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startled to find a living green turtle within it, the smooth, body-shaped cavity in which it had resided during its imprisonment clearly visible. The animal's rescue, alas, proved its undoing. It died within ninety-six hours of its liberation.

Where rocks are concerned, we seem indeed to be dealing with an event not significantly short of miraculous, as Corliss says. Occasionally conventionalists have speculated that the animals were able to sustain themselves by drinking water that seeped through cracks. Even if we discard testimony that specifically denies the presence of such openings, we still leave unanswered the monumental question of how the animal got there in the first place. The implication, it need hardly be emphasized, is that it was there a *long* time.

Nothing about this phenomenon makes any kind of sense. It seems to defy not only natural but even any conceivable paranormal explanation. Of the phenomenon all we can do is to acknowledge that while it is entirely impossible, it happens anyway.

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### Ghost Lights

Ghost lights are luminous phenomena, usually either points of lights or spheres, whose appearance, behavior, location, or regular manifestation puts them, at least ostensibly, into a separate category from ball lightning or unidentified fly-

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ing objects. Ghost lights are often taken to be supernatural or paranormal, and in many cases, especially those in which they appear regularly over a period of time in one place (as with the famous Brown Mountain lights and the Marfa lights), legends have grown around them, typically associating the lights with apparitions of the dead.

### Lights in folk tradition

Over three hundred years ago Nathaniel Crouch wrote in *The English Empire in America* (1685) that the Indians “have a remarkable observation of a flame that appears before the death of an Indian or English upon their wigwams in the dead of night; I was called out once about twelve a clock . . . and plainly perceived it mounting into the air over a church. . . . You may certainly expect a dead corpse in two or three days.”

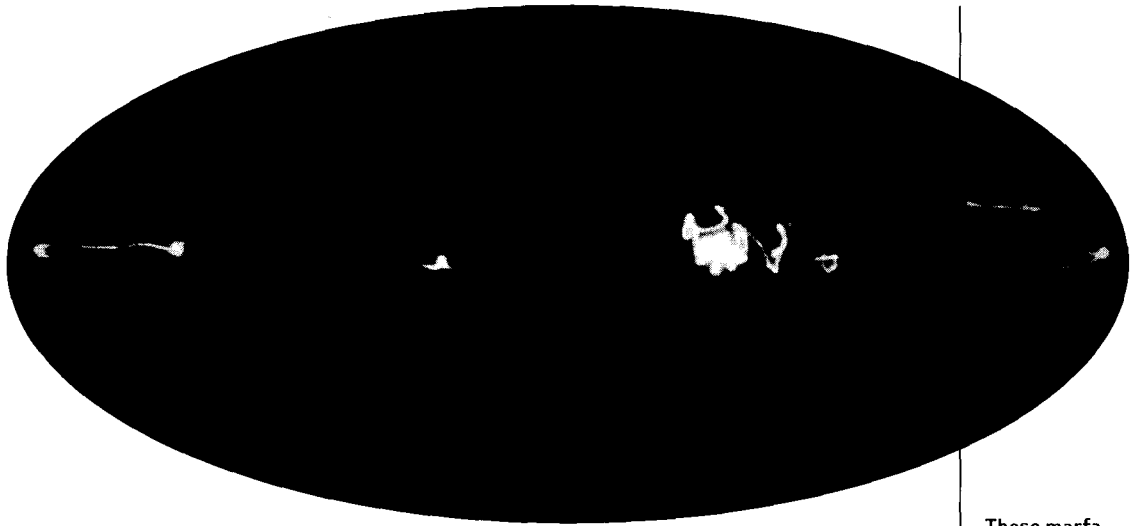
Three decades earlier, in 1656, John Davis, vicar of Geneu'r Glyn, Cardiganshire, Wales, recorded his and others' observations of varyingly colored lights that foretold deaths. These lights could be encountered anywhere: in the open air, on their way through a door, or inside a house. A small light presaged the death of a child, a bigger light that of an adult. Several lights together meant as many deaths. His wife's sister, Davis said, had observed five lights in a room; that night, in that very room, five servants suffocated to death in a freak accident.

In 1897 R. C. Maclagan published a long survey of ghost-light traditions, stories, and reports from Scotland's West Highlands. Typical of them are these tales told by an Islay man:

*One time lights were seen moving about at night on the rocks on the shore near Kilchearan. Shortly after that, a vessel was wrecked there, and the body of a man was washed ashore at the spot where the lights had been seen. One time lights were seen on Lochandaal, between Bowmore and Blackrock. Not long after that, two young men were crossing the loch on a small boat, and at the place at which the lights had been seen the boat was capsized and the two lads drowned.*

Such widespread traditions of “corpse candles” continued into the twentieth century. As a Welsh informant told W. Y. Evans-Wentz early in the century, “The death-candle appears like a patch of bright light; and no matter how dark the room or place is, everything in it is as clear as day. The candle is not a flame, but a luminous mass, lightish blue in color, which dances as though borne by an invisible agency, and sometimes it rolls over and over. If you go up to the light, it is nothing, for it is a spirit.”

In February 1909, for example, newspaper accounts told of the excitement generated in Stockton, Pennsylvania, over the “appearance at night of an arrow of flame, which hovers over the spot on the mountain where the dismembered body of a woman was found in a barrel two years ago. . . . The light appears every night at about 9 o'clock and hovers over the spot until midnight, but it disappears when anyone approaches the spot to investigate. The superstitious villagers say it is the



avenging spirit of the slain woman come back to keep alive the history of the crime so that the murderers may some day be apprehended.”

Lights also were associated with appearances of fairies. A young Irishman who attended Oxford University with Evans-Wentz provided him with this account:

*Some few weeks before Christmas, 1910, at midnight on a very dark night, I and another young man (who like myself was then about twenty-three years of age) were on horseback on our way home from Limerick. When near Listowel, we noticed a light about half a mile ahead. At first it seemed to be no more than a light in some house; but as we came nearer to it and it was passing out of our direct line of vision we saw that it was moving up and down, to and fro, diminishing to a spark, then expanding into a yellow luminous flame. Before we came to Listowel we noticed two lights, about one hundred yards to our right, resembling the light seen first. Suddenly each of these lights expanded into the same sort of yellow luminous flame, about six feet high by four feet broad. In the midst of each flame we saw a radiant being having human form. Presently the lights moved toward one another and made contact, whereupon the two beings in them were seen to be walking side by side. The beings' bodies were formed of a pure dazzling radiance, white like the radiance of the sun, and much brighter than the yellow light or aura surrounding them. So dazzling was the radiance, like a halo, round their heads that we could not distinguish the countenance of the beings; we could only distinguish the general shape of their bodies; though their heads were very clearly outlined because this halo-like radiance, which was the brightest light about them, seemed to radiate from or rest upon the head of each being. As we travelled on, a house intervened between us and the lights, and we saw no more of them.*

These marfa  
mystery lights  
were  
photographed in  
Texas in  
September 1986.

*(Photo by James Crocker,  
courtesy Fortean Picture  
Library.)*

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## Lights in Wales

In early December 1904 a thirty-eight-year-old Welsh housewife, Mary Jones of Egryn, Merionethshire, allegedly experienced a vision of Jesus, and in short order she became the leading figure in a Christian revival that in the weeks and months ahead attracted international attention – not because of her message, which was simply the tried and true one, but because of the peculiar phenomena that accompanied it.

The lights themselves were not unusual, but they had an odd quality: sometimes – though not always – they were visible to some persons but not to others who should have been able to observe them.

A *London Daily Mirror* reporter related a sighting he experienced in the company of the newspaper's photographer. The two had stationed themselves one evening in Egryn, where they hoped to see the lights. At 10 p.m., after a three-and-a-half-hour vigil, a light resembling an "unusually brilliant carriage lamp" appeared at a distance of 400 yards. As the reporter approached it,

*it took the form of a bar of light quite four feet wide, within a few yards of the chapel [from which Mrs. Jones conducted her ministry]. For half a moment it lay across the road, and then extended itself up the wall on either side. It did not rise above the walls. As I stared, fascinated, a kind of quivering radiance flashed with lightning speed from one end of the bar to the other, and the whole thing disappeared. "Look! Look!" cried two women standing just behind me; "Look at the Light!" I found they had seen exactly what had appeared to me. Now comes a startling sequel. Within ten yards of where that band of vivid light had flashed across the road, stood a little group of fifteen or twenty persons. I went up to them, all agog to hear exactly what they thought of the manifestations – but not one of those I questioned had seen anything at all!*

The witness does not say what, if anything, his photographer saw, or why the latter took no photographs. (No photographs of the lights are known to exist, and some contemporary accounts even assert, improbably, that the lights could *not* be photographed.) Arguably the climate of excitement and expectation caused the reporter to hallucinate, but the *Daily Telegraph* writer was not the only journalist to report such an experience. If anything, the incident recounted by Beriah G. Evans of the *Barmouth Advertiser* is more puzzling.

Evans wrote that while walking with Mrs. Jones and three other persons early on the evening of January 31, 1905, he saw "three brilliant rays of light strike across the road from mountain to sea, throwing the stone wall twenty or thirty yards in front into bold relief, every stone plainly visible. There was not a living soul there, nor house, from which it could have come." Half a mile later, a "blood-red light" appeared in the middle of the village street a foot above the ground and immediately in front of them. It vanished suddenly. Only the reporter and the evangelist saw these things.

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"I may add," Evans wrote in a subsequent magazine article, "that a fortnight later a London journalist had an almost identical experience. He, and a woman standing near, saw the white light, now a broad band, crossing the road near the chapel, and climbing and resting upon the wall. A group of half a dozen other people present at the same time saw nothing. Others have had an almost precisely similar experience."

Still, other light manifestations claimed not only multiple but independent witnesses. Once, as Mrs. Jones was holding a revival meeting in a chapel in Bryncreug, a ball of fire casting rays downward illuminated the church. It was also observed by passers-by. On another occasion, Mrs. Jones and three companions were traveling in a carriage in broad daylight when a bright light with no apparent source suddenly shone on them. The occupants of two trailing carriages, including two skeptical journalists, witnessed the sight, as did Barmouth residents who were awaiting her arrival.

Some representative sightings:

December 22, 1904, 5:18 p.m.: Three observers saw a large light "about half way from the earth to the sky, on the south side of Capel Egryn, and in the middle of it something like [a] bottle or black person, also some little lights scattering around the large light in many colors."

January 2, 1905, 10:40 p.m.: "[H]overing above a certain farmhouse . . . it appeared to me as three lamps about three yards apart . . . very brilliant and dazzling, moving and jumping like a sea-wave under the influence of the sun on a very hot day. The light continued so for ten minutes. All my family saw it the same time."

Early January, between 10 and 10:30 p.m.: "I saw two very bright lights, about half a mile away, one a big white light, the other smaller and red in color. The latter flashed backwards and forwards, and finally seemed in the same place again, but a few minutes after[,] we saw another light which seemed to be a few yards above the ground. It now looked like one big flame, and all around it seemed like one big glare of light. It flamed up and went out alternately for about ten minutes."

On February 23 the *Advertiser* took note of a recent report by two men, one a prominent farmer, of a "gigantic human form rising over a hedgerow. Then a ball of fire appeared above and a long ray of light pierced the figure, which vanished."

In the midst of all of this, Mrs. Jones and some of her followers were also encountering Christ and angels, who would manifest themselves in dreams and visions. One dark night, as she walked along a country road, Mrs. Jones said she encountered a shadowy figure who turned into a black dog and charged her, only to be dissuaded when she broke into a hymn. The attacker was, of course, Satan. These sorts of experiences are invariably personal and subjective and thus susceptible, to those so disposed, to secular psychological explanations. The lights, on the other hand, remain a mystery nearly a century later.

The appearance of the lights in the context of an evangelical revival may or may not be coincidental. Certainly it is true, if we look at the broader historical

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view, that anomalous luminosities are usually observed in a purely secular context. Still, there are precedents. During a religious revival in Ireland in 1859, a "cloud of fire" was seen to descend from the sky and then hover over open-air assemblies of the faithful.

### Lights in one place

In hundreds, possibly even thousands, of places around the world, "strange lights haunt the earth," anomaly chronicler Vincent H. Gaddis has written. "These types of UFOs are not flying saucers or balls of lightning. They are usually small in size and appear close to the ground. Their outstanding characteristic is that they are localized to one area or place."

Such lights become the focus of legends, not infrequently of lantern-bearing ghosts searching for something they lost in life, such as (in not a few of the more morbid traditions) a head. Not many of these have ever been properly investigated, but on those rare occasions when scientists or other serious researchers have addressed themselves to the task, the results generally have been disappointing – at least to those who wish to have their mysteries remain forever enigmatic or who, on the other hand, have their own more exotic explanatory hobbyhorses to ride.

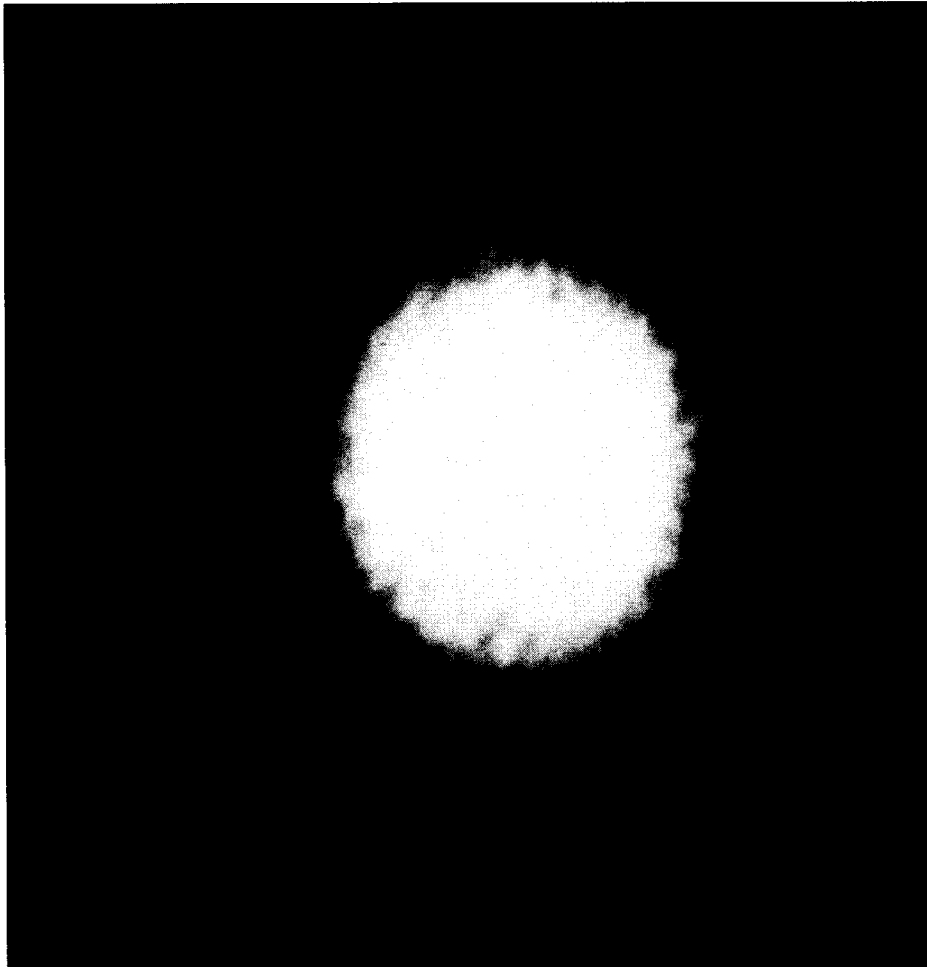
Many of the lights turn out, for example, to emanate from the headlights of cars on distant highways, or from stars and planets refracted through layers of air of varying temperatures. Sometimes the claim that the lights were a part of folklore even before the invention of the automobile or the locomotive proves itself to be folklore. Yet even ghost lights that are convincingly explainable in prosaic terms yield up occasionally puzzling reports, as if to confuse those of us who want to keep things simple. It may be that these are only anomalies of human perception, of course, but sometimes the witnesses are scientists and other trained observers.

