

**A L I E N
ABDUCTIONS**

A CRITICAL READER

EDITED BY JEFF CARNEY

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Introduction

[from *Abduction: Human Encounters with Aliens*, 1994, 1997]

John Mack

Nothing in my nearly forty years in the field of psychiatry prepared me for what I have encountered in working with individuals reporting abduction experiences. I have always felt that my strong suit during many years of training in adult and child psychiatry and psychoanalysis, and in the clinical work as a teacher and practitioner that followed, has been the discrimination of mental states, the assessment of the nature and meaning of patients' communications. Yet here were individuals, reporting with appropriate feeling and self-doubt, experiences which—according to generally accepted notions of reality—simply could not be. . . .

What struck me initially about the cases I saw . . . was the consistency of the stories told by individuals who had not been in communication with each other, had come forth reluctantly, and feared the discrediting of their accounts or outright ridicule that they had encountered in the past. Furthermore, most of the specific information that the abductees provided about the means of transport to and from spaceships, the descriptions of the insides of the ships themselves, and the procedures carried out by the aliens during the reported abductions had not been written about or shown in the media. Finally, none of the experiencers seemed psychiatrically disturbed except in a secondary sense, that is they were troubled as a consequence of something that had apparently happened to them. There was little to suggest that their stories were delusional, a misinterpretation of dreams, or the product of fantasy. None of those I saw

initially and in the coming months seemed like people who would concoct a strange story for some personal gain or purpose. In short, the experiences reported had the characteristics of real events: highly detailed narratives that seemed to have no obvious symbolic pattern; intense emotional and physical traumatic impact, sometimes leaving small lesions on the experiencers' bodies; and consistency of stories down to the most minute details. But if these experiences were in some sense "real," then all sorts of new questions opened up. How often was this occurring? If there were large numbers of these cases, who was helping these individuals deal with their experiences and what sort of support or treatment was called for? What was the response of the mental health profession? And, most basic of all, what was the source of these encounters? . . .

[THE TYPICAL ABDUCTION EXPERIENCE: A SUMMARY]

Abduction encounters begin most commonly in homes or when abductees are driving automobiles. In some cases the experiencer may be walking in nature. One woman reported being taken from a snowmobile on a winter's day. Children have experienced being taken from school yards. The first indication that an abduction is about to occur might be an unexplained intense blue or white light that floods the bedroom, an odd buzzing or humming sound, unexplained apprehension, the sense of an unusual presence or even

the direct sighting of one or more humanoid beings in the room, and, of course, the close-up sighting of a strange craft.

When an abduction begins during the night, or, as is common, during the early hours of the morning, the experiencer may at first call what is happening a dream. But careful questioning will reveal that the experiencer had not fallen asleep at all, or that the experience began in a conscious state after awakening. As the abduction begins the abductee may experience a subtle shift of consciousness, but this state of being is just as real, or even more so, than the "normal" one. Sometimes there is a moment of shock and sadness when the abductee discovers in the initial interview, or during a hypnosis session, that what they had more comfortably held to be a dream was actually some sort of bizarre, threatening, and vivid experience which they may then recall has occurred repeatedly and for which they have no explanation.

After the initial contact, the abductee is commonly "floated" (the word most commonly used) down the hall, through the wall or windows of the house, or through the roof of the car. They are usually astounded to discover that they are passed through solid objects, experiencing only a slight vibratory sensation. In most cases the beam of light seems to serve as an energy source or "ramp" for transporting the abductee from the place where the abduction starts to a waiting vehicle. Usually the experiencer is accompanied by one, two, or more humanoid beings who guide them to the ship. At some point early in this process the experiencer discovers that he or she has been numbed or totally paralyzed by a

touch of the hand or an instrument held by one of the beings. Abductees may still be able to move their heads, and usually can see what is going on, although frequently they will close their eyes so they can deny or avoid experiencing the reality of what is occurring. The terror associated with this helplessness blends with the frightening nature of the whole strange experience.

When abductions begin in the bedroom, the experiencer may not initially see the spacecraft, which is the source of the light and is outside the house. The UFOs vary in size from a few feet across to several hundred yards wide. They are described as silvery or metallic and cigar-, saucer-, or dome-shaped. Strong white, blue, orange, or red light emanates from the bottom of the craft, which is apparently related to the propulsion energy, and also from porthole-like openings that ring its outer edge. After they are taken from the house, abductees commonly see a small spacecraft which may be standing on long legs. They are initially taken into this craft, which then rises to a second larger or "mother" ship. At other times they experience being taken up through the night sky directly to the large ship and will see the house or ground below receding dramatically. Often the abductee will struggle at this and later points to stop the experience, but this does little good except to give the individual a vital sense that he or she is not simply a passive victim. . . .

INSIDE THE SHIPS: THE BEINGS

Sometimes abductees will report being taken into the ship through its underside or through oval portals along its edge, although often they cannot recall the moment when they entered the

craft. Once inside they may at first find that they are in a small dark room, a sort of vestibule. But soon they are taken into one or more larger rooms where the various procedures will occur. These rooms are brightly lit, with a hazy luminosity from indirect light sources in the walls. The atmosphere may be dank, cool, and occasionally even foul-smelling. The walls and ceilings are curved and usually white, although the floor may appear dark or even black. Computer-like consoles and other equipment and instruments line the sides of the rooms, which may have balconies and various levels and alcoves. None of the equipment or instruments are quite like ones with which we are familiar. Furniture is sparse, limited generally to body-conforming chairs and tables with a single support stand that can tilt one way or another during the procedures. The ambiance is generally sterile and cold, mechanistic and hospital-like, except when some sort of more complex staging occurs. . . .

Inside the ships the abductees usually witness more alien beings, who are busy doing various tasks related to monitoring the equipment and handling the abduction procedures. The beings described by my cases are of several sorts. They appear as tall or short luminous entities that may be translucent, or at least not altogether solid. Reptilian creatures have been seen that seem to be carrying out mechanical functions. Nordic-looking blond human-like beings are seen and human helpers are sometimes observed working alongside the humanoid alien beings. But by far the most common entity observed are the small “grays,” humanoid beings three to four feet in height. The grays are mainly of two

kinds—smaller drone or insectlike workers, who move or glide robotically outside and inside the ships and perform various specific tasks, and a slightly taller leader or “doctor,” as the abductees most often call him. Female “nurses,” or other beings with special functions, are observed. The leader is usually felt to be male, although female leaders are also seen. Gender difference is not determined so much anatomically as by an intuitive feeling that abductees find difficult to put into words.

The small grays reported have large, pear-shaped heads that protrude in the back, long arms with three or four long fingers, a thin torso, and spindly legs. Feet are not often seen directly, and are usually covered with single-piece boots. External genitalia, with rare exceptions, are not observed. The beings are hairless with no ears, have rudimentary nostril holes, and a thin slit for a mouth which rarely opens or is expressive of emotion. By far the most prominent features are huge, black eyes which curve upward and are more rounded toward the center of the head and pointed at the outer edge. They seem to have no whites or pupils, although occasionally the abductee may be able to see a kind of eye inside the eye, with the outer blackness appearing as a sort of goggle. The eyes, as we will see in the case examples, have a compelling power, and the abductees will often wish to avoid looking directly into them because of the overwhelming dread of their own sense of self, or loss of will, that occurs when they do so. In addition to boots, the aliens usually wear a form-fitting, single-piece, tuniclike garment, which is sparsely adorned. A kind of cowl or hood is frequently reported.

