rain from clear sky / C.R. 44-786.

1839 Oct. 12 / Comrie.

[BCF, pp. 403-405 / See May 17, 1830.]

1839 Oct. 18 / Intense darkness / Quebec / Niles Nat Register, Nov. 16, 1839 (N.M.).

1839 Oct. 20 / Vulcan ?

1839 Oct. 21 and 22 / Prolonged but very slight shocks / island of Antigua / BA-54.

1839 Oct. 21-26 / 62 shocks / Reggio, Calabria / BA, '54 / of which 26 were severe.

1839 Oct. 22 / Aurora seen at Milan. / L.T., Nov. 5-3-f.

1839 Oct. 22 / L.T., 4-d / at this date / N. eye group of sunspots.

1839 Oct. 22 / [LT], 4-e / 24-4-f / De Cuppis' dark body denied / said had been sunspots.

1839 Oct. 22 / France and Italy / Aurora / C.R. 9/538, 602 / 18/228.

1839 Oct. 23 / Pointed out in L.T., Dec. 11, that shocks at Comrie were same time as
[Reverse side] shocks in St Jean de Maurienne and at Reggio.

1839 Oct. / A / Am. J. Sci 2/7/315.

1839 Oct. 23 / Edin 34/97 / That in Sept. and Oct. been uncommonly brilliant aurora [s]. "They had a curious fiery color." / Many felt electric shock.
[Reverse side] There were other shocks. Mr. Milne in his review in vol. 25, "This aerial sound was perceived to accomp[any] most of the other shocks in October 1839.

1839 Oct. 23 / q felt simultaneously / Comrie / Piedmont / Calabria / LT, Dec. 5, 1840.

1839 Oct. 23 / See BA 54 for series this year at
[Reverse side] St Jean de Maurienne, Savoy.

1839 Oct. 23 / Comrie / A thin, fleecy cloud was often observed hovering over the center of disturbance. / BA-54.

1839 Oct. 23 / In Rept B. Assoc, 1840, Milne says in review of phe since 1788 — "Occasionally there was a fall of fine black powder."

[BCF, pp. 403-405 / See May 17, 1830.]

1839 Oct. 23 / Aurora borealis and shooting stars in Scotland were more frequent that usually in Sept. and Oct. /
[Reverse side] BA 54/28.

1839 Oct. 29 / Comrie / Sound and Etna / Ap. 13, 1822 / Etna = etc.

1839 Oct. / Comrie / Stone in Perth / May 17, 1830.

1839 Oct. / Comrie / q / loud sound at

Blackford / Oct. 30, 1821.

1839 Oct. / Comrie to distant / May 11, 1877.

1839 Oct. / Comrie to Turkey / July 12 — 1894.

1839 Oct. / Comrie as sounding board or Comrie to Distant q / May 11, 1877 / Collecting begins here.

1839 Oct. / Comrie / stone / Jan. 27, 1863 // b. rain / March 14.

[BCF, p. 200 / See Oct. 10, 1802.]

1839 early in Nov. / (Stat) / (Ref) / Night, great fall of mets — next day, 2 p.m., detonations and falls of stones
[Reverse side] at Sola, Mexico. / Bull Acad Roy des Sci de Bruxelles, 8/437.

1839 Nov. 9 / Antigua — little after daybreak / concussion / detonation / brilliant meteor /
[Reverse side] Athenaeum 1840/930.

1839 Nov. 9 / (3 soun[ds]) / (Cut) / Antigua, W.I., at first taken for an earthquake — but the meteor had been seen. / 3 explosions — / Am. J. Sci. 39/282 ///
[Reverse side] 42 // 32 / 159 / 220 / 220 // 443 / 498 / 517 / 619 / 533.

1839 Nov. 9-19 / Meteors as counted at Ceylon / small displays / mostly tending southward / Athenaeum [1] 839/970.

1839 early in Nov. / Nopalero, Mexico / 2 p.m. / W. to E. / Det. meteor / BA 60.

1839 Nov. 12 — / This year? / not in Athenaeum for 1839/970 / not '40.

1839 Nov. 13 / Moon-sized meteor / Cherbourg / Athenaeum 1839-76.

1839 Nov. 29 / before sunset / Large met at Naples, moving Eastward. When over the Adriatic,
[Reverse side] turned back and passed over Naples again. / BA 60.