There are, however, unambiguously mysterious lights that serious, sustained investigations by sober field researchers have not been able to lay to rest. The two major current examples are the lights at the Yakima Indian Reservation of south-central Washington and in the Hessdalen Valley of Norway.

### Yakima

The thinly populated reservation is 3,500 miles square, divided between rugged wilderness in the west and flat lands in the east. Beginning in the late 1960s (though sporadic sightings had occurred before then), forest rangers, fire-control personnel, and others began reporting the movement of bright white lights low in the sky over rough terrain on both the north and south sides of Toppenish Ridge, which cuts through the reservation's east-central section.

When these reports came to the attention of W. J. (Bill) Vogel, chief fire-control officer, by his own account he would greet them "with knowing smiles, an embarrassed shuffling of papers, and advisement to 'keep us informed'." Then late one night, as he was on patrol south of Toppenish, he saw something above a hill.



According to local legend in Long Valley, New Jersey, this "spook light" was made by the lantern swung by a dead railroad conductor known as the Hookerman. In 1976, the Vestigia research group showed that the light was an organized form of plasma gas produced by seismic pressure.

*(Courtesy Fortean Picture Library.)*

"It was easy to see then that the object most certainly was no aircraft," he said. "Also there was no discernible lateral movement. Even without binoculars the object's teardrop shape, with the small, pointed end above, was obvious. Brilliantly white in the center, the outer edges were fluorescent tan or light orange with a surrounding halolike glow. Its most awe-inspiring feature was a mouselike tail or antenna protruding from the small end and pointing upward. The antenna, as long as the object itself, was segmented into colors of red, blue, green, and white which were constantly changing brilliancy and hue."

Over the next ninety minutes Vogel took a series of photographs of the object, which eventually vanished to the south over the Simcoe Mountains. It would be only the first of a number of sightings he would make. Soon Vogel was busy collecting and investigating sightings on the reservation. Most of the reports he gathered were from his own fire lookouts, all trained and reliable observers, but he also interviewed many local people who had seen the lights.

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Later investigators included astronomer and former Air Force UFO consultant J. Allen Hynek. Hynek persuaded the Tribal Council to allow an observer to set up equipment on the reservation and to monitor the lights' activity. The observer, David Akers of the Aerial Phenomena Research Organization (APRO), brought with him cameras and other devices. On August 19, 1972, his first night on the reservation, Akers, accompanied by Vogel, saw two round, glowing, reddish-orange lights circling, changing places, and going on and off as they maneuvered beneath the tops of hills west of White Swan, a town at the reservation's north-central region. He took four photographs. Other sightings and other photographs followed until Akers left the reservation at the end of the month.

Unfortunately, technical problems with his equipment prevented him from getting the other kinds of hard data he was seeking, but Akers left convinced that "something very strange and unusual is taking place." He returned to the reservation over the next few days to interview witnesses and to see and photograph more strange aerial phenomena.

In later years Greg Long (who would write a book on his research) joined the investigation, working closely with Vogel (since deceased). Examining the detailed records of Vogel and Akers, Long found lights that appeared at ground level, above ground level, and at high altitudes.

Some of the strangest cases reported by fire lookouts involved apparent mental communications. Though most of their sightings were of distant lights, on occasion lookouts saw the phenomena at no more than several hundred yards, yet somehow were prevented from getting closer. Lookouts reported "hearing" a voice inside their heads saying, "Stay back, or you'll get hurt," and feeling restrained. One lookout saw a shaft of bright, purple-colored light shining down around her cabin. When she tried to go outside to investigate, she felt as if "two magnets [were] repelling each other" and blocking her exit. Puzzled but determined, she even ran at the entrance several times but could not get through.

Observers often reported feeling as if they were seeing something they were not meant to see, and more often than not they removed themselves from the presences of the lights or objects they had come to investigate.

It must be noted that some reports were of craftlike structures and a few were of alien beings (described as skinny, long-haired, and long-nosed). Consequently the Yakima phenomena may have more to do with UFOs than with the sorts of pure-light manifestations with which we are concerned here. Still, as UFOs, those at Yakima are out of the ordinary in being bound to one place and in looking like – at least in most of their appearances – ghost lights. In any case, the sightings have subsided substantially since 1986.

### **Hessdalen**

The Hessdalen lights also subsided in 1986, but for a period of several years they were the target of a determined investigation that combined the efforts of ufologists, scientists, and locals. The Hessdalen Valley, stretching across twelve



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kilometers of central Norway near the Swedish border and holding no more than 150 inhabitants, began to experience odd luminous phenomena in November 1981.

The lights sometimes appeared as often as four times a day, often below the horizon along mountain tops, near the ground, or on the roofs of houses. Usually white or yellow-white, they typically were shaped like cigars, spheres, or an "upside-down Christmas tree." In this last instance, according to miner Bjarne Lillevold, the light was "bigger than the cottage beside it. It was about four meters above the hill and had a red blinking light on it; there seemed also to be a curious 'blanket' over the whole thing. The object moved up and down like a yo-yo for about 20 minutes. When it was close to the ground, the light faded, but at the height of the maneuver it was so bright that I could not look at it for long. When the light was near the ground, I could see through it as though it was made of glass."

Occasionally, according to other witnesses, a red light maintained a position in front. The lights hovered, sometimes for an hour, then shot off at extraordinary speed. Most of the time they traveled from north to south.

Investigators from UFO-Norge brought valley residents together to discuss their sightings on March 26, 1982. Of the 130 who attended, thirty-five said they had seen the lights. Soon afterwards two Norwegian Air Force officers interviewed natives and later told reporters that the "people of Hessdalen have been seeing luminous objects since 1944, but many years passed before they dared to talk about the sightings." It is unclear what the 1944 reference means; numerous sightings of what would come to be called UFOs occurred in northern Europe during World War II, but such sporadic, seemingly random reports should not be confused with the mid-1980s phenomena.

Though sightings declined for a time in 1983, that summer Scandinavian ufologists formed Project Hessdalen and secured technical assistance, including the active participation of scientists, from the Universities of Oslo and Bergen. A variety of equipment was set up on three mountains. The results from the month-long winter vigil (January 21 to February 26, 1984) were interesting but inconclusive: some sightings, radar trackings, and photographs. When laser beams were aimed at passing lights, the lights seemed to respond. Once, on February 12, one such object "changed its flashing sequence from a regular flashing light to a regular double flashing light, i.e., flash-flash . . . flash-flash . . . flash-flash. After about ten seconds we stopped the laser and the light immediately changed back to its previous flashing sequence. After about another ten seconds we repeated the exercise and again the light responded by changing to a double-flash sequence. In all we repeated this exercise four times and every time we got the same reaction from the light."

The investigators disagreed on what the phenomena could be, with some holding forth for a geophysical explanation and others suspecting some guiding intelligence. Erling Strand, one of Project Hessdalen's directors, thought it "strange that they [the lights] existed for a five-year period" to be "recorded in Hessdalen and nowhere else." Another investigator, Leif Havik, wrote of the "coincidences" that enlivened the investigation:

*On four separate occasions, it happened that we came to the top of Varuskjolen, stopped the car, went outside, and there "it" came immediately*

*and passed by us. The same thing happened once on Aspaskjolen. All these instances happened at different times of the day and most of the time it was an impulse which made us take an evening trip to Hessdalen by car. . . . On some occasions other observers had been looking for hours without success. . . . "Coincidences" also happened to the video equipment which recorded the radar screen. One evening the pen of the magnetograph failed to work. At the same time the video tape had come to an end, and the phenomenon appeared less than one minute later. The next evening we made certain that the pen had sufficient ink and turned on the video recorder ten minutes later than the night before. We thought that now everything was ready for the usual 10:47 "message." [One light appeared regularly at 10:47 p.m.] The video tape ran out at 10:57 p.m. and we thought that tonight "it" had failed us. But at 10:58 the usual phenomenon appeared.*

In terms of hard scientific data, the results were disappointing. Project investigators logged 188 sightings. Some, they determined, were of passing aircraft. Of four photographs taken through special lens gratings, only two showed light spectra of sufficient clarity to be analyzed. Project adviser Paul Devereux said of these, "One spectrum of one 'high strangeness' object was analyzed and showed a wavelength range from 560 nm [nanometers] to the maximum the film could respond to – 630 nm. . . . The spectrum analyzer did not register anything unusual while lights were being seen, but odd readings were obtained at times. . . . These showed up as 'spikes' at approximately 80 mHz [megaHerz]." In 40 percent of the sightings, changes in the magnetic field registered on the instruments.

Looking back on the episode, University of Oslo physicist Elvand Thrane, who had participated in the research, remarked, "I'm sure the lights were real. It's a pity we cannot explain them."

### **Other luminous anomalies**

Writing of anomalous lights, sociologist of science James McClenon observes that the "circumstances of a report frequently determine its interpretation. A ball lightning effect that occurred during an electrical storm would be termed 'ball lightning'. . . . Other cases with the exact same appearance but occurring in other circumstances would be called UFOs, psychic lights, or will-o'-the-wisps depending on the context and the observer's assumptions and interpretation." He then relates a story, which the informant "solemnly affirms to be true," of a ball of light witnessed during his youth. The ball, one foot in diameter, approached the boy's bedroom from outside, magically opened a window, sailed around the house, and left via the front door, which also opened. "The respondent has not previously reported this observation," according to McClenon, "because it seems to defy classification."

Ball lightning, whose existence most physicists and meteorologists now accept, continues to defy explanation, at least in the sense that so far no one has been able to find a physical mechanism that accounts for all its features. We do know that ball lightning nearly always appears during thunderstorm activity, is

seen just after and near a lightning strike, lasts a few seconds to (rarely) a minute or two, and often disappears in an explosion that leaves a sulfurlike odor. Clearly, whatever the surface similarity in shape and luminosity, true ghost lights are not examples of ball lightning.

Other hypotheses, notably Paul Devereux's "earthlights" and Michael Persinger's "tectonic stress theory," propose geophysical explanations for such luminous phenomena, but neither explanation has won any significant scientific acceptance. Devereux's in particular seems a thin scientific veneer for a kind of British nature mysticism, and Persinger's has been criticized on a number of methodological grounds. Both hold that ghost lights are the product of subterranean processes that not only create luminous energy on the surface but generate hallucinations in observers.

Probably ghost lights are a number of different things, from the ridiculously mundane, to the exotically natural, to the certifiably enigmatic.

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## Nazca Lines

At some time before 1000 B.C. the Nazca Valley, a desert region on Peru's southern coast, was occupied by a people whose sophisticated agricultural technology enabled them to build an irrigation system, improve their crops, and expand the area of cultivatable land. Over the next 1,500 years they also made advances in weaving, pottery, and architecture. The most celebrated of their cultural achievements, however, was the creation of a remarkable ground art whose precise function remains a mystery.

The so-called Nazca lines, of which there are thousands, consist of five kinds of markings. William H. Isbell writes:

*Most common are the long straight lines. Thousands of these crisscross the desert in every direction. . . . Sometimes the lines turn back on themselves to form elaborate geometric complexes with zigzags or long parallel sets of oscillating lines. Second are the large geometric figures – elongated trapezoids or triangles – which were first noticed from the air. . . . Third are representational drawings of animal and plant forms accomplished with curving lines. . . . Frequently these three types of markings are combined in a single layout. . . . A fourth class of ground markings incorporates several kinds of rock piles. . . . The fifth class of ground art consists of figures on steep hillsides.*

The lines may be as narrow as six inches or as wide as several hundred yards. Some run for several miles. The Nazca people created them by removing the dark surface stones and placing them in the desired pattern. "Walking or sweeping the resulting figure disturbs a thin brown surface coating of material called desert varnish, which accumulates over time," William E. Shawcross writes. "This action exposes the creamy pink soil underneath." These light areas comprise the Nazca lines that, owing to the dry, stable climatic conditions of the area, have remained essentially unchanged over many centuries.

What has made these lines a curiosity that otherwise would interest only South American archaeologists is the fact that some (though not all) of the forms are visible only from the air. Within conventional archaeological circles this aspect has given rise to different interpretations: one, that the figures, which probably had some religious significance (they were not "roads," as some popular opinion had it), were not meant to be seen in their entirety, at least by human eyes, and two, that the Nazca people built balloons that enabled them to fly over the sites. This latter interpretation, though not impossible, seems devoid of supporting evidence.

### Beacons of the gods?

The Nazca lines entered popular culture not long after the commencement of the UFO age, with its suggestions of extraterrestrial visitation. In the 1950s, as books and magazine articles about UFOs proliferated, some writers looked back to



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## Field Research of Mysterious Lights Reported in Norway and Brazil

By Linda Moulton Howe

### Introduction:

There are places on the Earth where locals have long reported seeing mysterious lights, day and night. To name a few, there are the Ontario Lake lights in Canada, the Ural lights in Russia, the Victoria lights in Argentina, the Tagish lights in the Yukon, the Yakima lights in Washington, the Marfa lights in Texas, the Pine Bush lights in New York, the Hessdalen valley lights in Norway, and the mysterious lights associated with crop circles around the world.

The lights are described as small, often six to twelve inches diameter, or smaller. Their glow is most often white, yellow, orange or red. The lights “float” or move in the air, or flash on for a few seconds and then flash off – in the sky or near the ground. Some lights seem to react to human activity as if intelligent. One example of interaction with a laser pointer is discussed in this paper.

Physicists and engineers from Italy and Norway who have studied mysterious, reoccurring lights in the Hessdalen Valley of Norway describe the lights there as “illusive” and “unpredictable” and wonder if they are “thermal plasmas of unknown origin,” or “electro-heated silicon,” or both. Biophysicist W. C. Levenson<sup>317</sup> of Michigan has published in peer reviewed journals some of his discoveries about changes in crop formation plants and soils which he hypothesizes are caused by “spinning plasma vortices,” also of unknown origin.

Mysterious lights have also been the talk of local farmers for decades in Corguinho, Brazil. White, yellow, orange or red lights have been seen moving in the sky or near the ground in daylight or night. But unlike Hessdalen, the Corguinho farmers have watched mysterious lights literally come out of the ground, move around low in the air, rise high into the sky, expand in size and increase in brilliance, and then move “inside” the large mesa that dominates the Corguinho landscape. Sometimes the lights have also been seen “coming out of” the large mesa, flying around and disappearing back down into farm land.