The leader or doctor is reported as slightly taller, perhaps four and a half or

five feet at most, and has features similar to the smaller grays, except that he may seem older or more wrinkled. He is clearly in charge of the procedures that occur on the ship. The attitude of the abductees toward the leader is generally ambivalent. They often discover that they have known one leader-being throughout their lives and have a strong bond with him, experiencing a powerful, and even reciprocal, love relationship. At the same time, they resent the control he has exercised in their lives. Communication between the aliens and humans is experienced as telepathic, mind to mind or thought to thought, with no specific common learned language being necessary.

PROCEDURES

The procedures that occur on the ships have been described in great detail in the literature on abductions and will be summarized only briefly here. . . .

The abductee is usually undressed and is forced naked, or wearing only a single garment such as a T-shirt, onto a body-fitting table where most of the procedures occur. The experiencer may be the only one undergoing the procedures during a particular abduction, or may see one, two, or many other human beings undergoing similar intrusions. The beings seem to study their captives endlessly, staring at them extensively, often with the large eyes close up to the humans' heads. The abductees may feel as if the contents of their minds have been totally known, even, in a sense, taken over. Skin and hair, and other samples from inside the body, are taken with the use of various instruments that the abductees can sometimes describe in great detail.

Instruments are used to penetrate

virtually every part of the abductees' bodies, including the nose, sinuses, eyes, ears, and other parts of the head, arms, legs, feet, abdomen, genitalia, and, more rarely, the chest. Extensive surgical-like procedures done inside the head have been described, which abductees feel may alter their nervous systems. The most common, and evidently most important procedures, involve the reproductive system. Instruments that penetrate the abdomen or involve the genital organs themselves are used to take sperm samples from men and to remove or fertilize eggs of the female. Abductees report being impregnated by the alien beings and later having an alien-human or human-human pregnancy removed. They see the little fetuses being put into containers on the ships, and during subsequent abductions may see incubators where the hybrid babies are being raised. Experiencers may also see older hybrid children, adolescents, and adults, which they are told by the aliens or know intuitively are their own. Sometimes the aliens will try to have the human mothers hold and nurture these creatures, who may appear quite listless, or will encourage human children to play with the hybrid ones. . . .

Needless to say all of this is deeply disturbing to the abductees, at least at first, or when the material first surfaces. Their terror may be mitigated somewhat by reassurances the aliens give that no serious harm will befall them, and by various anxiety-reducing or anesthesia-like means they use. These involve instruments that affect the "energy" or "vibrations" (words that abductees often use) of the body. These processes may greatly reduce the abductees' fear or pain, and even bring about states of considerable relaxation. But in other

cases they are incompletely successful and terror, pain, and rage break through the emotion-extinguishing devices used. . . .

In sum, the purely physical or biological aspect of the abduction phenomenon seems to have to do with some sort of genetic or quasi-genetic engineering for the purpose of creating human/alien hybrid offspring. We have no evidence of alien-induced genetic alteration in the strictly biological sense, although it is possible that this has occurred.

[THE RETURN]

The abductees usually report fewer details of their return to Earth than they do of their abduction. Usually they are returned to the bed or car from which they were taken, but sometimes “mistakes” are made. They may be returned quite a distance, or even miles, away from their home. This is rare, and I have seen no cases of this kind, although Budd Hopkins has told me of such instances. Smaller mistakes are more common, such as landing the experiencer facing in the wrong direction on the bed, with his or her pajamas on backwards or inside out, or with certain garments or jewelry missing. Sometimes the aliens seem to be making a point, or a certain humor is involved. One two-year-old among my cases was tucked into his bed tightly after an abduction, which the parents say that neither they nor his older sister had done; he, of course, was incapable of doing this. Hopkins tells of a case where two abductees were returned to the wrong cars. As they drove along the highway the drivers recognized each other’s cars. They were “reabducted” and returned to the appropriate vehicles.

After the abduction the experiencer may have varying degrees of recollection of what occurred. Sometimes what happened will be remembered as a dream. The abductee may wake with unexplained cuts or other lesions (the mucous membrane was reported cut into and tissue taken from inside the nose and under the tongue in one of my cases), small lumps under the skin, a headache, or nosebleed. Generally experiencers are quite tired afterwards and feel as if they have been through some sort of stressful experience.

[PHYSICAL EVIDENCE]

The physical phenomena that accompany abductions are important, but gain their significance primarily in that they corroborate the experiences themselves; for the effects tend to be subtle and would not by themselves convince a Western-trained clinician of their meaning. For example, even though the abductees are certain that the cuts, scars, scoop marks, and small fresh ulcers that appear on their bodies after their experiences are related to the physical procedures performed on the ships, these lesions are usually too trivial by themselves to be medically significant. Similarly, abductees will often experience that they have been pregnant and have had the pregnancy removed during an abduction, but there is not yet a case where a physician has documented that a fetus has disappeared in relation to an abduction. Many abductees have noted that electrical or electronic devices—television sets, radios, electric clocks, telephone answering machines, electric lights, and toasters—malfunction in relation to abductions, or simply when the experiencers are nearby. But it is almost

impossible to prove that these disturbances are related to the abduction process, or even that they have occurred at all.

Abductees are frequently convinced that some sort of homing object has been inserted in their bodies, especially in the head but other parts as well, so that the aliens can track or monitor them, analogous, the abductees themselves will observe, to the way we track animals with various devices. These so-called implants may be felt as small nodules below the skin, and in several cases tiny objects have been recovered and analyzed biochemically and electromicroscopically I have myself studied a 1/2- to 3/4-inch thin, wiry object that was given to me by one of my clients, a twenty-four-year-old woman, after it came out of her nose following an abduction experience. Elemental analyses and electronic microscopic photography revealed an interestingly twisted fiber consisting of carbon, silicon, oxygen, no nitrogen, and traces of other elements. A carbon isotopic analysis was not remarkable. A nuclear biologist colleague said the "specimen" was not a naturally occurring biological object but could be a manufactured fiber of some sort. It seemed difficult to know how to proceed further. . . .

John E. Mack, M.D., is professor of psychiatry at the Cambridge Hospital, Harvard Medical School. He won the Pulitzer Prize for his biography of T.E. Lawrence, *A Prince of Our Disorder*.

Communion (Excerpt)

[Beechtree Books, New York, 1987, 144-146]

Whitley Strieber

Sometime during the night I was awakened abruptly by a jab on my shoulder. I came to full consciousness instantly. There were three small people standing beside the bed, their outlines clearly visible in the glow of the burglar-alarm panel. They were wearing blue coveralls and standing absolutely still.

They were familiar figures, not the fierce, huge-eyed feminine being I have described before, but rather the more dwarflike ones, stocky and solidly built, with gray, humanoid faces and glittering, deepset eyes. They were the ones I felt were “the good army” when they took me on December 26.

I thought to myself, *My God, I'm completely conscious and they're just standing there.* I thought that I could turn on the light, perhaps even get out of bed. Then I tried to move my hand, thinking to flip the switch on my bedside lamp and see the time.

I can only describe the sensation I felt when I tried to move as like pushing my arm through electrified tar. It took every ounce of attention I possessed to get any movement at all. I marshaled my will and brought my attention into the sharpest possible focus. Simply moving my arm did not work. I had to order the movement, to labor at it. All the while they stood there.

I struggled, bit by bit clawing closer and closer to that lamp. I turned my head, fighting a pressure that felt as if a sheath of lead had been draped over me, and saw the light switch in the dark. I watched my hand move slowly closer, and finally felt the switch under my finger. I clicked it. Nothing. Tried again.

Still nothing.