1839 Nov. 29 / (It.) / Naples / Metite / Phil Mag 4/8/460 / See June 16./
[Reverse side] Cosmos, N.S., 3-55.

1839 Dec. 11 / q — like aurora / St. Jean-de-Maurienne, Savoy / 3:25 a.m. / Ab. 2 minutes after the
[Reverse side] shock, the horizon appear[ed] brilliantly lighted so that one could easily distinguish the objects in a room. From 16th of June, qs here had stopped, but had begun again Oct. 4. /
[Front side] B.A., 1854.

1839 Dec. 13 / evening / Dover / Brilliant meteor / L.T. 19-7-e.

1839 Dec. 16 / BO / [LT], 3-b / 4 large wolves seen in village of Lilleshall, near Newport.
[Reverse side] 1 shot and 3 captured. Supposed escaped from a menagerie.

1839 Dec. 18 / Breslau / Fireball / BA 60.

1839 Dec. 19 / L.T. / At Dover a rapping ghost.
[Reverse side] Servant girl confessed "after a severe examination."

1839 Dec. 31 / Upton-on Severn / See Lum objs.

1840

1840-41 / Longest sunspot on record / lasted 18 months / Todd, Astronomy, p. 175.

1840 / Carbon / Tenn. / N / D-73.

[BCF, p. 76 / See March 15, 1806.]

1840 / See 39. / fireballs at Parma / Rep BA-1860 / Ap 28 / May 2, 23, 31 // Also 41 / Feb. 25, 27 / May 8.

1840 Jan. 2 / [LT], 3-c / 3-3-d / Feb. 3-5-b / Dec. 39? / Comet.

1840 Jan. 2-3 / A great number of meteors, at Gand, and a bright aurora at Geneva./
[Reverse side] Proc. Amer. Phil. Soc., 13-501.

1840 Jan. 2 / See Jan. 2, 1839. / N.M. / unusual Quadrantids / E. Mec 74-446.

1840 Jan. 2-3 / See Jan. 1, 1842.

1840 Jan. 8 / 8 p.m. / det met / probably exploded over the German Ocean /
[Reverse side] BA 60.

1840 Jan. 8 / Meteor / Denmark / N.M. / C.R. 10-119.

1840 Jan. 8 / 10 p.m. / Donegal / Ireland / q and crackli[ng] in air and detonations / BA '54.

1840 Jan. 8 / (q) / Comrie / and a crackling sound in the air / Edin New P. J 36/73 / Others compared the sound
[Reverse side] to firing of cannons. / Mr. Milne lists and gives details of 18 other shocks in 1840 and 1841. / especially mentioning explosions or crackling sounds [Front side] "in the air" upon Jan. 8, 1840, and April 21 and Sept. 12, 1841 — explosions last instance hear[d] [a]t sea were mistaken for cannon fire.

[BCF, pp. 405-406 / See Oct. 3, 1839.]

1840 Jan. 30 / 3 a.m. / q and loud report at St. Louis / (N.M.) / Niles Nat. Register, Feb. 22.

1840 Feb. 2 / Volc eruption / Moluccas / See 14th. / Niles Nat. Register 59-1.

1840 Feb. 2-14 / Volc and q's / Ternate, Java / N.M. / C.R. 70-878.

1840 Feb. 6 / Brussels / Fireball / SE to NW / BA 60.

1840 Feb. 6 / Fireball / Sandwich Islands / BA 60.

1840 Feb. 7 / a little before midnight / Volc eruption near Baku, on the Caspian / Timbs 1841-257.

1840 Feb. 8 / Copenhagen / Fireball / BA 60.

1840 Feb. 14 / q — deluge / Moluccas / violent q and deluge from sky / Had been volc. on Feb. 2. /
[Reverse side] Niles Nat. Register 59-1.

1840 Feb. 17 / Berne / Fireball / BA 60.

1840 Feb. 25 / Met set fire. / Met set fire to roof of a wine press at Bois-aux-Roux (Chanteloup). /
[Reverse side] C.R. 112-514 / (This 1841?)