### Corguinho, Mato Grosso do Sul, Brazil

After midnight in Corguinho, Brazil on January 5, 2003, public lawyer and Attorney General of Rio de Janeiro, Jose Carols De Souza, and his wife were stunned to see a large red and gold light shaped like a disc about 56 feet in diameter suddenly appear in front of them. It was close to the ground moving slightly back and forth. Then it slowly traveled behind a tree where it “turned off.” The couple waited for awhile to see if it would reappear. It didn’t, so they decided to leave. Immediately, the glow reappeared behind the tree and flew away rapidly.

Only three and a half months before on September 15, 2002, farmer Urandir Oliveira said a “violet light flashed” in his bedroom and he began to feel hot and rise paralyzed off the bed through the ceiling. At 7:30 p.m., dozens of small, disk-shaped rocks began to fall out of the sky on to the farm. His parents, cousins and friends gathered many of the rocks and ran to Oliveira’s house. Urandir was not there, but in the bedroom on the bed was the “melted” pattern of a body and in the wood ceiling was a dark scorched pattern of a body. Urandir was

<sup>317</sup> Owner, Pinelandia Biophysical Laboratory, Grass Lake, Michigan.



gone until the night of September 18, 2003, when he said he was returned to the bed by “tall, blond extraterrestrials.”

After analyzing the cotton and polyester woven bed sheet imprinted with the body pattern, biophysicist W. C. Levengood said, “This (pattern) takes a very high precision kind of energy, probably at the molecular level, to transform these threads and fibers. Whatever the energy was, it was extremely precise.”

**Hessdalen Valley, Norway** (hess-DOLL-un)

In the Hessdalen research, there is a confusing mix of data that indicate both small, glowing lights which show point spread frequencies (PSF) in optical spectra of plasmas, and others which show PSF of solid objects.

After three years (2000, 2001 and 2002) of research collaboration with Norwegian engineers in Hessdalen, astrophysicist Massimo Teodorani, Ph.D., wrote about the mysterious lights in his recent report, *2002 Optical and Ground Survey in Hessdalen*: “Whatever these things are, if some ‘alien intelligence’ is behind the Hessdalen phenomenon, that hypothetical intelligence has shown no interest in searching a direct, continuing and structurally evolved communication with mankind and have gone on behaving in such a way that the light phenomenon itself appears to be totally elusive.”<sup>318</sup>

In August 2002, I traveled to Hessdalen, Norway to report about the third year of joint investigative efforts of the mysterious lights by Italian astrophysicist Massimo Teodorani, Physicist Gloria Nobili, Norwegian engineers Erling Strand, Bjorn Hauge and others.

In February 2002, I traveled to Corguinho, Brazil to collect physical samples from the bed sheet and ceiling body patterns and to collect some of the rocks that fell on September 15, 2002. I also gathered other rocks and wood from locations where local residents have observed mysterious lights impact with rock, soil and plants.

This presentation is a summary of ongoing and evolving research in both Hessdalen, Norway, and Corguinho, Brazil.

<sup>318</sup> Page 16, “An Optical and Ground Survey in Hessdalen, Norway – EMBLA 2002” © 2002 by Massimo Teodorani, Ph.D., Astrophysicist, Institute of Radioastronomy, Medicina, Italy, and Gloria Nobili, Physicist, Bologna, Italy.

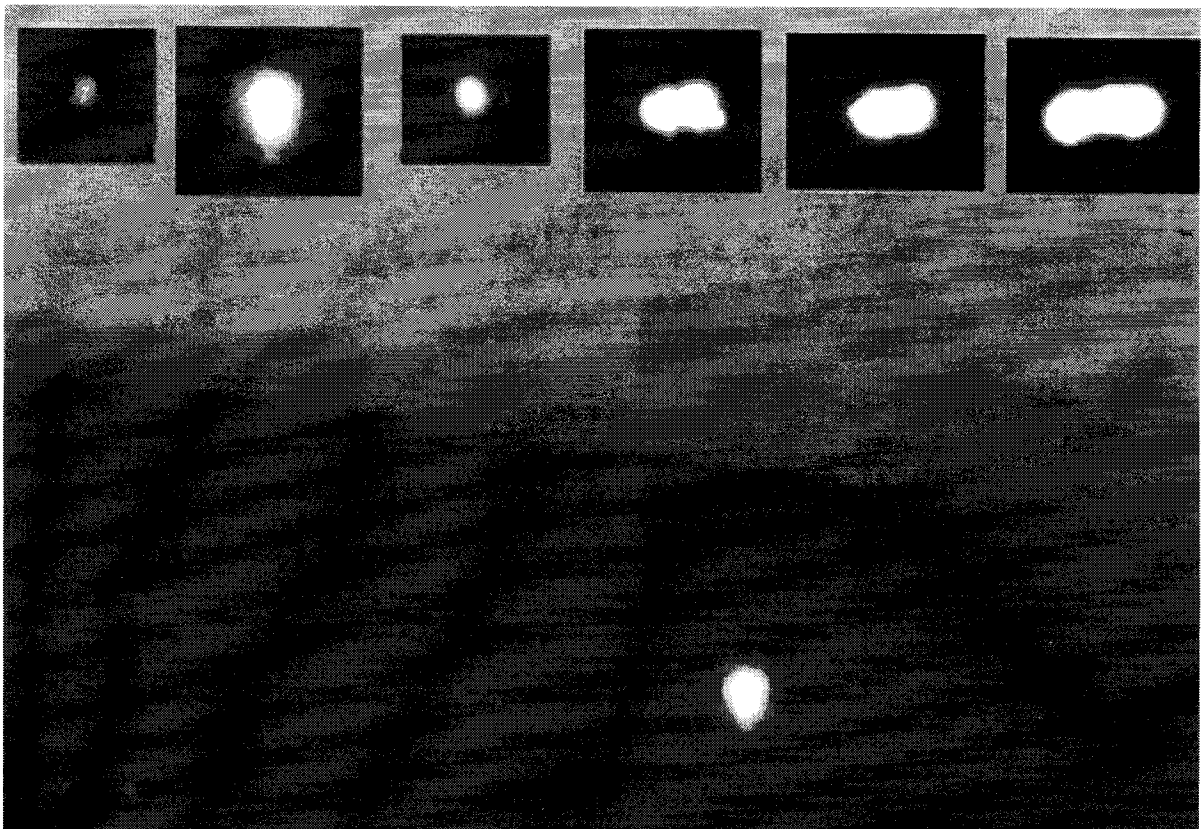
Part I – Hessdalen, Norway

*“We saw that those lights were changing shapes suddenly from very big to very small and the phenomenon was there standing still. But the temperature was just constant because we measured the temperature in both phases. So, there must be some kind of self-heating mechanism that keeps the temperature constant. This is highly anomalous.”*

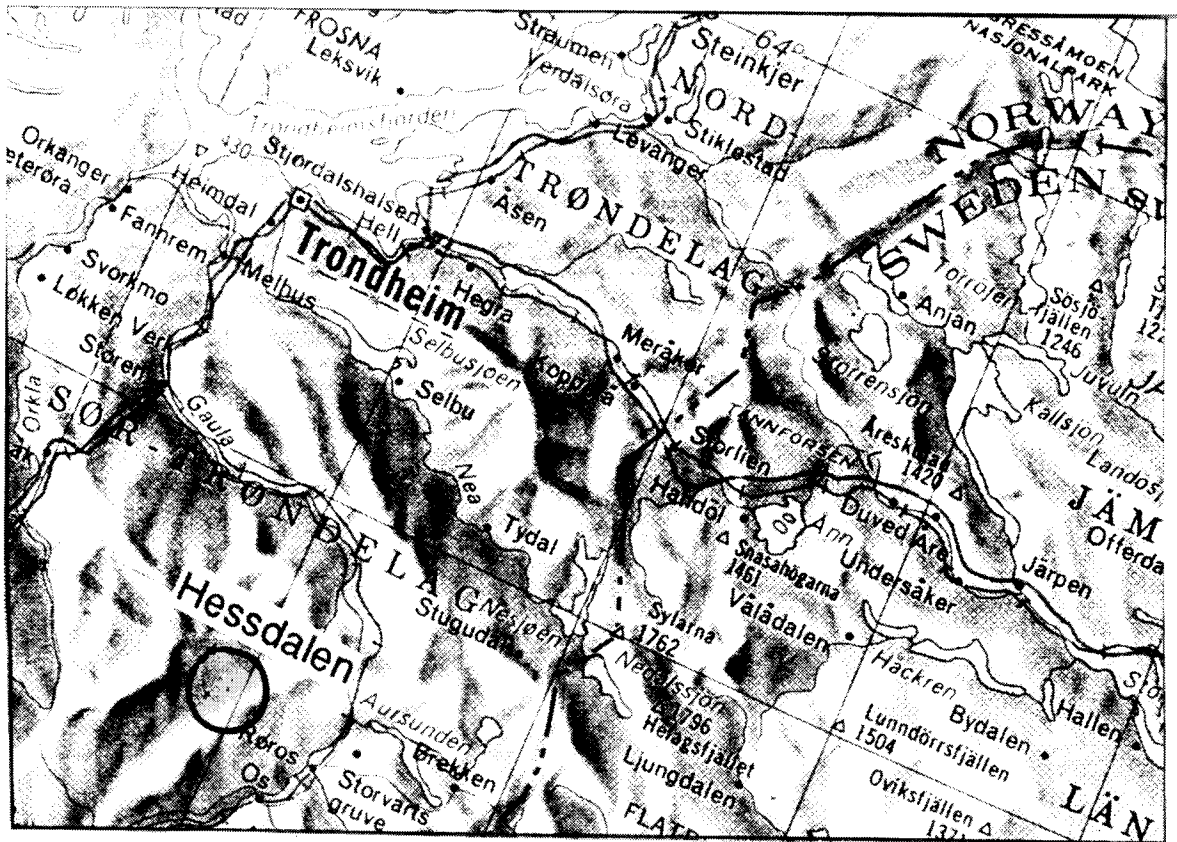
- Massimo Teodorani, Ph.D., Astrophysicist, November 2001

*“The light phenomenon is able to increase luminosity in a drastic way due to a ‘photometrically multiplicative effect’ caused by many light-spheroids (some of which might be ejected from a central body, surrounding an initial ‘light-seed.’ In such a case, luminosity increases because of an increase of a total illuminated surface formed by a cluster of light-spheroids.”*

- Massimo Teodorani, Ph.D., Astrophysicist, November 2002



Observation point is Aspaskjolen in the valley of Hessdalen, Norway, on August 18, 2001, looking southeast. The light over the valley was photographed repeatedly in time exposures of about 30 seconds each for the first three images inset in upper left. The remaining three photos (upper right) were taken an hour later at the same exposure rate. Reflex camera was Yashica 107 Multiprogram; film 200 ASA. Photograph and processing by astrophysicist Massimo Teodorani.



The Hessdalen valley is a few kilometers from Roros, Norway, which is southeast of Trondheim.

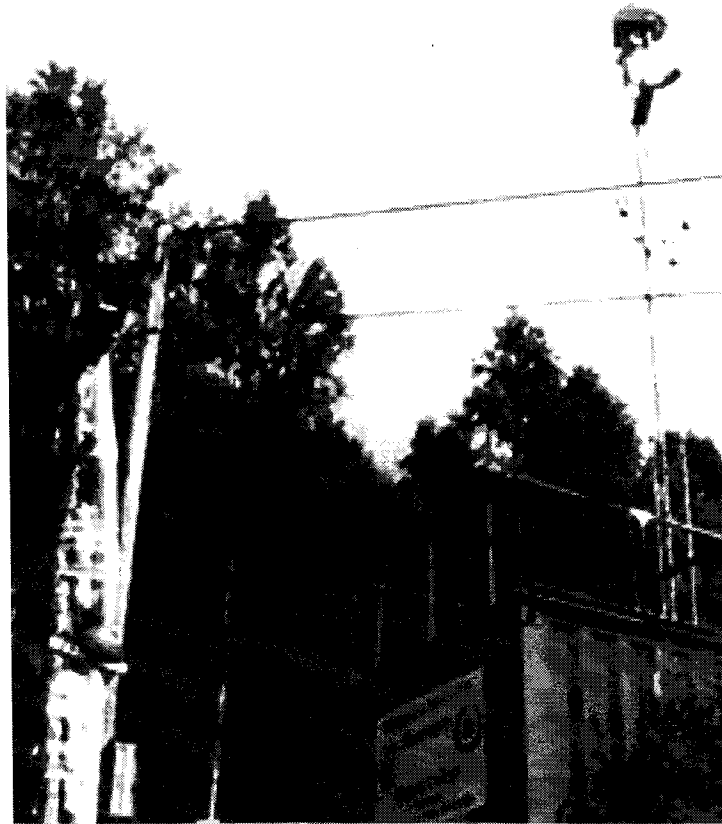
Since at least the 1800s, many eyewitnesses in the mining valley of Hessdalen in Norway southeast of Trondheim have reported flickering, pulsing, lights that change shape. Today, Hessdalen is a small village of 140 people. The valley is surrounded on all sides by large mountains containing deposits of iron, copper, sulfur and quartz.

In 1982, many people reported mysterious lights. On September 25, 1982, at 7:30 p.m., engineering professor Erling Strand from Ostford College near Oslo was in Hessdalen to investigate. To his amazement, he saw a large, bright, white light about 20 feet in diameter that moved up above the hills, swinging right and left. Then beams emitted from the light, pulsing on and off, for more than one hour.

Professor Strand was determined to find out what the light was and by 1984, he began a scientific investigation known as Project Hessdalen. To keep a constant surveillance on the valley, in August 1998, he built an Automatic Measurement Station on the side of a hill he calls the "Blue Box." The station now has three cameras which are triggered by anomalous light events and the cameras interface with computers inside the measurement station. The Blue Box operates 24 hours a day, 365 days a year.

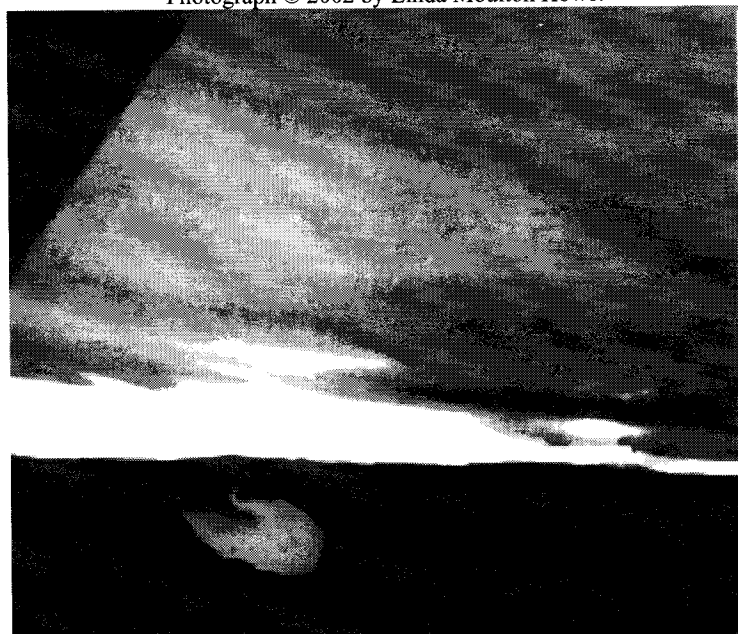
To date, the cameras have recorded more than 100 light events, of which at least 79 remain unexplained, including the photograph on the next page of an orange glowing "plasma" moving in the sky, taken by the monitoring station's cameras on October 9, 1998, at 6:16 p.m. local time.