The electricity was off. The burglar alarm was still working because it had battery backup—but apparently it meant little to them, as they had entered the house without tripping it.

When I turned my head back I confronted a sight so weird, I thought afterward that I did not know how to write about it. I still don't, so I am just going to plunge ahead.

Beside my bed and perhaps two feet from my face, close enough to see it plainly without my glasses, was a version of the thin ones, the type I have called “her.” It was not quite right, though. Its eyes were like big, black buttons, round rather than slanted. It appeared to be wearing an inept cardboard imitation of a blue double-breasted suit, complete with a white triangle of handkerchief sticking out of the pocket.

I was overcome at this point by terror so fierce and physical that it seemed more biological than psychological. My blood and bones and muscles were much more afraid than my mind. My skin began tingling, my hair felt like it was getting a static charge. The sense of their presence in the room was so unimaginably powerful, and so strange. I tried to wake up Anne but my mouth wouldn't open. The moment I thought of the kids a clear picture flashed in my head of the two of them sleeping peacefully.

The thing before me seemed like a sort of interrogatory. Why the suit? Did it mean that they were showing me a male? If this was a hive species, there

might well be more than one sex, and they might be physically very different. Females, males, and stocky little drones?

Now what was I going to do, having called them—lie here and quake? I had wanted to communicate.

They were obviously waiting for me to do something. I saw their faces so clearly, their eyes dark, glittering pits in their dun skin. I could not help noticing that there was a sort of jollity about these beings. I'd thought before that they seemed happy. Perhaps whatever they were trying to do was going well.

They had responded to my summons. What on earth should I say? I wanted them to know that I was still in possession of myself, that despite what I can only describe as a terrific assault against me, physically and mentally, I was still functional and on some level independent. More than this, I wanted them to know how I felt about them, despite all the complex connotations of what they were now doing to me. There may very well be good reasons for their behavior. Have all of their contacts with human beings been peaceful? And how about me: Had I fought in the past?

If they had a hive mind, it might be that the amount of volition I had left was all they could allow me without risking loss of control of the situation. What if I'd been able to do something unexpected very quickly, like reach out and take one of them by the shoulders? Would the hive then have become confused about where this being was? Would it have been that simple to take a captive?

There was and is no way that I would ever make a provocative gesture in their presence. In fact, I wouldn't move at all unless bidden, not until I understand more. If one could escape into their world, one could also get lost in it.

Lying in that bed, I felt a very strong sense of responsibility. I had to communicate in some nonthreatening manner. I was an emissary of sorts—although perhaps only to the court of nightmare. If so it was a strange sort of bad dream, in that the terror began to pass even though the dream hadn't ended.

Again it took an absolute concentration of will, a centering of my attention and the application of the most careful effort to the muscles of my face, but I did manage to smile.

Instantly everything changed. They dashed away with a whoosh and I was plunged almost at once back into sleep. Now I did dream—qualitatively a very different experience from what had just transpired. Frankly, I'm quite certain that the beings I saw were not a dream, and probably not a hallucination. What they were was an enigma.

Whitley Strieber is the author of several horror novels, including *The Hunger* and *Wolfen*. Since writing *Communion*, he has written several other books about extraterrestrials, and has been very involved in the investigation of UFOs and related phenomena.

The Incubatorium

[from *Secret Life: Firsthand Documented Accounts of UFO Abductions, 1992*]

David M. Jacobs

After the primary experiences, the abductee is walked into a special room that I call the incubatorium. Here she sees scores of what appear to be fetuses in the process of incubation. They may be upright in containers floating in a liquid solution, or they may be lying down in either dry or liquid environments. Abductees report as many as fifty to one hundred fetuses gestating in this room. The containers are often attached to an apparatus that is either in the center of the room or off to the side; this apparatus appears to be responsible for the life-support systems. The abductee can hear a whirring or humming sound coming from the apparatus.

James Austino was taken into an incubatorium when he was fourteen years old. As is usual in these situations, the Beings offered no explanation for why they were showing it to him.

[What follows is a partial transcript of a hypnosis session between David Jacobs and James Austino.]

Can you get a glimpse into any of them?

There's like all these tubes running straight up to the wall, liquid or something in them.

Is there anything in the tubes, other than the liquid?

Yeah, I think so. It's like a machine with twenty or thirty tubes. The whole room is like round with them.

Are these just all in a clump, or are they lining the

walls, or . . . ?

There's like the machine, and they're all sitting up on the machine, going straight up. And they line the wall. It's like a big fish tank or something, each one of them's a little fish tank. . . . It's like blue liquid. There's lights underneath each tube, shining up straight into it.

Is this guy still with you when you go into this room?

Yes.

Where is he standing?

Next to me. He looks at me. His hand's on my back.

What happens next?

There's little things in each of these tubes.

What do these little things look like?

Hamsters.

You mean, they're animate?

Bald hamsters, just kind of lying in there with wires and stuff attached to it. Looks like hamsters.

Do you stand to watch this, or does he have you sit down?

He just walks me in the middle, tells me to look around, don't touch anything.

Are all these hamster things the same size?

Yeah, about. But they don't look like hamsters. They've got little black eyes, like curled up, floating in there.

Now you're saying you're looking at little black eyes.

Mm-hmm.

Are you looking at babies?

It looks like little ones.

Fetuses?

Yeah, just floating in these things. The light shines up on them from underneath.

Is it one fetus per tube, or are the tubes filled with them?

One per. But the whole wall's lined up.

How many would you estimate are in there?

Sixty, seventy, maybe more. The room has a blue glow to it from the water.

Do you hear gurgling and bubbling?

Yeah, it sounds like a fish tank.

. . . Are these fetuses resting on anything?

They're just floating in it.

Is there anything attached to them?

Little wires. They're about hand-sized, each of them.

How close are you to them?

I walk up to one and I look in to get a better look.

What do you see in there?

A little thing; it's curled up.

Does it look like a human fetus?

A little. It's just the eyes are different.

What color are they?

They look blue from the inside, but that could be from the water. . . . They're veiny, though.

You can see veins in them?

Yeah, all over the place.

Are they red veins?

I can't tell, it's blue. They look blue. . . .

Are these tubes made of glass, do you think?

It looks like glass. because I could see my reflection.

Okay, all the tubes are attached to a central machine, you say?

Yeah, like a monitoring unit, like life support or something. . . .

David Jacobs is an Associate Professor of History at Temple University and a leading authority on unidentified Flying Objects. He is the author of *The UFO Controversy in America*.

Kidnapped by UFOs?
[Nova, WGBH Television, 1996]
Budd Hopkins

NOVA: Could you tell us briefly about your own personal introduction to UFOs and what it is that got you believing in the reality?

HOPKINS: I had a daytime UFO sighting on Cape Cod. It lasted about three minutes. The object seemed to be able to hover. And then it zoomed at great speeds straight into the wind. We had thought perhaps it was some kind of flat balloon or something, but clearly it wasn't. And when you see something like that and the three of us jumping out of the car finally to watch it disappear, you realize that there's some factor in the world that you had previously been unaware of. And it could be an extraordinarily important factor.

NOVA: As you know, many people have a hard time believing the literal truth of abductions. Can you please describe for us how you overcame your own skepticism and became a believer?

HOPKINS: As I was looking into a few early sighting reports, many years after I had my own sighting and I began to look into the cause, I was curious. At that point I thought that an abduction case was an extremely rare item. And when I first heard of an abduction, which was in 1966, two years after I'd had my daytime sighting, I couldn't accept it, I couldn't believe it. And I had a very simple reason; it's just too hard to believe.