1840 Mar. 4 / Assam / q and eclipse of sun. / (ordinary?) / BA '54.

1840 March 14 / The unknown footprints of B.D. in Athenaeum of [March 14] from Perth Courier.

1840 Mar. 15 / Great met / Princeton and New Haven / BA 60-78.

1840 March 17 / Meteor / Canada / "Since said to be a false account." / BA 60.

1840 March 21-22 / night / Loudly detonating met / Sainte-Menould (Meus) /
[Reverse side] CR 12-662.

1840 March 22 / q — magnetic / q. / Annecy, in Savoy / 23, many villages destroyed in Burmah.
[Reverse side] These days magnetic perturbations at Prague. / BA '54.

1840 Mar. 24 / Grain / Rajkit, India / in storm / D-65.

[BCF, p. 66:
Amer. Jour. Sci., 1841-40:
That, March 24, 1840 — during a thunderstorm — at Rajkit, India, occurred a fall of grain. It was reported by Col. Sykes, of the British Association.
The natives were greatly excited — because it was grain of a kind unknown to them.
Usually comes forward a scientist who knows more of the things that natives know best than the natives know — but it so happens that the usual thing was not done definitely in this instance:
"The grain was shown to some botanists, who did not immediately recognize it, but thought it to be either a spartium or a vicia."]

1840 March 24 / 7 p.m. / Mobile, Ala. / Tornado. / Finley's Report.

1840 Ap. 5 / Volc eruption / Mindanao, Philippines / ashes, great showers / 7 N and 121 East /
[Reverse side] also 300 miles Neast of 1st position (two ships) / A.J. Sci., 40-198.

1840 Ap. 5 / Ship Niantic / 60 miles from Mindanao (Philippines) / Year Book 1842-245 /
[Reverse side] 2 a.m., ashes ab on[e] hour / fell occasionally for several days / (also on a ship 300 [miles] away).

1840 Ap. 24 / Aurora / Proc Roy Irish Acad 1/451.

1840 Ap. 28 / Parma / SE to NW / large slow meteor / BA 60.

1840 Ap. 29, 30 / Cloud of dust that obscured the sun 2 days in Russia. / Am. J. Sci 2/10/287.

1840 May 2 / Parma / Fireball / BA 60.

1840 May 7 / 2 p.m. / Natchez, Miss. / Tornado. / Finley's Rept.

1840 May 9 / Kirghiz Steppes, Tartary / Metite / BA '60-78 /
[Reverse side] Karakol, Siberia / (F).

1840 May / A / Toronto / A.J.S. 40/337.

1840 May 13 / Albany, N.Y. / 3 a.m. / Det. Met. / BA 60.

1840 May 13 / ab 3 a.m. / Great meteor / Conn and adjoining states / A.J. Sci. 39-382.

1840 May 13, 29 / 2 mets / U.S. / BA 60-78.

1840 May 22 / Violent eruption of Guteer, in Java / Athenaeum 1840-1014.

1840 May 23 / Parma / Fireball / BA 60.

1840 (May 23) / Aurora? Caraccas, Venezuela / sky clouded / one "star of first magnitude appearing at intervals" — a band of light that flickered and flashed / L. *Times*, Aug. 14 /
[Reverse side] Timb's Y.B. 1841/260 / CR 13/965.

1840 May 24 / 3 a.m. / volc / Goentoes, Java / N.M. / C.R. 70-878.

1840 May 25 / Ext. tide / Lake Erie / and meteor, 29th / C.R. 12-450.

1840 May 27 / L.T., 7-a.

1840 May 29 / U.S. / large met / BA 60.

1840 May 31 / Parma / S to N / Fireball / BA 60.

1840 (June 12) / Uden, Brabant, Holland / Metite / BA '60 / (F).

1840 June 20-28 / July 2 / July 6 and 8 / [July] 27 // Armenia / great q. / [BA] '11.

1840 period of June / Philosophy of Mysterious Agents / E.C. Rogers (YRD) p. 260 / Home of Joseph Proctor, a miller, village of Willington near railway running from Newscastle to North Shields. A room — occupants
[Reverse side] see bluish lights and ghostly appearances and swoon. Story here of experiences of an investigator. / See 1835//, etc.