Hessdalen Interactive Observatory's "Blue Box" programmed to take photographs of anomalous light events in the Hessdalen valley of Norway.

Photograph © 2002 by Linda Moulton Howe.



October 9, 1998 at 6:16 p.m., Hessdalen Valley, Norway, moving "plasma" photographed by the Automatic Measurement Station known as the "Blue Box."

Then on December 4, 1999, a videotape camera caught 12-seconds of a similar moving object that some scientists hypothesize is “a thermal plasma of unknown origin” moving over the Hessdalen valley in an undulating fashion.

**VIDEO 1** – December 4, 1999 at 5:20 p.m. – SILENT (Moving “Plasma” In Sky) (:15)

**VIDEO 2** - Discovery Channel segment – SOUND UP FULL (3:00) (Prof. Erling Strand, School of Computer Science, Ostford College, Sarpsborg, Norway)

Some of the Hessdalen lights flash for only fractions of a second as photographed in time lapse by Dr. Massimo Teodorani, astrophysicist from the Institute of Radioastronomy in Medicina, Italy. Others lights have moved and glowed for minutes, sustaining constant temperatures for more than half an hour. Some have produced vivid red and yellow patterns in time lapse photographs.



Time lapse of a red and yellow moving light over the Hessdalen Valley of Norway in 1984. Photograph by Prof. Erling Strand.

By August 2000, Dr. Teodorani became so interested in Erling Strand’s research data that he decided to study the Hessdalen lights the same way he studies the optical spectra of stars with Point Spread Function (PSF). He and some of his Italian colleagues joined Professor Strand and his group in Hessdalen with radio spectrum analyzers, 35mm cameras, video recorders, spectroscopes and radar.

The results in 2000 and 2001 were originally thought to break down into two groups: 95% thermal plasmas and 5% unidentified solid objects. The data then indicated plasmas that emitted long wave radio frequencies. Strangely, their temperatures over time did not vary with change in size or brightness, even for as long as a half hour or more.

Quoting from their 2001 Project Hessdalen research summary:

- “1) most of the luminous phenomenon is a thermal plasma;
- 2) the light-balls are not single objects but are constituted of many small components which are vibrating around a common barycenter;
- 3) the light-balls are able to eject smaller light-balls;
- 4) the light-balls change shape all the time;
- 5) the luminosity increase of the light-balls is due to the increase of the radiating area. But the cause, and the physical mechanism with which radiation is emitted, is currently unknown.”

In the data gathered during the August 2002 research, another hypothesis in addition to “thermal plasmas of unknown origin” emerged from the data. Dr. Teodorani wrote, “The constancy of color temperature is an ascertained fact. How can this happen with a plasma? A plasma light-ball should expand and cool very rapidly: this would shift drastically the color peaks to the longer wavelengths and/or decrease the power of peaks due to cooling. ...The possibility of a solid nature (illuminated device) is also hypothesized by the characteristics of the spectrum which was obtained in 2002 ... even if no one can exclude that the chemical elements which produce such an illumination (such as silicon and other elements) could be a ‘natural feature’ of a ‘plasma’ of very exotic type which can be synthesized for unknown reasons by purely natural mechanisms.”

Thus, Dr. Teodorani wonders if the objects which produce Point Spread Function (PSF) patterns consistent with solidity instead of plasmas might be “a silicon electro-heated light-ball simulating a solid or a uniformly illuminated solid. ...Some other type of electric discharge might occur in the valley due to a strong abundance of copper and quartz of which the Hessdalen area is very rich and which can cause piezoelectricity very efficiently. The presence of excited silicon in the spectra is suspected indeed.”

Also, in August 2002, Dr. Teodorani and the rest of us observed “some strange flying devices with an apparently normal rectilinear movement (flying) in the sky whose main anomaly was due to light-colors which are totally inconsistent with the FAA rules for airplanes. In one case, only white lights were observed and then the flying target suddenly disappeared just after a flash of light. In another case, the lights were only blinking double red lights. *Is this a sort of scarcely successful mimicry?*” (Howe’s emphasis.)

Dr. Teodorani says, “The cause, and the physical mechanism with which radiation is emitted, is currently unknown. Whatever is the cause which triggers the Hessdalen lights, a ‘central force’ of unknown origin is created. Thus, the main goal of the research group is to find out how the lights work in a physical sense.”

This past August of 2002 between the 6th and the 12th, I was invited to participate with Dr. Teodorani, Erling Strand and the Project Hessdalen group. This was the third year for the joint Italian and Norwegian investigation of the mysterious lights. We all stayed in a school house together in Hessdalen. From there, Erling Strand took us on hikes above the valley and showed us huge mounds of quartz crystal that stick out all over the mountains where copper, iron and sulfur mines operated from the 1600s to the 1980s.

We all wondered if the geological abundance of so much quartz, iron, copper and sulfur in those mountains around the valley might have something to do with the unpredictable appearances of the Hessdalen lights. Are they linked to piezoelectric activity in the minerals and geography?



Author in foreground and Project Hessdalen researchers standing next to large quartz outcropping above Hessdalen, Norway.  
Photograph by Prof. Erling Strand.

Similarly, could the limestone of the British Isles, Germany's Isle of Rugen and U. S. regions such as Missouri, Arkansas and Texas also be linked to lights that appear there? Are we dealing with a plasma physics that has escaped the attention of mainstream scientists? Is the same plasma force involved in all these different phenomena – from the Hessdalen valley to worldwide crop formations to puzzling lights that show up repeatedly in Corguinho, Brazil and many other parts of the world? If so, why do many of the lights react as if intelligent? Or at least respond to changes in the environment around them, as Erling Strand and others have witnessed.

Laser Interaction with Hessdalen Light - AUDIO (2:25)

Prof. Erling Strand  
Computer Sciences  
Ostford College  
Sarpsborg, Norway

“We wanted to do a test with a laser. The reason was that people had told us that when they use a spotlight pointing towards a light, it disappears. When we prepared a field investigation running back in 1984, instead of using this big spotlight, we used a red laser (pointer), which wasn't so strong.

But a flashing light was coming and we pointed the laser light towards it and suddenly the flashing frequency doubled. We were surprised because we had not expected that. So we took the laser light down again and the flashing became as it was before. We put the laser light back on it again and the same thing happened – it doubled the frequency.

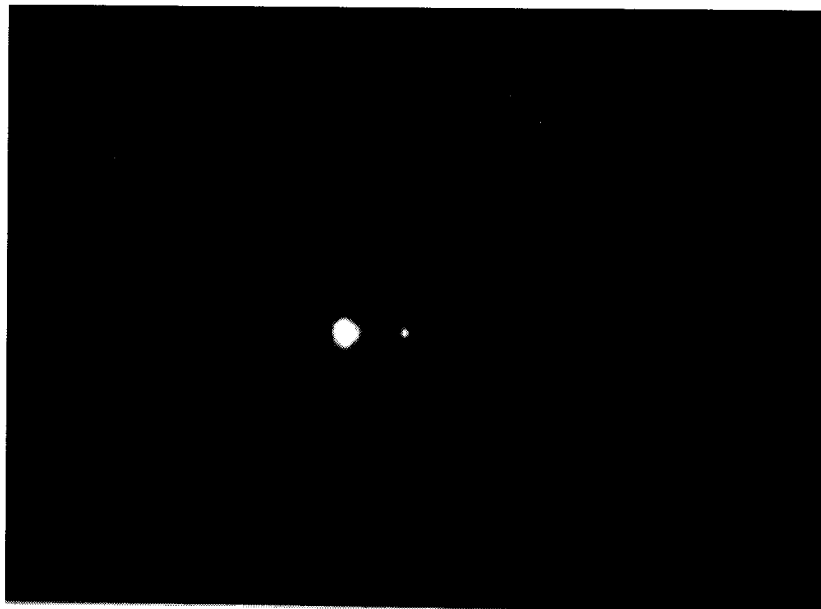
One week later, there was a light seen around our feet, which was a red light, as if there was a laser pointing down on the snow. But there was no laser present at that time. So, that was really strange.

**Linda Howe: When you saw that red light on the snow that resembled the red laser, what went through your mind about the implication?**

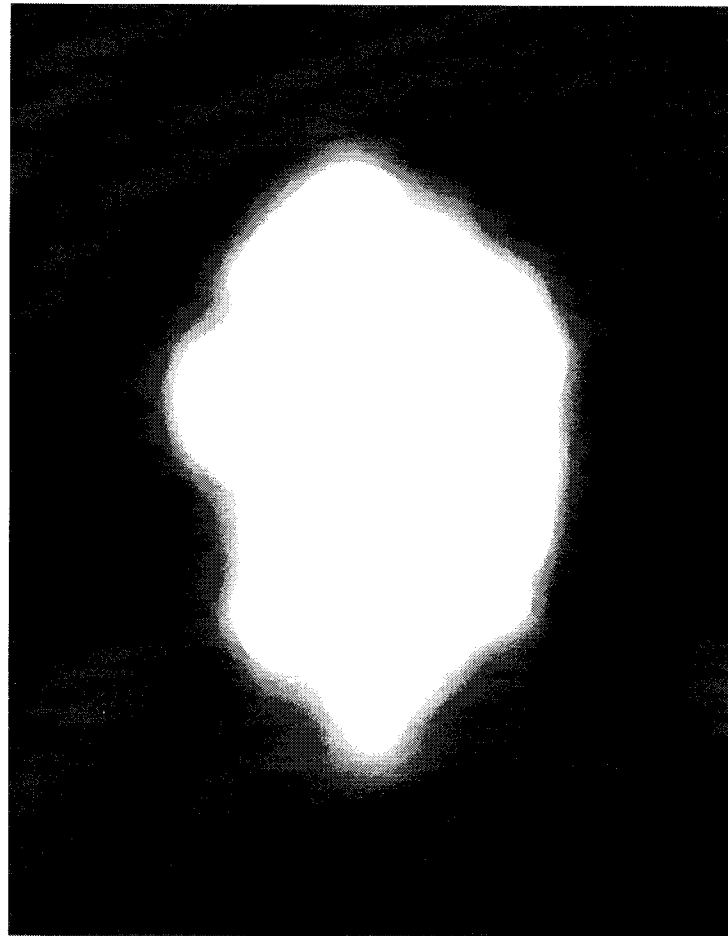
It's a difficult question. The more you study, the more strange it is. It's really strange. It's not easy to find an answer about what it can be. But, I think we can learn a lot about it and where does all the energy come from because you have stories from people who say that part of the valley has been illuminated in the middle of the night. There must be a huge amount of energy and where does all this energy come from? That's one question. And why does it dim the light when an airplane is moving? Why does it react to a laser? Well, there's a lot of questions."



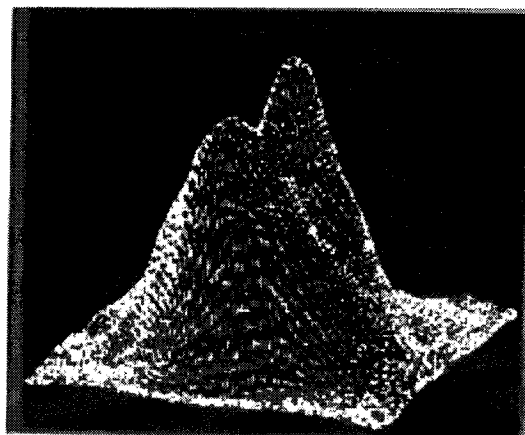
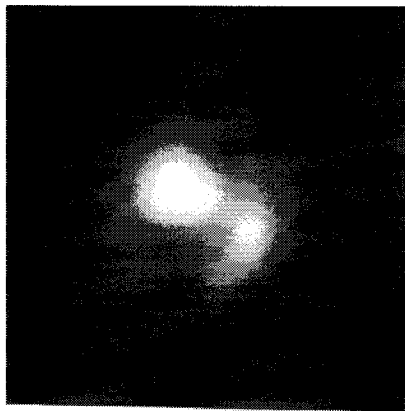
Highly enlarged and enhanced close-up of pulsating ball-like flash in motion. Several minutes of exposure on Reflex camera; Yashica 107 Multiprogram; film: 100 ASA. Image and processing by M. Teodorani.



A typical blinking light while it is ejecting a "sub-ball" on August 10, 2001. Reflex camera: Yashica 107 Multiprogram; film: 200 ASA, Exposure: 3 minutes. Photograph, processing and analysis by M. Teodorani.



Structure of a blinking light is shown in this processed frame that is the summation of 30 contiguous video frames (1/25/second each). The “mini light-ball” components can be seen around the main luminous body. Date: August 6, 2001. Video frames by Simona Righini; processing and analysis by M. Teodorani.



Mysterious object floating in sky appeared in a digital photo taken on August 19, 2001. On left is processed enlargement of the object that Dr. Massimo Teodorani concluded has a solid, polished surface. PSF of object on right. Processing and analysis by M. Teodorani.

I want to show some of the mysterious light activity that I taped with my Sony digital video camera in both natural light and in Night Vision mode during my August 2002 week in Hessdalen. The night watches were devoted to the challenge of capturing the unpredictable appearances of the mysterious lights on cameras and scientific instruments.



Night watch in August 2002 above Hessdalen valley. Astrophysicist Massimo Teodorani is center; Engineer Erling Strand is behind the silver tripods; and Physicist Gloria Nobili is far right. Photograph © 2002 by Linda Moulton Howe.

**VIDEO 3 - August 6 – 12, 2003, Project Hessdalen Research (4:30)**

Dr. Teodorani told me during one of the August 2002 night watches that he wonders if the mysterious lights are plasmas programmed with intelligence designed to interact with the earth environment?

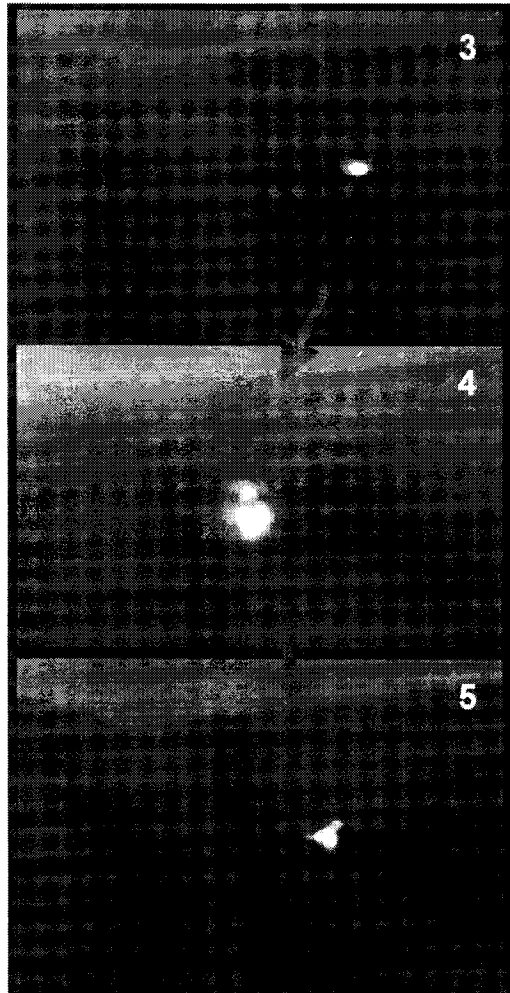
Could Mysterious Lights Be Programmed Plasmas? - AUDIO (1:08)

Massimo Teodorani, Ph.D.  
Astrophysicist  
Institute of Radioastronomy  
Medicina, Italy

“I can say that if we are able to probe with nanotechnology already now, I wouldn’t wonder at all if somebody else is able to make a plasma that is intelligent, in the sense that it contains information. Or you can give orders to it. We are able to give orders to the DNA to make computers now. So, what happens in 1 million years? Maybe even less, 1000 years?”