I had no logical reason. If I have seen something flying around in the sky, there's no reason to think that there

might be people inside the ship—occupants. Although we looked down upon that, at the time, as ridiculous. And David Jacobs made a wonderful remark that it took the investigators who took UFOs seriously, it took them 20 years to accept the idea that a UFO might have an inside.

And in retrospect, now that I know about the abduction phenomenon, and I've been looking into it for practically 20 years, I realize that in those early years before we accepted the idea of occupants, before we accepted the idea of abductions, and we were just looking at the objects themselves, that it was as if we were trying to get the license plate number on the get away car, without having figured out what the crime was.

But, as these cases began to come my way, where people were reporting a sighting, a period of missing time, they couldn't account for a couple of hours. Perhaps they were in a car, the car ended up on another road aimed in the wrong direction. They were having nightmares and fears and so on afterwards. You have to assume that something traumatic had occurred in a number of these cases. So, I used a couple of friends who were psychiatrists, psychologists and others to help us with hypnotic regressions to look into these experiences that the people were unable to recall all the details of. And one of the interesting things, of course, is the people who were doing the hypnosis for us were all skeptics. I don't think they ended up skeptics, but that's the way they began. But, as the case material mounted up, and case after case after

case replicated the cases before, and these were totally believable people from all walks of life, and even down to tiny details in their descriptions of what happened to them, these tiny details were replicated again and again—you have to feel you're dealing with a phenomenon that has an absolute core of reality about it.

NOVA: Assuming that there is a literal truth to the . . . abduction phenomenon, what in your opinion is the real significance of that? Why is this important?

HOPKINS: Well, if this is true and I have at this point sadly no doubt that it is true, what that means is on the silliest level that we're not necessarily the top of the food chain. But, on the most profound level, it means that an intelligence which is a controlling intelligence, which can see into our mind, so to speak, which would mean a total end to the privacy that we each have inside our heads right now. That that intelligence, which possesses the technology that is staggering, is bound to ultimately be in control. Just as the Spanish were bound to somehow control the Aztecs. That's the way things were slated.

To think that it might be an end to Eden, so to speak, if we can look at our past as Eden, I'm sure the Aztecs thought of their past as Eden too before the Spanish arrived. If I can, you know, just guess what life might be like 20 or 30 or 40 years from now should this momentum continue, it's a terrifying thought. Even though I don't see the UFO occupants as evil or conquerors or anything of that sort—it's nothing that simple. Still, control would be absolute if this finally comes to making them-

selves obvious, ending the covert.

NOVA: You state that the evidence for the reality of these abductions is overwhelming. Could you please briefly describe what the nature of that evidence is?

HOPKINS: I think most dramatic are the physical marks on people's bodies after these experiences. They fall into various types, but one very common one is what we call a scoop mark, which is a little round depression about the size of my thumb nail or a little smaller. As if a little—some sort of object or some sort of tool has just removed a layer of cells.

Now, a person can be asleep at night and wake up in the morning with one of these things right on the front of the shin and it's not bleeding. This can happen, of course, outside or whatever. But, these things are extremely similar. And they turn up absolutely overnight or after the experience ended. We don't know why they're there, but they happen over and over and over again.

Another type is just a straight like surgical cut that can be anywhere from oh, a small inch or so, but down to maybe three and a half, four inches long. And there is very rarely any bleeding that results from these. And, another set of these marks can be simply large bruises, especially on the insides of the thighs, as if some kind of gynecological stirrups had been used or something of that sort. Again, if this happens during the night, the person goes to bed unmarked and wakes up with these various cuts or whatever I've described. And some of them are extremely dramatic in appearance.

When people have gone to doctors—in one case a woman went to a doctor after one of these things turned

up on her back after an abduction. And the doctor insisted that she'd had surgery because there were at regular intervals little extensions along the cut. And she said, "No, this is just what happened when I woke up." That is one basic, dramatic piece of evidence.

The second thing is, of course, a person will often find in the house signs that that person has been outside. In a particular case, for instance, a man woke up in the morning with the recollection that he had been outside. He remembered there were figures in the room. He remembered pieces of this experience.

NOVA: David Jacobs has his theories of his meanings of the abductions, as does John Mack. What does Budd Hopkins think this all means?

HOPKINS: Trying to speculate as to the ultimate meaning of all this is always tough. Certain things seem very clear to me. We know what they're doing, I think, beyond any doubt at this point. As to why they're doing it, that's speculation. It definitely seems to me, though, that what they're doing is for their purposes, not for ours. The hidden religious hopes that I think everyone has would connect with the idea that they're coming here to help us. It's certainly nice to think that. Our paranoid fears that many people have are they're coming here to take us over, I don't see a sign of either one of those being true. They seem to be here for their own purposes. Now, they could take what they need. Our DNA, our genetics, they could create their hybrids to solve some particular evolutionary problem that they may be facing. Who knows? And they could just simply leave and then leave us alone again, which would be quite wonderful.

But, I don't think it's possible to say. I don't have enough to go by, enough information, to say what they're here for. They're not here, that's for sure, to help us plug up the ozone layer hole. They're not here to take over our supermarkets. They're here for their own reasons. And I'm not sure what those are.

NOVA: There are those who say that the abduction stories are so similar not because they're real but because we all share the same cultural images of UFOs and aliens. Why is this, in your opinion, not enough to explain the many apparent similarities?

HOPKINS: One of the most important things about these cases, as they emerge, is that they come from all around the world, even from essentially illiterate people. Zimbabwe, Saudi Arabia, New Guinea, I mean cases have been reported exactly like the cases we get here from people who were totally illiterate. There is no possible way that this could have bubbled down. Also, one could do a simple test. You ask the man on the street to explain what a UFO abduction is about, and he may get one or two things right. But, most people really don't have a clear idea of what happens.

NOVA: You had said—and it's been said that the best evidence for the reality is experience, is the similarity of these stories. In other words, what do you mean by that process?

HOPKINS: Well, these accounts, of which we have literally thousands upon thousands, are so extraordinarily similar. To start with, in the sequence of events, Robert—Edward Bulwark, who's

a folklorist, has broken down these various accounts into separate units of what happens, and has found out that not only are the same things reported again and again, but they're reported in the same sequence. Which is very, very different, obviously, from a fantasy or a whatever. And the details are so incredibly similar. Which I am stunned by every time I interview somebody. The power of these accounts, or the emotional resources behind them, where people are really extremely upset and going into it—which is not the kind of thing one finds behind a fantasy—the power of that, mixing with the fact that the accounts are so similar around the world, again, supported by the evidence in all the cases. You know, if somebody said the UFO came down in the yard there, where that tree is, you might look at it and find a broken tree branch, or several of them broken from the top down. That sort of thing. The background is always supported there. Which, of course, doesn't happen with a fantasy. It only happens with reality. And the evidence is absolutely there in every case. And, of course, you don't get in fantasies or imaginary experiences this—the fact that everyone is remembering the same thing the same way. And you have multiple—many multiple abductions.

NOVA: What is your best response to people who believe abductees must simply be crazy, that this is just crazy mentally stuff. Do you think they would feel differently after they got a chance to meet and hear directly from these people?

HOPKINS: Well, the issue of whether the abductees are crazy—by the thousands, we're talking about by the

thousands—is, I think, a simple question to answer. I mean these people can be psychologically tested as they have been. We instituted a psychological series of psychological tests with a group of abductees, without informing the psychologists of the nature of our sample—many years ago. And there was no psychopathology that emerged from the testing. And this is what happens again and again.