1840 June 23 / [LT], 7-a / Spon. Comb.

1840 July 2-6 / (q and water?) / q / Mt Ararat / and immense floods of water / T.Y. Book 41/257 / but see 42-248.

1840 July 17 / In period of q's / Armenia / 6 and 8 and 27 / BA 11 / See 2-6.

1840 July 17 / (See [note cut off].) / Casale Piedmont / stonefall at Cereseto / Rept BA 1860-78 /
[Reverse side] Phil Mag 4-8-460 / See 1868.

1840 July 17 / 7 a.m. / '40 / Loud detonation at Milan. Metite fell at Ceresato. / Athenaeum 1840-1013.

1840 July 22 / metite / ab 8 a.m. / Great met seen in metite [?] said fallen near Milan / C.R. 11/244 / See 17th.

1840 July 28 to 29th / by H.M.S. Erebus / S. Lat 47° / E. Long 97° / Great numbers of meteors in a gale / BA 65-122.

1840 July 30 / Vienna / met train / 15 minutes / BA 60.

1840 ab Aug / lbs. / Brighton / D. News / Aug. 17, 1847.

1840 Aug. 2 / Frankfort / Fireball / BA 60.

1840 Aug. 3 / France / Fireball / BA 60.

1840 Aug. 3 / Met set fire. / 9:30 p.m. / Meteor seen at Tamerville, near Valognes, France, and said set fire
[Reverse side] on a farm. / C.R. 111-292 / The farm buildings on fire one hour later.

1840 Aug. 3 / Farmhouse at Tamerville, near Valognes — (La Manche), burned. Six witnesses told of having seen a meteor going in the
[Reverse side] direction of the house and of the fire immediately breaking out. / Mirror 36-160.

1840 Aug. 7 / Eng / whirl / *Times*, Aug. 14.

1840 Aug. 7 / Naples / Fireball / BA 60.

1840 Aug. 9 / q / Conn. / attrib by some persons to a meteor / Am. J. Sci. 33/335 / See Ap. 12, '37. /
[Reverse side] See Nov. 9, 1810.

(to be continued)

THE SOCIETY FOR THE INVESTIGATION OF THE UNEXPLAINED

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ORIGINS OF SITU/PURSUIT

Zoologist, biologist, botanist and geologist Ivan T. Sanderson, F.L.S., F.R.G.S., F.Z.S., in association with a number of other distinguished authors, established in 1965 a "foundation" for the exposition and research of the paranormal—those "disquieting mysteries of the natural world" to which they had devoted much of their investigative lifetimes.

As a means of persuading other professionals, and non-professionals having interests similar to their own, to enlist in an uncommon cause, the steering group decided to publish a newsletter. The first issue came out in May 1967. The response, though not overwhelming, was sufficient to reassure the founding fathers that public interest in the what, why and where of their work would indeed survive them.

Newsletter No. 2, dated March 1968, announced new plans for the Sanderson foundation: a structure larger than its architects had first envisioned was to be built upon it, the whole to be called the Society for the Investigation of The Unexplained, as set forth in documents filed with the New Jersey Secretary of State. The choice of name was prophetic, for Dr. Sanderson titled one of the last of his two-dozen books "Investigating the Unexplained," published in 1972 and dedicated to the Society.

Another publication was issued in June 1968, but "newsletter" was now a subtitle; above it the name *Pursuit* was displayed for the first time. Vol. 1, No. 4 in September 1968 ("incorporating the fourth Society newsletter") noted that "the abbreviation SITU has now been formally adopted as the designation of our Society." Issue number 4 moreover introduced the Scientific Advisory Board, listing the names and affiliations of the advisors. Administrative matters no longer dominated the contents; these were relegated to the last four of the twenty pages. Most of the issue was given over to investigative reporting on phenomena such as "a great armadillo (6 feet long, 3 feet high) said to have been captured in Argentina"—the instant transportation of solid objects "from one place to another and even through solids"—the attack on the famed University of Colorado UFO Project headed by Dr. Edward U. Condon—and some updated information about "ringing rocks" and "stone spheres."

Thus SITU was born, and thus *Pursuit* began to chronicle our Investigation of The Unexplained.