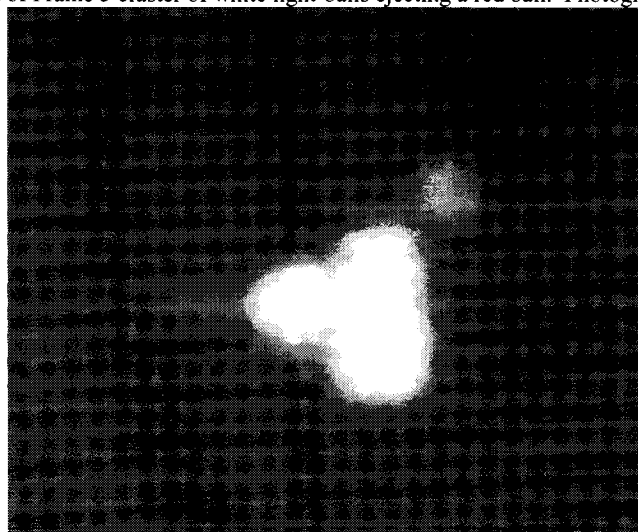
Maybe we will be able to educate not only DNA or chips, but plasmas that will make all the orders that we want. So, I cannot exclude that some intelligence is able to do that, to educate a plasma to make several actions. I cannot exclude it, but I cannot demonstrate it scientifically, of course.”

In other words, could some of the luminous phenomena be monitoring and manipulating devices? But who? or what? would program plasmas and other materials to monitor and interact with Earth life? And why?



**Above:** Photo frames of the light phenomenon which appeared several times in two weeks as seen towards south from the Aspaskjolen spot. Arrows indicate movement of light-balls. Photos have been taken by using a Yashica 107 Multiprogram reflex camera at 70mm and a Praktica BX-20 reflex camera at 270mm; exposure times ranged from 30 to 120 seconds on 100 ASA Kodak Ektachrome film.

**Below:** Enlargement of Frame 5 cluster of white light-balls ejecting a red ball. Photographs by M. Teodorani.





**Part II – Corguinho, Mato Grosso do Sul, Brazil**



Corguinho is a small farming community northwest of Campo Grande and north of Terenos in the state of Mato Grosso do Sul, Brazil. From Sao Paulo, an airliner flight will land you in Campo Grande. From there, it's two hours northwest by 4-wheel drive truck to Corguinho.



Large mesa that dominates the Corguinho, Brazil landscape. The farm land below is on the western side of the mesa where Urandir Oliveira bought 209 acres in 1996 on which his parents and cousins also live. Photograph © 2003 by Linda Moulton Howe.

Mysterious small, glowing spheres have also long been reported by farmers in Corguinho, Brazil in the cattle raising state of Mato Grosso do Sul. From Sao Paulo, a city of 18 million people, it's an hour plane ride northwest to Campo Grande with a population of about 850,000. Going north another two hours on very rough roads in a 4-wheel drive truck, you come to Corguinho dominated by a large mesa that is surrounded by farm land. Urandir Oliveria's farm with bed and breakfast facilities is on the western side of the mesa. Farmer Tulio Alves Costa has a farm on the eastern side of the mesa.

Tulio Costa has farmed in Corguinho for twenty-four years and seen many mysterious lights come out of the ground, fly around, disappear into the big mesa, and reappear back out in the sky again. On November 24, 2001, he saw mysterious, bright, white lights about six inches in diameter. The lights moved in the air over his land off and on throughout the day. Eventually after sunset, at least one of the small lights grew very large. Not understanding what was happening, Tulio called his friend Urandir Oliveira on the other side of the mesa to come see. Urandir and several others from the farm arrived when it was dark. Everyone could clearly see the glowing white light. At 8:30 p.m., the light grew larger and very bright near the eastern slope of the mesa above Tulio's farm. On videotape, the light suddenly flared up "like an explosion" without sound and then disappeared.

Radioactivity was found around scorched plants on the mesa. Three of Tulio's calves and a cow died and two other calves went blind after the light incident. The year before in October 2000, not far away at the southern end of the mesa, rock melted where eyewitnesses said a glowing light came down to the ground and flew back up into the air.

#### **Urandir Oliveira, Farm Owner, Corguinho, Brazil**

Urandir Oliveira was born on March 14, 1963, in a rural area outside Sao Paulo and is now forty years old. Urandir had five brothers and three sisters and his father was a city service employee. By age eight, Urandir realized that when he fought over food with his brothers and sisters at the kitchen table, his hands gave off energy that would bend and twist the metal utensils. He remembers once throwing a fork with anger and was amazed that it kept bending out of shape as it landed and laid on the table.

Urandir Oliveira recalls physical abductions by extraterrestrial beings in craft when he was 13, 27, 35 and 39, plus a face-to-face encounter in Sao Paulo with blond humanoids when he was 23-years-old.

In 1996, convinced the geology around the Corguinho, Brazil mesa can enhance communications between humans and extraterrestrials, Urandir Oliveira purchased 209 acres to grow crops and to build a bed and breakfast facility to accommodate tourists and visitors interested in the extraterrestrial phenomenon. During this time, one of those interested visitors was Felipe Branco, a Brazilian businessman and owner of Castelo Branco Fazenda in Campo Grande. Felipe was educated at the University of London and runs businesses now for his family's ranches and holding companies in Rio de Janeiro, Campo Grande and Italy. The two men worked together to build a research compound at Corguinho they called Project Portal, or "doorway," in an effort to make human and non-human communication possible there. But in early 2003, Urandir Oliveira said he was changing his farm's name to Ecovila with the goal of raising organic food for Brazilian markets.



Left to right: Urandir Oliveira, Felipe Branco and Linda Moulton Howe at Oliveira's farm in Corguinho, Brazil, on February 8, 2003. Photograph by Luciano Didier.

*"I have seen the ships, everything, beings. I have had many encounters there, incredible stuff! But I was very afraid because I could never see myself involved directly with this because it is very difficult to believe. Even though you see it in front of you, it is strange. It's like you are in a dream, like Disneyland. I don't know. It's very strange and very difficult to accept this reality."*

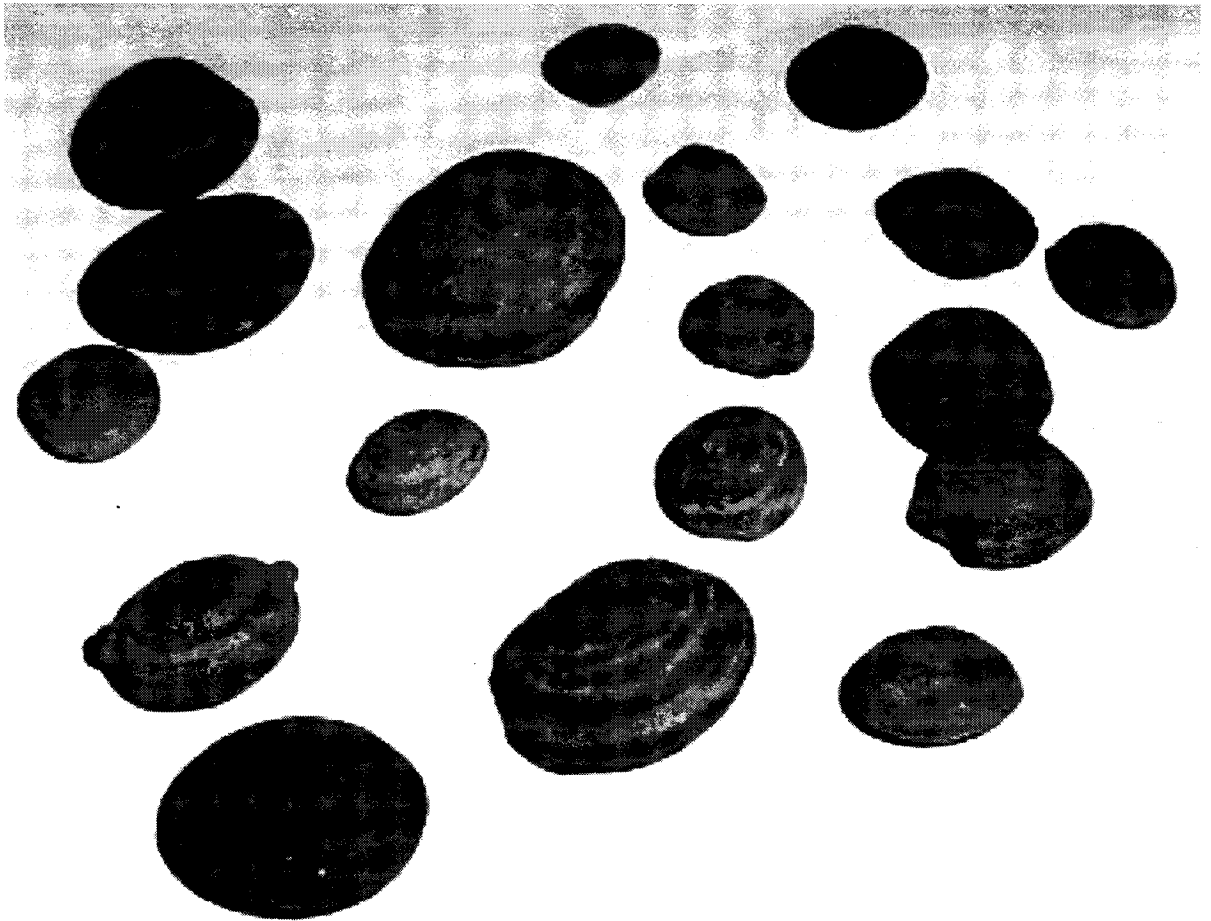
- Felipe Castelo Branco, Owner, Castelo Branco Fezenda,  
Campo Grande, Brazil in December 13, 2002, Radio Interview

On September 15, 2002, Urandir Oliveira's wife, Jessica, and their 2-year-old son were in Sao Paulo. Urandir had stayed behind on the farm because he expected an encounter with tall, blond extraterrestrials who have taken him into their craft four times since he was 13 years old in 1976. Urandir said the blond beings use what he calls "plasma lights" to communicate. He says that small "plasma lights" come to him from the non-humans and deliver information telepathically. Urandir had told Felipe that the tall, blond extraterrestrials communicated they would come for Urandir on or before 10 p.m. on September 15, 2002, and that a signal the event had occurred would be a "rain of rocks." Felipe Branco had just driven into the Urandir Oliveira farm in Corguinho, Brazil at 7:30 p.m., on September 15, 2002, when disk-shaped rocks began falling from the sky onto his truck and the surrounding ground. Why did rocks fall out of the sky? No one, including Urandir, knows.

Rocks falling from the sky have been reported over the centuries, such as the September 1814 incident near Agen, France. A small, white, spherical cloud appeared that caught the attention of several residents. The

“cloud” began to spin and move to the south. Witnesses reported that a loud rumbling noise came from the small cloud and then it suddenly exploded in a shower of rocks and stones. (Paranormal Phenomena website by Stephen Wagner.)

In the middle of November 2002, Felipe Branco e-mailed to several researchers of unusual phenomena about the alleged abduction of Urandir Oliveira by extraterrestrials. There have been hundreds of reported human abductions around the world since the early 1960s. What made this e-mail unusual were the photographs attached. One showed eighteen small, disk-shaped stones that Felipe Branco picked up from the ground, along with Urandir’s family, friends and visitors who heard and saw dozens of the rocks fall out of the sky for several seconds around 7:30 p.m. on September 15, 2002. Urandir Oliveira thinks the stones fell at the same time he was lifted from his bed through the ceiling and roof into an extraterrestrial craft operated by the tall, blond beings.

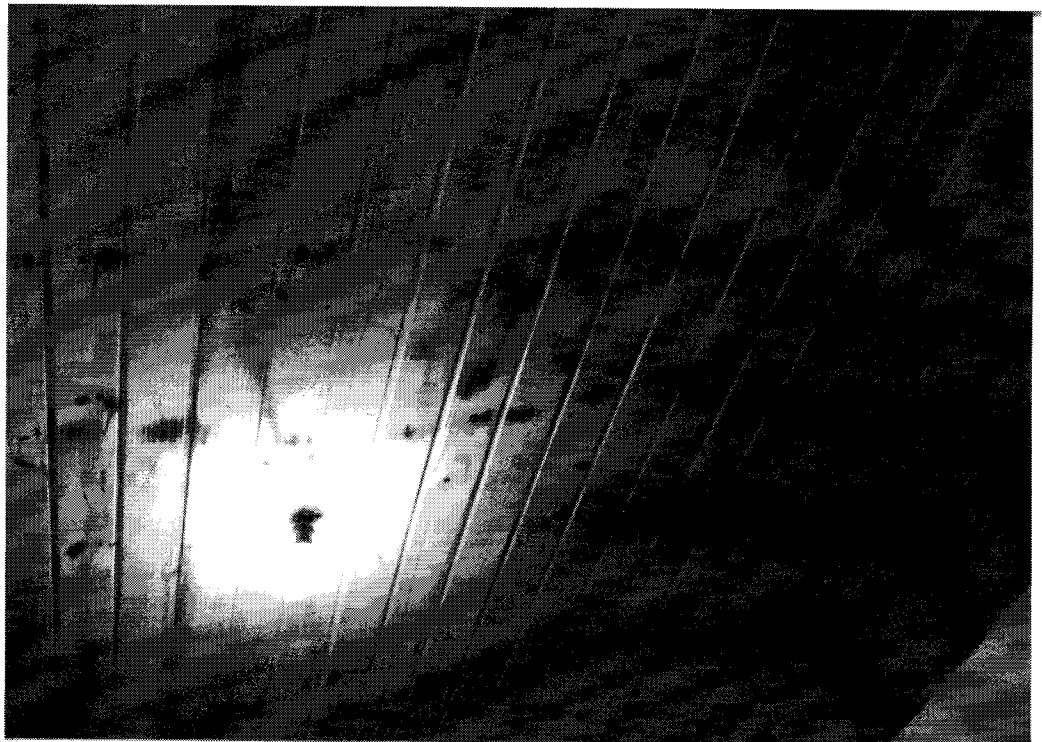
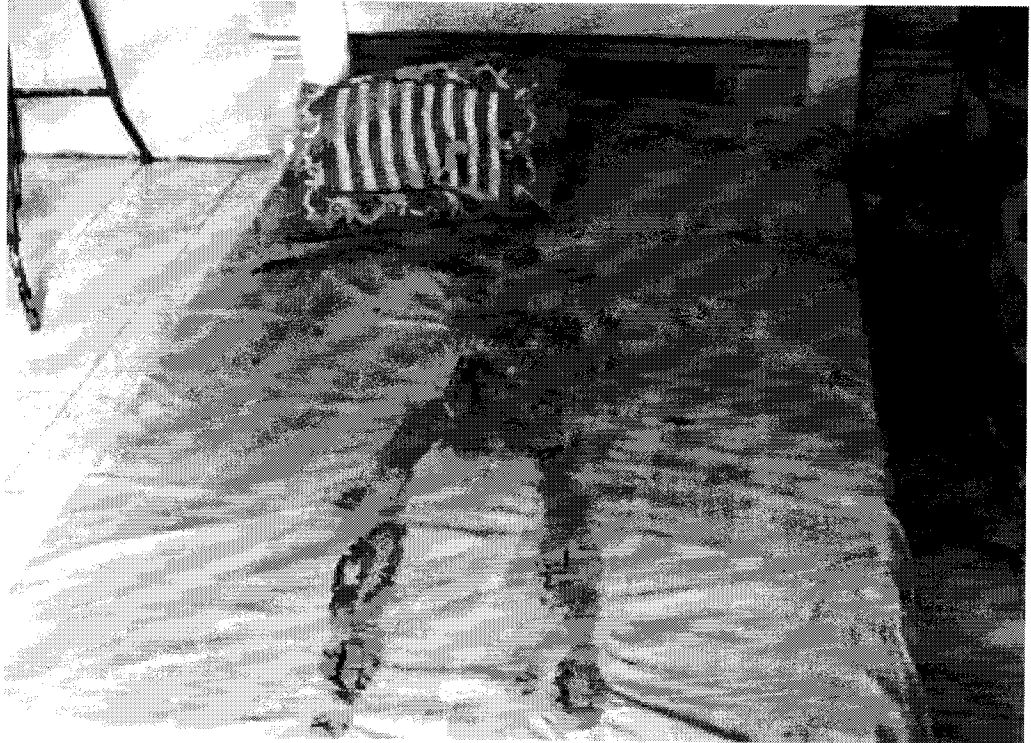