Budd Hopkins has received many awards for his painting, sculpture, and scholarship, among them the National Endowment for the Arts Fellowship and a Guggenheim Fellowship. He began to formally investigate UFOs in 1975. His books include *Missing Time*, *Intruders*, and *Witnessed*.

The Use of Hypnosis

[from *Secret Life: Firsthand Documented Accounts of UFO Abductions*, 1992]

David M. Jacobs

When I first begin the memory recovery process with a subject, I obtain a case history of the abductee, outlining many of the “suspicious” occurrences in that person's life that might be indicative of an abduction. I do not discuss anything about the specific content of abductions with the subject. Then, with the abductee's record, I select a memory to be probed. The abductee then consciously relates all that she remembers about the incident, sometimes in surprising detail. We discuss this and then we begin a hypnosis session to ascertain the origin of the occurrences.

Hypnosis is an indispensable tool in unlocking the memories of an abduction. Ever since 1963, when Dr. Benjamin Simon first used it on Betty and Barney Hill, UFO researchers have employed it to learn about abductions. It is the best method available to gain detailed access to people's hidden abduction memories. Hypnosis, however, is not foolproof. Some abductees simply do not remember; when they do remember, especially details, it may be an incorrect memory that they are “filling in.” This can be particularly true when the subject is asked to supply details of an event from childhood.

It is easy for a hypnotist to ask (consciously or inadvertently) leading questions that steer the abductee into an answer that may not reflect reality. This can be a problem for suggestible subjects. Confabulation, or the unconscious invention and filling in of memories, can become an easy way of providing information to the eager hypnotist-investigator. In hypnosis, even asking

questions about a specific event can put pressure on the subject to invent details of that event to provide the answers to those questions. This problem is compounded by the fact that in abduction research, questions about details are routinely asked in order to gather as much information as possible.

Even the milieu of the investigation might present problems. Certain expectations are inherent in this situation. The hypnotized person might unconsciously invent information about an abduction because that is what is expected. Even the investigator's beliefs might subtly influence the subject to tell him “abduction” material. Intentional fabrication can be another problem. Even in deep hypnosis, the subject can consciously fabricate stories.

Yet, despite these potential problems, hypnosis is a valuable instrument of data collection. The abduction accounts are recalled in a surprising manner. For many abductees, once the event is tapped into, the memories seem to pour out without much questioning. When the memories are finally out and discussed, they then are contained in “normal” memory and the abductees tend to forget them as they would any other more or less traumatic memory (thus, often these abductees find it difficult to recall details of the events later on without hypnosis). Other abductees, however, have a very difficult time remembering details of the abduction during the regression. Much of this depends on the specific abduction that they are trying to recall.

The hypnosis I employ consists of

light relaxation induction. Basically, I tell the subject to relax in several different ways, use a small amount of visual imagery to “deepen” the trance, and then begin to ask questions. My inductions are usually about fifteen minutes long. The hypnotized subjects have complete control and are free to challenge questions, refuse answers, or get up and go to the bathroom.

I use a calm, informal style of inquiry, especially with those abductees who have had many sessions with me and with whom I have spent enough time to know their reactions to the questioning. When a person comes for her first session, my questioning technique is necessarily cautious and not pressing. With a new subject, I intentionally ask leading questions to ascertain whether she is “readable” to any degree. The vast majority of the time she is not, demonstrating this by answering a definite “no” to my leading questions

During a regression session, I try to be as rigorously systematic as I can. I go through the abduction one step at a time, from just before the incident began until the very end. This requires expending a great amount of time on each abduction account. I have developed a technique through which I can move the abductee backward and forward through the event, slowly expanding memories. Sometimes I will go through the event twice, asking questions in a slightly different manner based on what has already been said. If a person cannot remember something, I do not press for recall. Each session lasts between three and five hours, with the hypnosis itself lasting between one and three hours.

I use as nonconfrontational and supportive a manner as I can, often

purposely not finishing questions so that abductees can “ease” into the line of questioning that I am developing or interpret the question for themselves. For the most part, I speak in low, conversational tones so that I do not in any way set up an environment that is hostile or suspicious. If I find what appear to be contradictions, I point these out and question them about it (e.g., “If you are lying on your back, how could you feel someone touching your back?”). If they say something that I have never heard before, I again question them very closely to make sure that it is not imaginary. It might appear in some of the transcript excerpts used in this study that a question is leading. In each case I have found that the abductee was not readable; often the questions asked are from material that had already been discussed previously in the session.

During a regression, all abductees are quite aware of what is happening on two fundamental levels: (1) the information that they are remembering, and (2) the questions and answers that they are required to deal with while they remember. If possible, the abductees learn to observe and analyze the events from a dispassionate and systematic point of view. When they have had a number of sessions, they become adept in questioning themselves and their remembrances, and they can distance themselves to a greater degree from the event. They become “participant-observers” rather than just helpless victims. This has proved to be invaluable for my own research and for the way that the abductees learn to cope with the problems engendered by the abductions. After I have had a number of sessions with them and am sure that they cannot be led while undergoing

hypnosis, I can be more blunt in my questions and they can evaluate their memories for themselves. After I bring them out of the hypnotic state, we engage in a thirty-minute to one-hour “talk down” period when other details may be recalled.

Occasionally I use a method I call “assisted recall,” in which close and careful questioning techniques enable the abductee to remember most of the abduction without the use of hypnosis.

David Jacobs is an Associate Professor of History at Temple University and a leading authority on unidentified Flying Objects. He is the author of *The UFO Controversy in America*.

Sara: Species Merger and Human Evolution

[from *Abduction*, 192-208]

John Mack

Sara was a twenty-eight-year-old graduate student when she wrote to me requesting a hypnosis session. She was planning to travel soon and wrote that she wanted to be hypnotized before she left “in order to release some emotions and information that feel close to the surface and to lessen some feelings of anxiety and confusion that have been increasing in intensity.” Many details of Sara’s file have been omitted in this narrative in order to protect her anonymity.

In the letter she said that a couple of years previously, in the course of massage treatment for pain at the base of her skull, “I had the experience of small beings communicating with me telepathically.” She also found that she was spontaneously making drawings with a pen in each hand (“I never used my left hand before”) of what she took to be alien beings, focusing especially on their eyes. Her drawings also included passageways and “some sort of subtle body field” like an “entity’s subtle body.”

Sara is one of an increasing group of abductees who bring a degree of spiritual interest to the understanding of their experiences. Her search for meaning, and the struggle to stretch the boundaries of her own consciousness, enabled her to achieve powerful insights in a short time. In her letter she also wrote that recently she had begun “receiving information linking other entities to issues of planetary preservation and ecological transitions, especially polar and geomagnetic reversals.” The desire to serve, “to do something constructive for the world,” is vitally important for

Sara, although she does not yet know the form that this will take.

Sara grew up outside an industrial city. She calls her Protestant upbringing “conventional” and describes herself as committed to experiencing reality as clearly as possible. Sara has never taken drugs and does not drink alcohol. She links this to her encounter experiences and she believes that since she has stopped consuming caffeine, chocolate, and almost all sugar, her experiences have become much more conscious and clear.

Sara’s father has died. Although he was intelligent, Sara wonders whether he was dyslexic, and she suspects that that interfered with his ability to do the paperwork necessary to be more successful professionally. A frustrated man, he was physically and verbally abusive to Sara’s mother and verbally abusive to Sara. She witnessed frequent arguments between her parents, and on occasions, she saw her father physically abuse her mother. Frightened by her father’s temper, Sara would go into another room to avoid being hit. Sara recalls that her father was kind to her when she was small, but when she began to excel in school, he became quite distant. In contrast, Sara’s mother is quite successful professionally.