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Pursuit Index 1984

And in Lake Champlain, 122
Andrews, George, 120, 153
Bayless, Raymond, 23
Bearden, T.E., 29, 111
Becker, William, 50
Calico: A Progress Report, 21
Callahan, Philip S., 25
Captures and Strandings of Monsters in Loch Ness, 121
Chatelain, Maurice, 103
Conference Report: MUFON UFO Symposium, 136
Cubits and Constructs of Ancient Astronomy, 103
Defense Against Earthquakes? or Earthquakes for 'Defense'?, 9
Destruction by Fire, 162
DeWitt, David, 2
Dinosaurs in Pre-Columbian Art, 13
Eden, Daniel, 174
Editorials on Contents Pages, 1, 49, 145
Effective Mass and the UFO, 174
'Electronic Poltergeist', An, 23
Encounters with the "Real" Jersey Devil, 173
Energy and Paranormal Phenomena, 33
Experiment in Dowsing, An, 157
Final Note on French Lost Cities, A, 141
Fitzjarrald, Sarah, 11, 86
Fort, Charles, The Notes of, 45, 93, 142, 190
Deciphered by Carl J. Pabst
Friend of SITU, A, 185
Grandfather is Here to Stay, 86
Greenwood, Stuart W., 147
Hagens, Bethe, 50
Hansen, Evan, 162
Hypothesis of a Soviet Scientist, 73
If the Well Runs Dry, 11
Infrared Factor, The, 80
Insectry, The, 25
Keel, John, 80
Lebelson, Harry, 9, 78
Legend of Wind Cave, The, 185
Letters to the Editors, 43, 91, 134, 188
Life Force, Psychokinesis and the Electric Girl, 76
Lost Cities of France: Fact or Folklore?, 37
Macer-Story, Eugenia, 178
Magic Spark, The, 17
Magin, Ulrich, 121
Maya and the Synodic Period of Venus, The, 147
Neidigh, Kim L, 136
Nelli, Raymond A., 33
News from Another World: The Nebraska UFO-Cryptozoology Conference, 81
Normalizing the Paranormal, 120
Partain, Keith, 128
Peculiar Origins of Alek J. Hidell, The, 168
Percipient-Dependent Components in the UFO Experience, 98
Photographic Biofeedback?, 178
Planetary Grid, The: A New Synthesis, 50
Premise, The, 149
Reardon, Russ, 149
Related SITUations, 110
Report on Two Conferences, 186
Resch Poltergeist, The, 177
Roll, Michael, 120
Sanderson, Ivan T., 157
Sanderson, Sabina W., 21
Schönherr, Luis, 74, 98
Singer, Jon Douglas, 37, 141
SITUations, 40, 88, 129, 182
Smith, Sydney, 173
Solving the mystery of Ball Lightning — A Military/Scientific Imperative, 78
Star Wars Now!, (In two parts), 29, 111
Swords, Michael, D., 76, 81
Thompson, Paul, 17, 146
Tri-State Spooklight, The: A controversial Mystery, 128
Unknown Mummy, The, 146
Uphoff, Walter & Mary Jo, 177
Warth, Robert, 186
Was it an Extraterrestrial Spacecraft?, 74
Water-Powered Pyramid, 2
What Uprooted Massive Chunk of Earth?, 161
When the Moon is in Perigee, 73
Where Have the Flying Saucers Gone?, 153
Williams, Hill 161
Williamson, J. N., 168
Wirth, Diane E., 13
Zarzynski, Joseph, 122

Books Reviewed

Aliens Above, Always,
John Magor, 42
Champ-Beyond the Legend,
Joseph Zarzynski, 97
Champ-Beyond the Legend,
Joseph Zarzynski, 140
Clear Intent,
Lawrence Fawcett & Barry Greenwood, 138
Four Major Mysteries of Mainland China, The,
Paul Dong, 187
Gemini Syndrome, The,: A Scientific Evaluation of Astrology
by R. B. Culver and P. A. Ianna, 187
Mind Wars,
Ron McRae, 41
100% Intellect — The Freedom Covenant,
Richard J. Benson, 137
Psychic Warfare: Threat or Illusion?,
Martin Ebon, 41
Sasquatch and Other Unknown Hominoids
Edited by Vladimir Markotic & Grover Krantz, 187