Dozens of disc-shaped stones with spiral patterns in them fell out of the sky onto the Oliveira farm around 7:30 p.m. on September 15, 2002, ranging in sizes from a quarter-inch to one-half inch to an inch in diameter. Digital image © 2002 by Felipe Branco.

After the rock fall, his family and friends had rushed to Oliveira’s house and found Urandir was not there. However, in the bedroom, everyone was shocked to find imprints of a human body “melted” onto the bed sheet and scorched into the wood ceiling.



Scorched body print in wood ceiling and on bed sheet, first discovered on September 15, 2002. Photograph © 2003 by Linda Moulton Howe.



**Top photo:** Body pattern on cotton and polyester woven bed sheet, head scorches on cotton and polyester woven pillowcase in home of Urandir and Jessica Oliveira, Corguinho, Brazil, discovered September 15, 2002. **Bottom photo:** Body pattern scorched into wood ceiling above bed. Photographs © 2003 by Linda Moulton Howe.



As the small, disc-shaped rocks began to fall, a visitor to the farm named Fabricio Da Silva from Rochedo captured some of the event on videotape.

**VIDEO 4** - Corguinho, Brazil on September 15, 2003  
beginning at 7:34 p.m. (15:30)

Excerpt from February 9, 2003 Videotape # 4 interview:

Portuguese-to-English Translation by Luciano Didier: "He (Urandir) is saying he was prepared for what was going to happen on this night. Actually, he was very much concerned and waiting for the agenda. So he (took a shower and) came to bed waiting for this and got a book to read. Suddenly, he started feeling very warm and the atmosphere was getting strange.

**Linda: Do I understand he was lying right where the body is now reading a book?**

Exactly. He was laying down with his hand holding the book.

**That's where the right arm sticks out?**

Yes. His arm was exactly on that position and the book was out of the bed. He was holding the book out of the bed reading it. Suddenly, everything started going on and he started to feel his body warm as if he was having a very high fever. And a big, bright violet light just dominated the whole room. The light, it was like a big flash, violet, that filled the whole room.

**Was it like a camera flash that goes off?**

Yes, exactly, but a flash that stood for awhile and formed this light tube. Then he was lifted up and he saw himself going through the ceiling.

**He was totally conscious?**

Totally conscious.

**Why is it, if his arm was extended with that book out, why would he have left his arm out going through the ceiling?**

He was just like as if he was paralyzed, until he went through the last level of the roof. After he left this environment and went through the roof and was already in the air and out of here, he could move. He recovered his movements.

**Where was the book?**

The book fell on the floor. (September 15, 2002 photograph of book on floor next to bed.)

**Could he feel any temperature, pressure, or sensation on his skin?**

Only at the moment he was rising from the bed, he was being lifted from the bed. Only at that moment, he had the sensation of heat on his skin.

**Was heat the only thing that he felt?**

Yes, the only thing that he felt.

**At any point rising from the bed to the ceiling, as he was approaching the ceiling, did he have any change in his sensations as he went into the ceiling?**

He felt like all his bones were being stretched.

**Does that mean he felt pain?**

No, no pain.

**But a stretched feeling throughout his skeletal structure?**

Yes.

**As he reached the ceiling, could he see the wood in the ceiling?**

He could see the ceiling, but not in this state as we see right now. It was as if porous, as if he was going through some kind of a foam.

**As he looks out on the sheet where he was laying reading the book and he looks at all of these scorched marks of his body on the sheet and the scorch marks that are in the ceiling, what does he think explains why so much scorching was left behind?**

He thinks it was the energy released from the interaction and altering the matter, his own matter. It would not burn him, but would burn things two or three centimeters next to him. It's as if he was losing things from himself, from his own body. And he said he lost 4 kilograms in this experience (8.8 pounds).

**Why would he not be physically burned if there is this much scorching on the sheets?**

He said that he cannot explain exactly why, but the beings told him that this is provoked by the interaction of the matter. If there was a blanket on top of him, it would happen the same thing. They said it was this process of transmuting. It happens no matter what the circumstances of where he is. If he was standing on the floor, the floor would have gone through the same process and would be burned the same way.

**Then why is it that I don't know of another abduction case in forty years, of maybe thousands (of people globally), where anything like this has ever happened before?**

Because this was the only programmed abduction that he was conscious about and he knew it was going to happen.

**But why would that make a difference in physical evidence?**



There was no need to leave these marks actually, but they wanted to leave him with enough credits to the public and to the science community that these evidences are very clear.

**Are we talking about the tall blondes?**

Yes.

**Why would they want to leave physical evidence?**

Because there is no evidence on these kinds of experiences and this time, they wanted to have some proofs because they want to have the evidences to prepare the population for the arrival (of the beings.)”

Narration: At this point, I asked Urandir Oliveira if he would lay down on the left side of the bed next to the body print so I could compare. There were no feet or right hand prints on the bed sheet or in the ceiling.

“He is going to lay down in exactly the same position that he was. (Urandir Oliveira lays on the bed next to the body pattern.) He was more or less like that, reading a book.

**His feet seem to go off the edge of the bed.**

His feet were actually in this position out of the edge of the bed.

**What was laying on the pillow then, because his head goes beyond those scorch marks on the pillow?**

His head was on the pillow. (Urandir bent his head as if laying on the pillow reading and his head matched the pillow’s scorch marks.)

**Then that means these marks at the end of the bed are not his feet, but they are the calves of his legs.”**

Narration: The speculation is that the violet beam technology did not have to separate his feet and right hand from the bed sheet. So, the energy was different in those places when Urandir’s body went through the ceiling without leaving feet or hand prints in the wood.

**Is paralysis important in ET technology so that he not move because there could be some damage if his body moves?**

No, he just could not move his body. He was totally paralyzed. There were no instructions that there would be any danger if he moved. He just could not move.

**All the way up to the ceiling. And it still does not make sense that the beings can put his body back down because nothing seems changed from those photographs that were taken on September 15. In other words, you would have thought there would be something (different) from a re-entry.**

In the same way he went, he came back. It's like a computer program – when he laid down in the 'bubble,' the bubble itself put him in the same previous position (of September 15). And in that same position he left, it was the same way he came back (on September 18.)”

The “bubble” that Urandir referenced had a large, translucent “skin.” Urandir said he telepathically understood from the tall, blond being who met him in the craft that he was to enter the bubble. It felt like air conditioning against his skin when he stepped through its wall. He understood that the bubble provided germ decontamination, energy balancing and the creation of a glowing, leotard-like suit on his body that replaced his cotton underpants.

The tall, blond male directed Urandir toward stairs and they climbed to the next floor where Urandir was to remain for the next three Earth days watching wall screens of images about the planet, this solar system and the galaxy in which cosmic and earth events allegedly will move toward a culminating event on December 22, 2012, a galactic event that will affect all earth life.

During our February 2003 interviews about his experience, I asked Urandir if he and the blond beings were in the same room all three days. He answered, “Yes, along with other humans and non-humans. It's like the walls were endless. I walked, but never reached the walls, so it gave the impression that the room was really big.”

I explained to him that other abductees have described “infinite” interiors in non-human craft and have been given information that time and space are some how distorted within the craft. But Urandir did not have such knowledge.

On the evening of September 18, 2002, Urandir said the tall, blond being walked him down the stairs in the craft to the place he had entered in the violet light. Urandir was put back in the violet beam and lowered into his bedroom, paralyzed, in the same position as he had originally laid on the bed.

The room was dark and he could not see details, but the first sensation he had as his body touched the bed again was stiff scratching of his skin. That scared him and he jumped up and flipped on the light.

He was shocked by the body print in the bed sheet, pillow case and ceiling. He said his heart started racing with fear and he reached for the door to get out of the room, but it was locked from the outside, a security measure that Felipe Branco had taken the night of September 15th to preserve the body print evidence. Urandir had only an intercom in the bedroom to communicate with family on the farm who came and let him out.

February 9, 2003, was the day I spent several hours at the Oliveira home collecting affected and control samples from the bed sheet and pillowcase and getting a piece of the charred wood ceiling and a wood control from a corner of the ceiling. As I worked, I wondered if a body left the bed on September 15, 2002, and went through the ceiling leaving the black scorch marks that Felipe Branco and the others photographed and videotaped, where were the body marks from the return on September 18? Urandir said he understood that the paralysis of his body in the laying down position both leaving the bed and returning were calculated precisely by the non-human blondes to be exactly the same. So, no second set of marks. The molecular precision, he says, is necessary to pass his body matter through other matter such as the wood ceiling. Are the beings capturing time and playing it back, so to speak, to return him so precisely? Urandir says he knows the beings do use and manipulate timelines, but he is uncertain if such use of time was involved in his particular September 15, 2002, transport in and out of his bedroom.

As Urandir explained in the videotaped interview, neither his right hand nor feet made any imprints on the sheet or in the ceiling. The right hand was holding a book off the edge of the bed and both Urandir's feet hung out over the end of the bed, as he demonstrated for us. I asked him why he thought there were no scorch marks of his hand or feet in the ceiling. He was uncertain, but said he understood from the non-humans that the energy beam that lifted his body was precisely tuned to the molecules of his body in order to separate it from the bed. But his feet and right hand were already in the air and thus, the beam technology did not have to exert energy to separate them.

I noticed that the body pattern in the ceiling appeared to be further east toward the wall and slightly to the right of the body imprint in the bed sheet. One speculation is that Urandir's body was moving forward toward the head of the bed as it was lifted upward by the violet beam technology.

### **Research – Ongoing and Evolving:**

#### **A. Bed Sheet, Pillow Case and Ceiling**

I first sent material, wood fragments and stone samples to biophysicist W. C. Levengood for initial study and photomicrographs. He in turn asked analytical chemist, Phyllis A. Budinger,<sup>319</sup> to study some small samples cut from his. Then on March 2, 2003, I sent larger pieces of Samples 1 (right leg), Sample 6 (pillowcase), normal control bed sheet sample, two of the disc-shaped stones from the September 15, 2002, "rain of rocks" and a common Corguinho rock for control.

I learned from Phyllis that the blue threads in the bed sheet are dyed cotton and the white threads are polyester (polyethylene terephthalate), PET. The blue and white threads are cross woven together throughout the sheet. Phyllis's infrared study indicated that the pillowcase was also cross woven cotton and polyester. Samples taken beneath the bed sheet were a beige-colored polyester that encased a thin, foam rubber mattress pad. With her infrared studies, Phyllis did not find any "unusual residues" on any of the cloth materials.

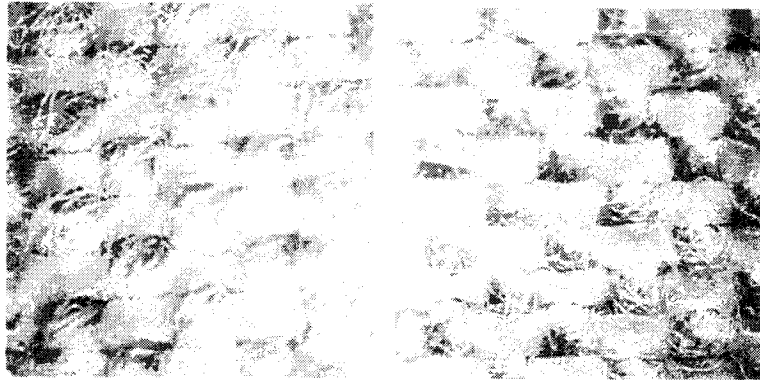
Cotton decomposes, or scorches, at about 148 degrees Centigrade (300 degrees Fahrenheit). But polyester threads don't melt until about 500 degrees F. The darker blue of the body pattern on the bed sheet that looks wet is where the polyester threads melted. Phyllis calls those "halo-like areas." The melted polyester threads are intricately woven throughout the blue cotton threads – even where the cotton is unaffected and not scorched or even brown. How can this be if polyester is supposed to melt at a temperature 200 degrees hotter than cotton is expected to scorch?

Phyllis Budinger wrote in her analysis summary: "An observation that the halo area of the sheet consists of melted PET and undegraded cotton is not an anomaly, though it is noted PET has a melting range between 250-265 degrees Centigrade (482-509 degrees F.) and cotton degrades at 148 degrees C. (298 degrees F). This can be explained by the differences in rates of heat conduction (Thermal Conductivity) of these materials. PET (0.28 W/m\*K) conducts heat about ten times faster than cotton (0.029W/m\*K). Therefore, a fast burst of heat (above the melting point of PET) would melt the PET, but not degrade the cotton. This was experimentally accomplished with an iron on the control sheet swath by this laboratory."