Sara was especially close to her maternal grandfather, who died when she was in her teens. He was “very benevolent,” and “we used to sit just for hours, sit there, and I would read [to] him . . . He was my source of support, a really good role model.” For about ten years after he died, Sara would often

have the feeling that her grandfather was in the room with her, especially when she was at her desk working. She recalls a “funny” room in her grandfather’s house. As a child, she would frequently go into this room, shut the door, and sit there for a long time. In a “not quite awake” state, Sara would experience a kind of “hazy energy” in the room, but she recalls nothing else about it.

Sara was an intellectually precocious child, and she was reading on her own at a very early age. She was especially drawn to mysteries and books about ghosts and poltergeists. The family went to church almost every Sunday. “I didn’t like the idea of original sin. It didn’t make any sense to me . . . I liked the Holy Spirit a lot.” She described the Spirit as “like the connective tissue that binds all of reality together.” By age eleven or twelve, Sara was considering theological questions such as a resolution to the dichotomy of good and evil, and she was drawn to reading about other religions.

While Sara was an undergraduate, she participated in studies of extrasensory perception. Her interest in integrating the discoveries of physical science with explorations of spirituality and human consciousness have continued. On one occasion, she experienced electrical sensations in her body. On another occasion, “I felt like I got out of my body and I couldn’t get back in, and I was gone for about two days.” She was quite frightened by this experience.

After graduating from college, Sara married Thomas. She became increasingly unfulfilled by the conventionality of their life together. He would “blow holes in everything I said I felt,” Sara said. She and Thomas remained married for several years due to a strong

love between them. In addition, Sara desired “some sort of ordered, comfortable” existence.

About a year after she was married, Sara became very ill. Although there is no outward evidence to support this, Sara connects this illness and later intense pain in her neck and head to the otherworldly presence in her life (“They knocked me down,” she said). While out walking with Thomas one afternoon, her legs suddenly gave way and she collapsed. She developed a fever almost immediately. Her condition was quite serious, and she was forced to go on disability from work. Her recovery was a long one, and during this period she and Thomas grew further apart and eventually divorced. The couple had no children, and to her knowledge, Sara has not been pregnant. Regarding her illness, Sara claims “It was for my own good, “an intervention that seems to have moved her onto her present spiritual path.

About five months before she wrote to me, Sara met a young man named Miguel. When Sara and Miguel sat down to a meal at their second meeting, he immediately brought up the subject of UFOs and told Sara that he had seen a spaceship (this kind of synchronicity or serendipity is commonplace among abductees). Sara refers to Miguel as her “extraterrestrial friend.” Miguel reported seeing alien beings in his dreams, and Sara felt that he may even be a “representative” of an alien species. He sometimes acted so listless that his behavior reminded Sara of the hybrid children abductees see on the ships. He was in an incubator as an infant and often showed “a huge neediness” according to Sara. At the same time, Sara valued the opportunity to discuss her encounter experiences with him.

Sara's abduction history is mixed with memories of various sorts of paranormal experiences. She has a very early memory—"six weeks old or less"—of "being picked up and moved and looked at." She believes that "someone was taking a picture . . . It was like their first moment of self-consciousness," she said. "I can shut my eyes and I recall it." Experiences related to ghosts "were a permanent fixture of my whole childhood," beginning at least as early as age four, Sara recalled. I became a premier ghost story teller." Sometimes she would build her stories around embellishments of portraits and tell "past life stories" based on imaginative recreations of their lives. She would concentrate on the eyes in the portraits and become "mesmerized." The portrait would take on a "living vibrancy" and fill out into a "three dimensional contour."

In addition to the ghost story sessions, Sara used to play what she called "seance games" with her childhood friends. Once at a slumber party, she asked her best friend, Annie, who was also the smallest, to lie down on the floor and said, "We're going to try to levitate you.' I don't know where I knew about levitation either, and we went all in a circle. I think I was at her head, and I started saying something, and then it was like, now okay, and the girl went up, you know." Each of the children who were present had "a sense that something weird had happened," and afterwards no one spoke of the incident. "I remember that night very vividly," Sara recalled. "Oh, God! That night the whole room was very strange . . . There was a lot of electricity in that room. I think after that it was not even conscious for the kids." I asked her if they told anyone about it. "I don't think they

even thought of the idea of telling." It seemed to Sara as if there were "a suggestion they don't tell." A couple of years ago, Sara says she asked the girl she had floated, "Did we lift you?" and the girl said yes and that everyone present was frightened by the experience.

Later, during the regression, Sara connected this knowledge and capacity to the floating experiences into, inside, and out of spaceships. "I feel like I'm levitating around the ship," she said, "like someone's giving me a demonstration on levitation. Like showing me, 'Oh, you can levitate!' And so they're letting me levitate, they're letting me play, basically. They're basically letting me levitate all the way around the ship and up and down."

Although the ghost story telling stopped when Sara was about nine, she continued to feel a presence in the house at times."When I was thirteen I used to feel stuff in the house all the time," she recalled, "like things coming up the stairs . . . I didn't really look too hard. I'd duck under the covers pretty quickly. But I used to say, really loudly, like in my head—I'd never say it out loud. I'd say, 'I'm not ready yet! Excuse me, but I'm thirteen and just wait.' That happened a lot. A lot, a lot, a lot."

During our first meeting, Sara discussed the intense pain in her head and neck that she had mentioned in her initial letter to me. Expanding upon her letter, she said that during physical therapy a couple of years previously, she "started seeing a lot of figures in my head, and sometimes they would seem to be talking to me." She would shut her eyes and "see these little guys up here in this corner of my head, and they were kind of light, really yellow and light, kind of rounded . . . After I started

seeing these guys the pain disappeared.” The figures looked yellow and round and sort of benevolent . . . The most overarching feeling I get is calmness. They’re so calm.” They had “very light” bodies with big heads. She recalls no prominent facial features of the beings, not even the eyes. Nevertheless, she felt (and feels) a lot of love from and to them. “It feels like home,” she said, “like the ideal feeling of uhm, like a warm family.” After initially connecting with these beings, which she calls “light beings,” Sara began to put her hand on the spot in the back of her head when the pain became uncomfortably intense and she’d “tune in” to the “light beings.” She calls this “listening,” and she found it to be helpful in reducing the pain.

Sara also mentioned two experiences that occurred about six months before I saw her. During one of these, “something” appeared to be looking at her from the bedroom door as she lay in bed, a presence which was confirmed by the man she was seeing at the time. “All I can describe is like an outline. It was skinny. It was skinny. That’s all I can remember.” During a separate incident, she experienced something in her bedroom next to the bed. This presence was also confirmed by the same man. Although it was emotionally difficult at the time, she sat up and tried to reach out with love and compassion to the entity. After that, the presence seemed to dissipate.

About a week before she was to come East to meet with me, Sara was in an automobile accident, the effects of which repeated the intense pain in her head and neck that had begun five years earlier. Because of this car accident, she was forced to delay her trip several days. Miguel was driving the car and became

dizzy. He started to “space out” with distortion of vision, and they both felt as if some “magnetic” force were pulling the vehicle. The car went off the road, over an embankment, and “folded in on itself.” Sara suffered cervical strain and wrenching of tendons and ligaments, and she was taken to the hospital in an ambulance.