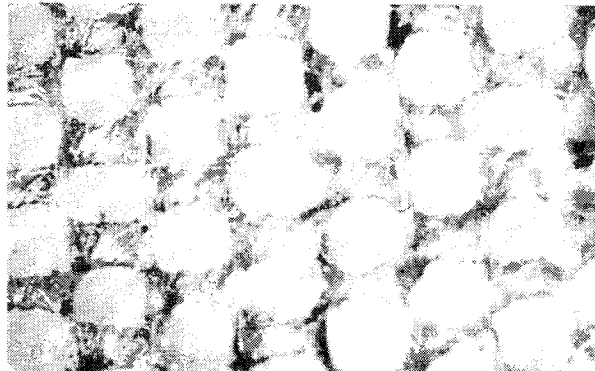
Phyllis showed on page 13 of her report three photographs at 3 seconds, 4 seconds and 10 seconds which resemble the halo-like areas on the Corguinho bed sheet. But the melted polyester cross woven with the cotton is flattened out in her photographs when compared to the melted polyester in 40X photomicrographs taken of Sample 1. The microscope shows the melted polyester threads are neatly contained and rounded, even though vitreous, and are not flattened on to the nearby cotton fibers.

<sup>319</sup> Owner, Frontier Analysis, Ltd., Chagrin Falls, Ohio, and author of "Technical Service Response No. UT026, Analysis of Samples Related to an Alleged Abduction in Corguinho, Brazil on September 15, 2002," dated April 22, 2003.

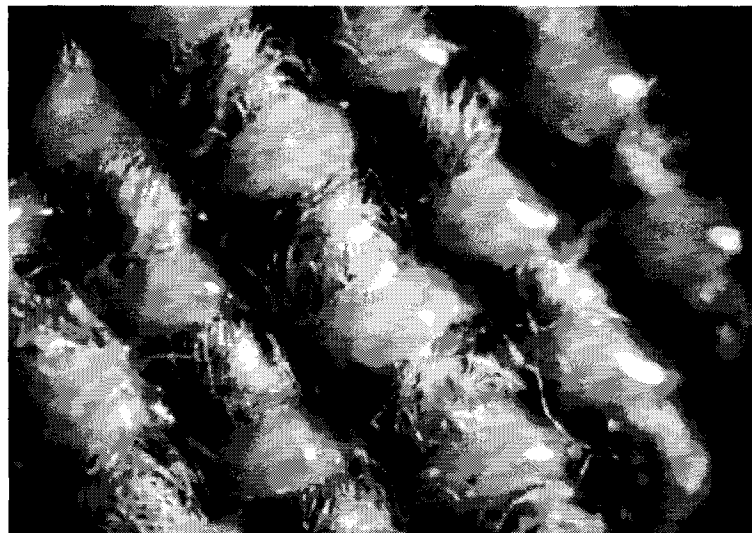
**Control Sheet Swaths Exposed to Heat  
3 Seconds                      4 Seconds**



**10 Seconds**



Page 13, Phyllis Budinger's report about her experiment with "a hot iron at its highest setting" applied to control samples of the Corguinho bed sheet for 3, 4 and 10 seconds. Photomicrographs © 2003 by Phyllis A. Budinger.



40X photomicrograph taken by biophysicist W. C. Levengood of Corguinho bed sheet Sample 1 cut from lower right leg of body pattern.

Further, on April 22, 2003, I showed Prof. Herbert J. Barndt<sup>320</sup> photomicrographs by biophysicist Levengood and the entire bed sheet and pillowcase which had been shipped to me in Philadelphia from Urandir Oliveira for further research. Prof. Barndt collected control samples from the Corguinho bed sheet to test with the goal of duplicating the melted polyester threads cross woven with unaffected cotton threads.

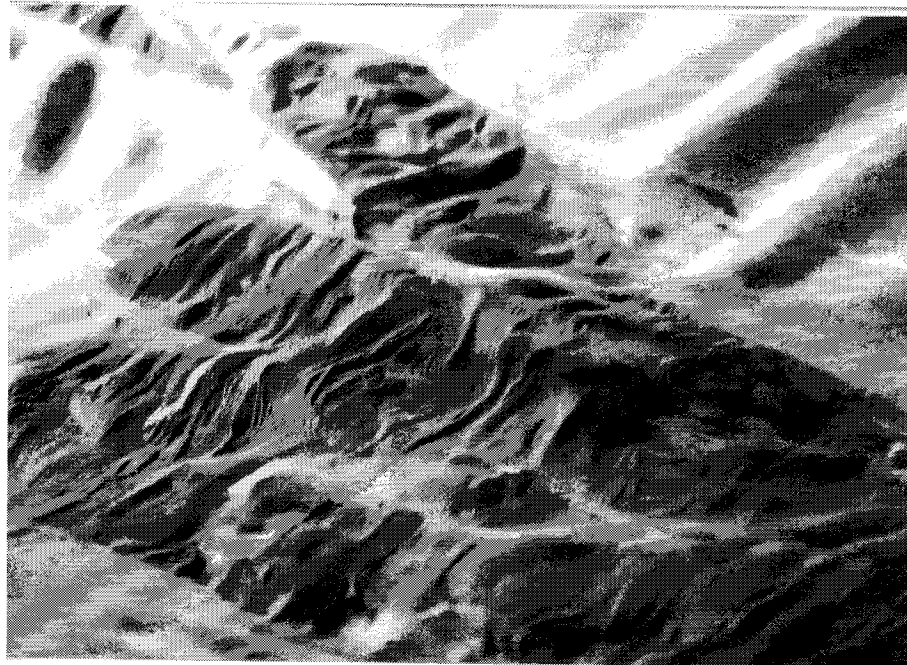
About Phyllis Budinger's comments on polyester's thermal conductivity, Prof. Barndt said he did not agree that polyester can conduct heat ten times faster than cotton. Technically, at the level of a *single* thread or fiber, thermal conductivity in polyester might be measured ten times faster. "But in this laboratory, we measure the conductivity of fabrics, not the conductivity of a sample polymer. That is why polyester is used as an insulating material in winter clothing. You don't fill a ski jacket with cotton."

I asked Prof. Barndt if he thought a hot iron could produce the body pattern. "No. If it was done with an iron, the polyester threads would be flattened just like those photographs (in the Budinger report). So it was some other heat source. What that is, we don't know."

Given Urandir Oliveira's statement that he had taken a shower just before he laid down on the bed, Prof. Barndt did add water to a piece of control sample from the Corguinho bed sheet and applied a small blow torch that emitted about 1500 degrees Fahrenheit. He was able to simulate the blue halo around a dark burned scorch after a brief 1 to 2 second exposure of the heat to the bed sheet sample. But the resulting scorch was darker than most of the body print on the bed sheet.

**VIDEO 5** – Prof. Herbert J. Barndt, Grundy Testing Laboratory, School of Textiles and Materials Technology, Philadelphia University, May 13, 2003.  
(5:30)

Further, he explained that the blue halo is produced around the body pattern when the polyester threads melt and shrink, contracting and exposing more of the dyed blue cotton threads. That polyester shrink also explains the rippling and separation of the bed sheet fabric throughout the body print which is the same on both sides of the bed sheet.



<sup>320</sup> Director, Grundy Testing Laboratory, School of Textiles and Materials Technology, Philadelphia University, Philadelphia, Pennsylvania. Prof. Barndt has been in textiles research for thirty-five years.

“It seems improbable to me that anyone made this with a blow torch or other mechanical heating device.”

“So this is extraordinary?”

“I think so, yes. It’s very unusual. If you were going to try to duplicate this in a laboratory, you would probably go through quite a few bed spreads. And why didn’t it just ignite and burn up? Because of the presence of moisture? Or something else we can’t explain.”



Prof. Herbert J. Barndt, Director, Grundy Testing Laboratory, School of Textiles and Materials Technology, Philadelphia University, Philadelphia, Pennsylvania, examines the Urandir Oliveira bed sheet and pillow case in his lab on April 22, 2003. Photograph © 2003 by Linda Moulton Howe.

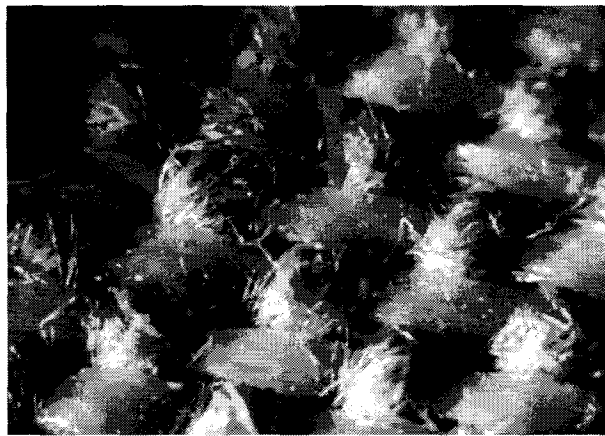
The following are some of Biophysicist W. C. Levensgood’s 40X photomicrographs of the cross woven cotton and polyester threads in the Corguinho, Brazil bed sheet which highlight anomalies that indicate precise and compartmentalized changes in the affected cloth.

Photomicrograph 1



“Photomicrograph 1 shows a control sample from one of the bed sheet corners where no alterations were observed. This is a simple checkerboard weave of white polyester threads cross woven with blue cotton threads which gives the very light blue color to the sheet. Each thread in both the polyester and cotton is roughly a little over .4 millimeters in diameter. The fibers that make up each thread are down in the micron region, 1/1000th of the thread size, or only three to four microns. Each thread is composed of probably several hundred fibers. But on this bed sheet, there are places where only a single thread has been affected and many places where polyester fibers are intact and visible *inside* other fibers which have melted around them. Whatever energy it was, it happened very fast.”

Photomicrograph 2



In Photomicrograph 2, the arrow points to polyester fibers *inside* a vitreous thread. You can see some faint horizontal lines inside the vitreous polyester, which means that not all the polyester fibers were transformed into the vitreous state. So, it's a transition region. This suggests that a change has occurred in the molecular structure of the 3 to 4 micron diameter polyester fibers, but did not affect *all* of the fibers at once and not in the same way.

**But you don't know how this occurred?**

No. I would speculate that (whatever the energy is), it has to fingerprint the actual molecular structure of the various materials.

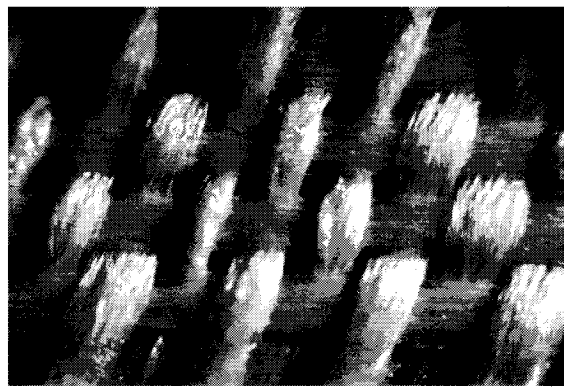
Photomicrograph 3



In Photomicrograph 3, the bubbles are where the polyester threads have literally boiled (at least 450 to 500 degrees F.) This emphasizes again the variability, complexity and compartmentalization of energies that interacted with that bed sheet and pillow case.

Photomicrograph 4

Photomicrograph 4 shows the normal weave of polyester threads in the mattress cover. The beige color appears to be uniform throughout.



Photomicrograph 5



Photomicrograph 5 shows a missing vertical thread and three vitreous spots where horizontal fibers cross the missing thread space in the mattress cover. None of the other polyester fibers appear to be affected. This again demonstrates the very precise application of the energy that produced these anomalous effects.

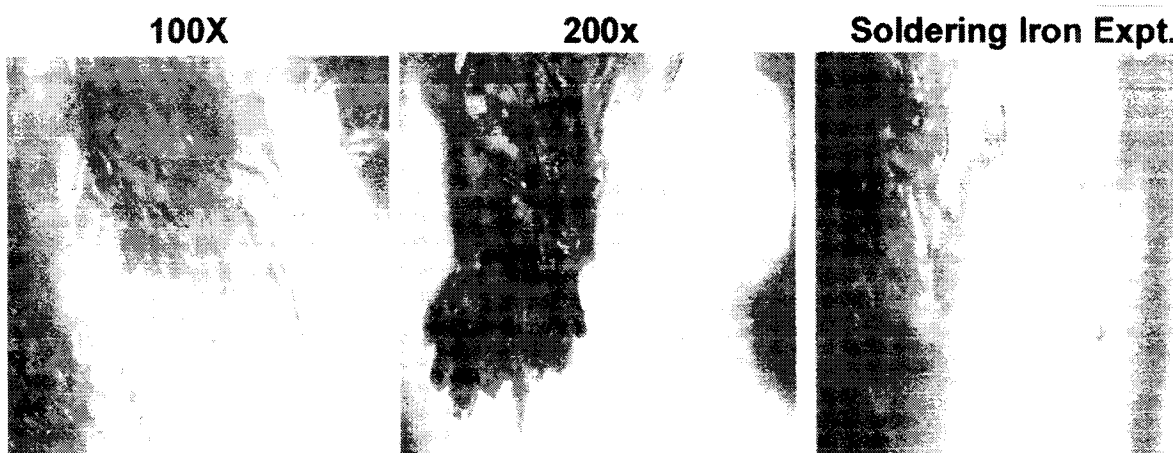
**Why did this one thin, vertical thread suddenly change its composition in some way without affecting any of the threads around it?**

I don't know. Here the (interacting) energy can pick one fiber and totally convert it. I think this is both a chemical and structural conversion of the molecules. To change to and deposit vitreous material on the horizontal fibers and not affect anything underneath – that's pretty amazing."



Phyllis Budinger also contacted Nick Reiter of Avalon Foundation<sup>321</sup> who has an Energy Dispersive Spectroscope (EDS) TN 5400 with light element detector. Phyllis sent him a piece of the Brazil bed sheet Sample 1, pillow case Sample 6, a control sample from one of the bed sheet corners and Stone 2 from the “rain of rocks” that Phyllis had broken open to study the interior with infrared. There is more about the stones in section C.

Nick Reiter says on page 37 of Budinger’s report: “Little can be said about the textile swatches, apart from this researcher’s opinion that similar looking scorch marks can be made with a simple soldering iron. We suspect that a larger clothing iron, a flat-iron, or otherwise heated flat stone or metal surface would be most effective at inflicting similar damage.” Reiter included with his comments color images labeled “100X, 200x and Soldering Iron Expt.”

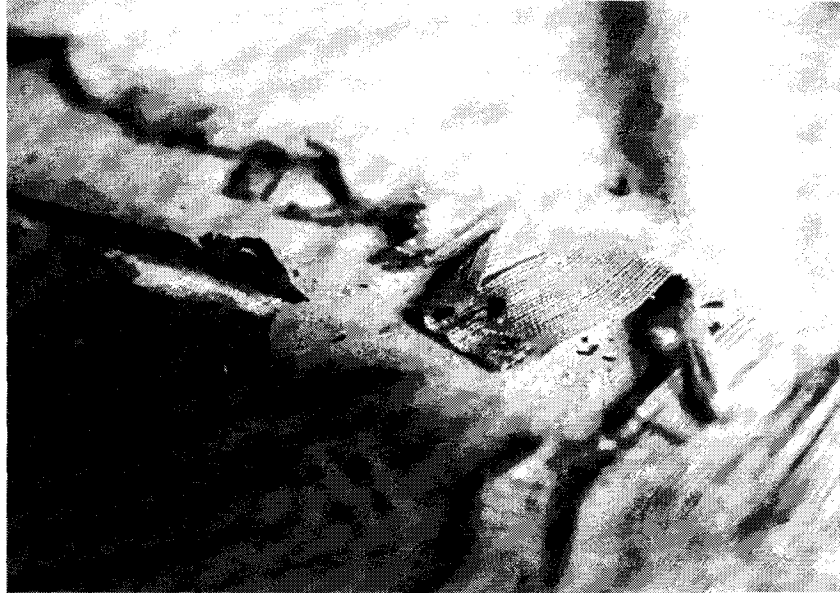


Images of his “soldering iron experiment” supplied by Nick Reiter in Phyllis Budinger’s April 22, 2003, analysis report.



Close-up scorched head area of pillowcase, Sample 6 region.  
Photograph © 2003 by Linda Moulton Howe.

<sup>321</sup> Owner, Avalon Foundation, Energy Dispersive Spectroscopy, Gibsonville, Ohio.



Close-up scorched right leg calf, Sample 1 region. Photograph © 2003 by Linda Moulton Howe.

### **B. Wood Ceiling**

With the Oliveira family's permission, I used a knife to extract one sample of the wood ceiling from the scorched right arm. I was curious to see if the scorch mark would extend through the wood as the body pattern on the bed sheet was on both sides of the cloth. But in the photograph below, the scorch was a very thin 1 millimeter that remained constant in depth along the length of the wood sample. Urandir said he remembered his body going through the bedroom ceiling that appeared like fine soap bubbles. Then he felt the paralysis of his body begin to relax and eventually outside the house in the violet beam, he was raised to a vertical standing position. I asked Urandir to check the roof tiles to see if there were any marks on top of them, but he could not find any.

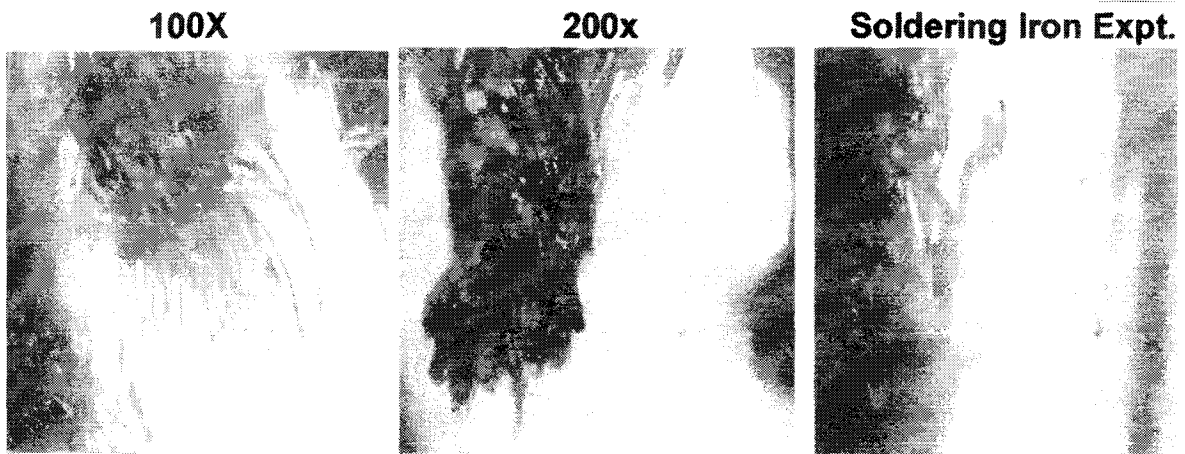


Profile of wood sample from right arm scorch mark in the ceiling of the Oliveira bedroom, Corguinho, Brazil. Photograph © 2003 by Linda Moulton Howe.

No one has yet proved precisely what the unidentified energy source was that produced the body prints or how long the Corguinho, Brazil bed sheet, pillowcase and ceiling were exposed to that energy.

Phyllis Budinger also contacted Nick Reiter of Avalon Foundation<sup>321</sup> who has an Energy Dispersive Spectroscope (EDS) TN 5400 with light element detector. Phyllis sent him a piece of the Brazil bed sheet Sample 1, pillow case Sample 6, a control sample from one of the bed sheet corners and Stone 2 from the “rain of rocks” that Phyllis had broken open to study the interior with infrared. There is more about the stones in section C.

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Images of his “soldering iron experiment” supplied by Nick Reiter in Phyllis Budinger’s April 22, 2003, analysis report.



Close-up scorched head area of pillowcase, Sample 6 region. Photograph © 2003 by Linda Moulton Howe.

<sup>321</sup> Owner, Avalon Foundation, Energy Dispersive Spectroscopy, Gibsonville, Ohio.

### C. Disc-Shaped Stones from "Rain of Rocks" on September 15, 2002

On March 2, 2003, I shipped to Phyllis Budinger two of the disk-shaped Corguinho, Brazil stones. Phyllis broke open one which she identified as "Stone 2." She did infrared analysis and wrote in her report: "Specifically identified is a major amount of quartz (SiO<sub>2</sub>) which is commonly present in sand and sand stone. Another major mineral is present with similarities to montmorillonite [(Na,Ca)<sub>0.33</sub>(AlMg)<sub>2</sub>Si<sub>4</sub>O<sub>10</sub>(OH)<sub>2</sub>] This mineral occurs in clay deposits, soils and sedimentary and metamorphic rocks. Iron is present and probably in oxide form. A very small amount of inorganic carbonate is also suggested which is likely in the form of calcite. Qualitatively both exterior and interior of the stone contain the same components; however, quantitatively there is more quartz, and probably iron oxide, on the exterior of the stone. XRD (X-ray Diffraction) analysis is recommended for further analysis of the stones."

Phyllis sent the two parts of Stone 2 to Nick Reiter for EDS plots. In his report, he speculates that the Brazil stones might be a form of "Moqui Marbles" – although no geologist I've talked to has yet confirmed their presence in Corguinho, Brazil. Nick wrote, "They are formed much like pearls, by accretion of minerals from the water supply around a core that can be anything from a sand grain to a small rock." However, at the website [rocksandminerals.com](http://rocksandminerals.com), it says "little is actually known about the origins of Moqui Marbles. In the United States, most of them come from the Navajo Sandstone Formation in the state of Utah." Most Moqui Marbles shown in website photos are ball-shaped.

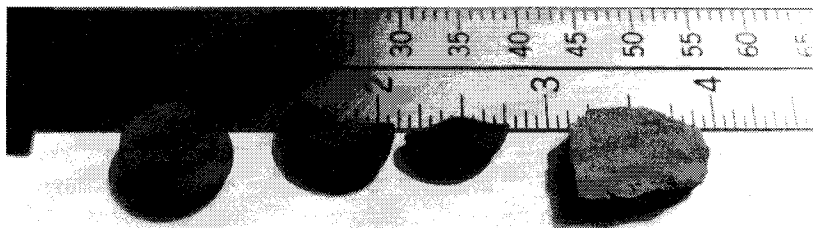
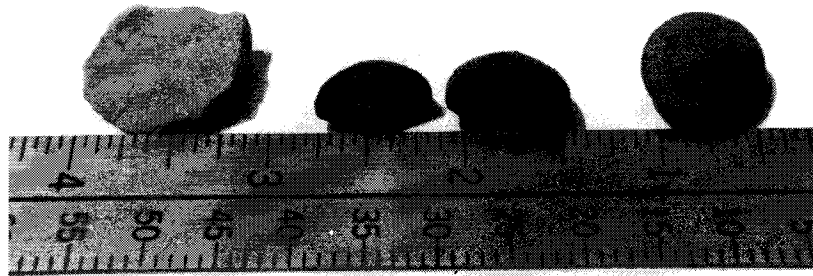
On page 3 of her report, Phyllis adds: "The stones are very similar to Moqui Marbles, (and several other names) found in Utah and Arizona. It is conceivable that there are also clusters of these in Corguinho, Brazil." That speculation is a question that Professor Art Johnson<sup>322</sup> at the University of Pennsylvania is researching. He also plans to follow up on another one of Phyllis Budinger's suggestions: "X-Ray diffraction analysis is recommended for further analysis of the stones." In late May 2003, Dr. Johnson will have x-ray diffractometer and petrographic microscope examinations done on Stone 1, broken Stone 2, and other stones he selected from several I brought back from Corguinho.

Phyllis reported that the two Brazil stones were the same diameter, which is 16mm, or about one-half inch. Stone 1 weighed 3.2051 grams and Stone 2 weighed 3.3068 grams. I have several more stones collected from the "rain of rocks" that all seem to be the same size as Stone 1 and Stone 2. Others are about one-quarter inch or one inch in diameter. On page 24, Phyllis showed exterior photos looking down on circular Stone 1 and Stone 2 before she broke apart Stone 2. Below the two Brazil stone photographs, Phyllis placed internet photographs of Moqui Marbles. Three of the broken open Moqui Marbles pictured in her report have dark outer shells around an interior ring of light colored material surrounding a round, darker center. Neither Phyllis nor Nick Reiter provided a photograph of the interior of the broken open Stone 2 from Corguinho, Brazil.

Upon return of the stones and material samples to me on May 6, I took photographs of Stone 2's interior and exterior, a side profile of Stone 1 and grouped them with a piece of the normal Corguinho control rock. Stone 1 and Stone 2 are disk-shaped and Stone 2's interior is dark brown, with scattered rust tints. The exterior of Stone 2 is a dark brown-rust color, a bit lighter than the interior.

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<sup>322</sup> Professor of Geology, Department of Earth and Environmental Science, University of Pennsylvania, Philadelphia, Pennsylvania.



**Top Photograph:** Left, normal Corguinho pink rock. Middle, both halves of Stone 2.  
Right, Stone 1 concentric ring side.

**Middle Photograph:** Stone 1 is turned on its side to show disk-shaped profile.

**Bottom Photograph:** Group from other side to show the surfaces on both halves of Stone 2. Stone 1 is 16 mm in diameter and weighs 3.2051 grams. Stone 2, before being broken in two, was also 16 mm in diameter and weighed 3.3068 grams. Photographs © 2003 by Linda Moulton Howe.

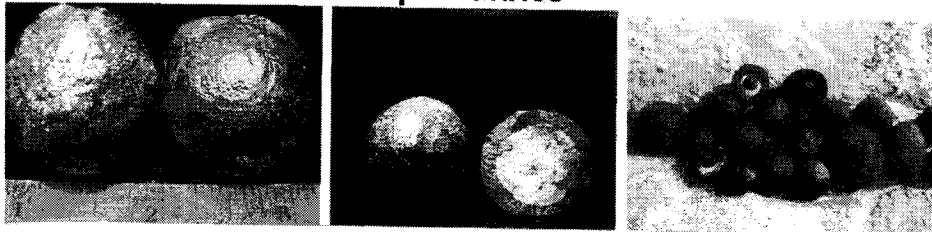
Stone 1



Stone 2



Moqui Marbles<sup>20</sup>



Images from page 24, Phyllis Budinger's analysis report.

Images from page 24, Phyllis Budinger's analysis report.

On pages 25-26 and repeated on Appendix pages 38-39 of her report, Phyllis shows Nick Reiter's EDS Plot of Stone 2. The EDS plot does not label from what part of Stone 2 the EDS was made, but Phyllis Budinger told me by phone she thought it was 2mm down from the exterior of Stone 2. Also shown are EDS plots labeled exterior and interior of a Moqui Marble and an EDS plot labeled Corguinho Rock Reference, the common control rock.

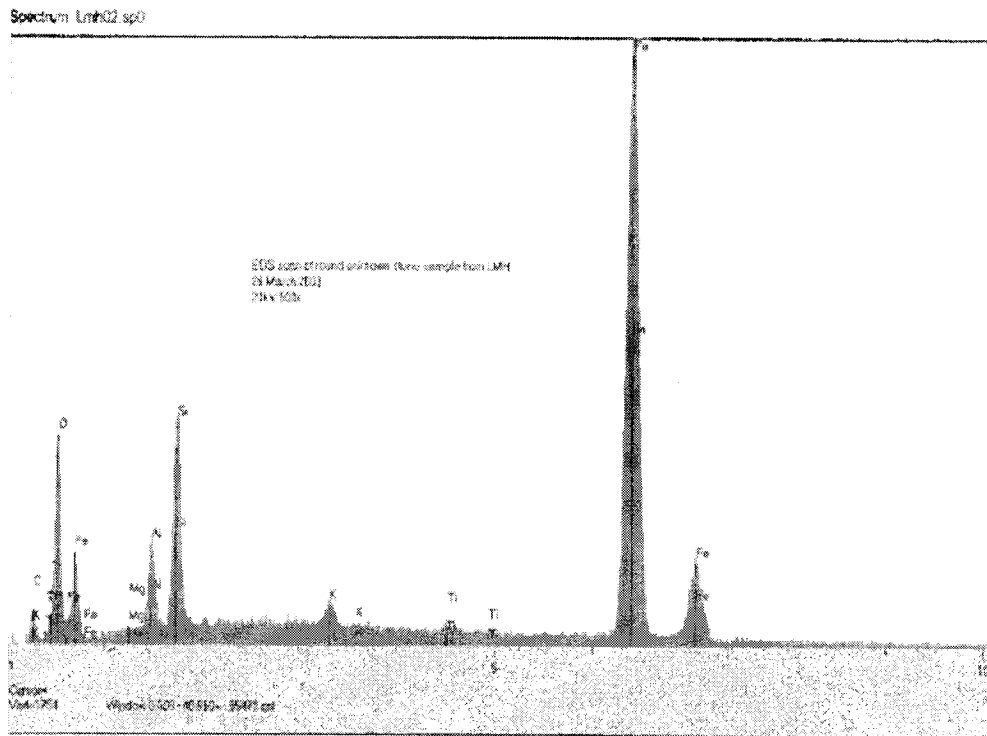
In studying the EDS spectra, what jumped out to biophysicist W. C. Levensgood were the titanium peaks in Stone 2. There are no titanium blips in the Moqui Marble exterior or interior and none in the common rock from Corguinho.

Levensgood said, "The normal control rock from Brazil is essentially iron oxide,  $Fe_2O_3$ , also known as hematite. If titanium is present in hematite, with heating and the right oxidation reduction, one of those iron Fe atoms can be chemically replaced by a titanium Ti atom that forms a new compound,  $FeTiO_3$ , which is ilmenite. Hematite is not magnetic. But after titanium enters, the new compound can become magnetic and instead of being red, the color will change to a black, shiny crystalline substance. I have found the round disk-shaped stones from Brazil that you sent me are weakly magnetic, so they might contain ilmenite which is quite different from either the control rock or the Moqui Marbles. Whatever the source of the September 15, 2002 rock fall in Corguinho was, the stones are not common iron or common rock."

Note in the EDS plots that follow, Stone 2 from Corguinho, Brazil at the top of this page shows very high iron (Fe) peaks, but the normal control "Reference Rock" below it does not. Also note the titanium (Ti) peaks in the Corguinho Stone 2, but none in the control rock.

Avalon Foundation EDS Plots by Nick Reiter  
20kV 200x, 28 March 2003

**EDS Plot Stone #2**



**EDS Plot Corghinho Reference Rock**