When Sara would shut her eyes after this accident, in addition to seeing the “light beings,” she could also differentiate a second type of entity. When “I shut my eyes I see them . . . I see these guys . . . down in a little row, like three or four little dark guys. Like gibbering.” Later she said, “it seems to me like these guys are in my head.” In contrast to the “light beings,” she described the “other ones” as “frenetic.” Shortly after the accident, she felt compelled to do her “listening” every day and to write down the information she obtained. She felt this would render additional accidents unnecessary.

A few days after the accident Sara and Miguel had an experience in which an unexplained green/yellow light penetrated their room. Miguel is ordinarily fearless, Sara said, but they were both terrified, and he appeared to have lost consciousness for a time during the incident. Sara felt as if she were “physically pinned down” and unable to move. She saw “three things hovering above me” like “three shrouded heads,” and thought to herself “something like, listen, we’re communicating. This is for real. Something like that, like, get your act together and start writing it down.” Then “the whole thing kind of dissipated.”

Sara also reports having observed unusual craft in the sky. On one occasion she was with a girlfriend and they both saw “a strange thing hovering

above.” Sara looked up, “and for a split second, I felt like . . . I felt like I was there and I was here. I felt like I’m in that spaceship, looking at myself. I felt like I was two places at one time, and then I started to think, ‘Oh, wow! That’s another whole possibility, you’re coming back to see yourself.’” On another occasion she saw what looked like a star. “But it wasn’t time for stars. It was like an afternoon. Really bright. Too low, but at a distance.” After a while “I kind of got fed up with it. I’m like, if you’re not going to do anything, then I’m going home. So I got in my car and started to drive away, and then it came at me, and then it came at me really quickly and flew over me . . . It looked like a flying star. It was just so bright.” At the time she thought to herself, “God, I’ve got to tell Miguel,” but she did not, and “it was like I forgot about it!”

Sara’s wish to be hypnotized grew out of her desire to “know what’s true . . . I don’t want to know a story that I make up or anybody else makes up,” she said. “I really want to know! I really want to know! It’s the only thing that’s important,” even though “it may be really complicated and really overlaid and everything.” She wanted to “get at” what “these little guys are.” Finally, Sara wants to be responsible for her experiences. “To tell you the honest truth,” she said, “I don’t know if I believe myself . . . There’s a part of me that really, really does. But there’s a part of me that doesn’t, and that part feels like it’s destroying me.”

Sara’s first words after being brought into an altered state of consciousness were, “I see my grandparents’ house . . . I’m oscillating between that and my white canopy bed which was in my parents’ house when I was little. I’m

remembering a lot about falling dreams that were a series of dreams I had in that bed, where I’d wake up really suddenly and grab the bedposts to keep myself from falling any farther. I felt as if I’d been dropped or had fallen from something very high back into the bed. I had quite a few of those, and I used to wake up feeling as if I might be close to having died.” I asked her to describe the sensation further, and she got “a real sensation of silver and like some sort of shaft, like an elevator shaft that I’d fallen through.” There were further images of “white, shiny material” and a “place I’ve just fallen from.” Then she shifted “to being in a field” and was “looking at what looks like a spaceship from a distance of maybe a hundred feet and I’m outside and alone in the field.”

The ship was a “white-domed thing” and had “a thing on the bottom and an entry that’s vertical” and “there’s light emanating from it . . . I see a lot of things that look a little bit like skeletons, but a cross between a skeleton and a walking insect. That is, they’re walking up and down these inclined planes . . . There’s light coming from—see one of the doors is folded down, and there’s light coming out of it, illuminating the little creature that’s walking up and down the inclined plane, looking a little bit like a thick skeleton. He has some sort of a bubble thing on his head, but I get a sense of filaments—then I just go right back to sliding down something into bed . . . Vertical. The descents were always vertical. So fast! So fast! Like almost rudely fast.”

Sara recalls that she used to wake up terrified from these abrupt descents from the ship, “terrified that I could have died . . . That was not very careful . . . It’s a good thing I caught the bed or I would have missed it,” she said. Her

next associations were to a long, shiny, white cylinder and the sense of her head hitting a “trap door.” She felt as if she were going back in time to “a place where I was dead.” Then she saw a being in what looked like a big, silver chair or throne made of metal. Although his head was “the most bizarre thing I’ve ever seen,” nevertheless, she recognized him. There was an “outer orb around the head. It’s translucent, and I’m seeing inside to a skeleton face. Inside the skeleton is not exactly like a human skeleton . . . There’s this outer filamenty kind of orb around him, and the smile is kind of sickly, like a skeleton smile. But I don’t feel, you know, scared. They’re not mean at all, and they’re nice. They’re nice . . . No one’s trying to scare me. It’s not their fault they look like that.”

Like many abductees Sara has had a name for this familiar entity. She calls him Mengus.”He’s family, really, kind of benevolent,” she said. Next she recalled herself first at age ten and then five, inside the ship (“I’m littler than he is”), “right up in front of” Mengus, “standing right next to him.” She communicated with him “dreamy, like in my head . . . half telepathically” and “half verbally” in English. “He just kind of nods his head.” She asked Mengus “what are you guys doing here on Earth?” and he replied, “Oh, we’re just looking around.”

Sara then reported seeing what looked like a control panel on the ship, like a cockpit on an airplane but even more metallic. “I kind of float over to this stuff” and she asked Mengus what every thing was. He told her “this is our transportation system.” She pulled at various things, “but like nothing’s on so I don’t do any damage . . . He kind of lets me, you know. He’s really benevolent

. . . like here’s this little girl, and she’s just looking around, and isn’t that fine.” Although she sensed “a real warmth and benevolence . . . it is mixed with a very steely emotion. Serious. This guy is dead serious.” Mengus said something like, “You’re young now, but this is like preparation, and this is really important . . . We’re leading you into this pretty easily, but this is not a joke, and this is not just to fly around, and this is serious business, so pay attention.” It was “just like, ‘Don’t screw up.’” The great amount of love she felt from Mengus enabled Sara to really listen to him and appreciate that “there’s no margin for error . . . I have a weird sense that he’s dead now,” she said, and: “I kind of feel sad.”

I asked Sara what made her feel that Mengus was dead. She replied, “I can just read his vibration, and when I go to find it now it’s just like it’s died and been recycled. I can’t access him anymore and he feels dead.” Mengus “was really nice. I would say, maybe like my first real teacher.” She has “the weirdest feeling that one of the little things I drew, the baby ones, was . . . Mengus’s new incarnation.”

Returning to her experience as a young child, Sara spoke of the floating/levitating phenomena described earlier and the sense that these capacities, although “really fun,” had come to her from “past life.” They were “not fun in just the conventional sense,” but part of how we evolve. “I consciously understood that true fun can be a lot of work and processing.” The vibrational energy of the translucent beings, Sara said, “was much more elevated than the conventional vibration you feel here . . . They’re just so much more conscious! They don’t keep everything suppressed in their unconscious. They’re just

awake. They're awake and they're responsible, and they're receptive and they're concise and precise and their eyes are open . . . Their hearts are open too. They're not afraid, and they're not stingy and selfish about their love, and it's just really nice. They're so, so, so, so nice . . . I get the sense there's a translucent thing on the back of their head . . . Our heads aren't translucent, you know are covered with hair and everything. We cover up all of our little things that we don't want people to see, and they just, it's like wide open. You can see right into it, and they're telepathic so they can't keep secrets that way. So as a result everyone's just a lot more together. They're not in denial the same way. I like that. God! I like that a lot. I wish I could be with them again."

Sara felt that to be with these beings, at least in the happy innocent way she had just spoken of, she would have to go backward in time, "before this life . . . I think I'll try it," she said. Next she found herself flying in a white spaceship with a number of little windows. It was flying over a desert area—"We're just whizzing around, and I can see down below and it's so beautiful . . . I don't know if I've ever been happy like that in this life, just like unreservedly, all the time, happy. Wow! We come over this ridge, and there's this big expanse of desert, and I see these reds and these yellows and oranges, and it's just like sensorially just scrumptious. It's just delicious." In this life her body was skeleton-like, "like Mengus's . . . It's creepy, and your bones are kind of little and brittle and it's kind of creaky. You walk in a very disjointed sort of way." Again Sara was struck by the joy of the maneuverability she felt within the space vehicle, how "just neat to zip around" it was.

From this alien/past life perspective Sara spoke of the "stupid" things that humans do and the temptation to confront them directly. But "it's much more useful to be subtle and make sure they thought of it themselves." Human beings are "so egocentric they won't change otherwise. They haven't. They've got this ego thing that they like to hold on to and they get really threatened . . ." At the same time there are "precious" things about human beings. "They can smell flowers, for instance. And that's like so incredible, and they get to feel the sun on their skin." As an alien being "I was operating out of less physicality, so you're lighter at one level . . . There are certain advantages. One is you don't get into these things like depression. But on the other hand it's a little disjointed and a little bit removed . . . The olfactory sense is not there the same way. You don't get the depth of smell, for instance," she observed. At the same time the aliens have seen "a bigger picture," and have more insight and patience. Also, "You have this thing in your head that [enables you] to access any kind of information telepathically. So you have this kind of informational pliability. I mean, you can get any information you need."

Sara felt that the purpose of her flight over the desert was to survey the planet for "planetary resources," in order "to see what is the survivability of an area like that" in case there was to be a "huge planetary shakeup." The desert area seemed to be a potentially "stable environment" in case of a major upheaval because it was high and flat. As she experienced herself flying in an alien incarnation she felt herself "going back and forth" between human and alien forms, as if trying to make a

decision. The human body identity was aesthetically pleasing for its “flesh and things,” while at the same time she was drawn to the greater perspective of the alien identity.

Sara returned then to the present and went on to describe a huge, ominous dark cloud covering the sky that seemed to exert a magnetic pull upon her, “like throwing dark, black tar over my head.” The cloud seemed to Sara to embody the projected negative consciousness and vibrations of human beings. Its impact was debilitating and made her feel victimized. The cloud functioned as a kind of mask or shield to hide some sort of “hokey” craft of the sort human beings would design if they were to make a spaceship. This craft was the source of negative vibration and was piloted by a human being. It appeared utterly “stupid” from Sara’s point of view. “I’m just loathing this whole thing,” she said. The aircraft’s “purpose,” she said, was “ostensibly war,” but not war to kill people. The war was “with people’s heads . . . war to control people.” She felt “this huge desire to shield myself from this thing.”

Next Sara described childhood encounters of “levitating,” “floating,” and “bouncing” around her in the room with the white canopy bed. “I feel like someone’s almost throwing me up and down.” Two “Mengus-like guys” have been doing this. She felt as if there were a magnetic field between their fingers and her body. The bouncing about “was fun . . . I was laughing,” and then the beings talked to each other, “not to me” and left headfirst through the window. These were friendly visits, “like coming over for tea,” but the beings became “mad” after college because she was living such a “conventional, stupid life . . . a very shortsighted existence,”

especially when she took a job in business.

Sara associated to another experience later in her life. She was alone, lying down on the deck to get a suntan, when “I felt something hovering on top of me.” She saw a figure that “was like a cross between a Mengus being and a person.” It was “less human in shape, but lighter and free-floating.” Sara received a communication from the being, “This is very important.” The intention, she was told, was not aggressive, but some sort of test of “genetic compatibility or something,” an “infiltration,” “a feasibility test,” “dimensional merging.”

I asked Sara to tell me more of what she meant by “dimensional merging.” She then described what I believe to be the central image of our first session. “It is like a plane,” she said, “a sheet of translucent cellophane.” There is “like a huge shattering of glass,” and a “razor blade thin” slit opens between this Earth/physical dimension and the realm from which the beings come. . . . The experience was not like anything she had known in human sexual relations. “The being itself felt aggressive, and I did not like that part of it. There was not an emotional component to the whole thing on its part . . . It was more like a scientific explorer tetry.” I asked if there were orgasmic activity. “It was much, much, much subtler,” she replied. “It was not entirely happening in this dimension,” Sara said, “so you can’t really evaluate it in the language and physical descriptive terms of this dimension because it wasn’t really happening here. It was half happening here and half happening somewhere else.” After this experience Sara “felt like I’d sort of been hoodwinked.” The being “didn’t give me the full story, and

it just kind of said, 'Hey, trust me, it's important.'"

Then she said, "If a being were to project itself onto a sheet of cellophane, and [the] cellophane were to shatter through to this reality, and I could stand and watch, I'd do that." I asked if this had in fact happened ("come through") to her. "Yes," she said, about two weeks ago. She had gone on a ski trip. There was a large mirror in her hotel room. She arose in the middle of the night, and the place where the mirror had been appeared as a corridor. She attempted to walk down this corridor, but she bumped her head against the glass. Miguel had not gone on the ski trip with Sara, but "the minute I bumped the corridor Miguel was in the room, and I tried to scream out, 'Miguel,' but I couldn't scream. Nothing could come out." She was sharing the room with a skiing friend, who she says independently saw a silhouette in the room. Paradoxically she "just immediately went back to sleep."

The bump hurt a great deal, but the pain was compounded by the "interpretation of the dimensions" as "the mirror opened up." It was as if "a being that looked like Miguel" or "a disguise of Miguel" came through. The being had "penetratingly dark" eyes, "dark, dark," and looked "insectlike" with "an overshaped head" and "a little, shrunken body . . . that's using the costume to look bigger . . . It hurt me," Sara said, but "the overall purpose wasn't to hurt me." It was rather "to explain something through demonstration," namely "this whole dimensional interpretation exists." By "bopping me on the head," they "demonstrate, 'Hey! This is physically real.'" Otherwise, many humans are often too "dense" and/or too preoccupied to be reached.

"In a species sense" Sara has felt "compatible" with the Mengus type of beings, but the being in the hotel room seemed to be a representative of another species with which Miguel was connected, perhaps in a past life. In Sara's view these two species are trying to connect with each other as demonstrated in her association with Miguel. Each species, she said, had its own "vibrational plane," so that for two species to connect they must "create a new vibrational plane of interaction." This could be exemplified in a human relationship that, in effect, crosses the species barrier. This would be accomplishing an infinite number of things with "one beautifully concise stroke."

I asked Sara to say more about the being she saw in the hotel room. The head was the most prominent part of the body and was "shimmery," looking "reptilian," almost "snakelike, serpentlike" and quite elongated. "Red vein-things" made the head appear like "a body turned inside out." The creature was not "bad. It's nice enough." It was "almost like a sea creature, like a mollusk or a snail without the shell." It seemed vulnerable, in need of "understanding" and "cooperation" from her. For Sara to own that the creature truly exists "expands my borders of acceptability and tolerance . . . opening my heart to something that isn't the same as I am. That's good for me. I need to know that. I need to learn that and actively do that." It was "sweet," she said for the being to "put on" the Miguel costume in order to bridge the gap of unfamiliarity. When Sara looked into this being's eyes she saw "so much love" and felt love herself. She also perceived a "kind of sad" and "battle-weary" look, as if it were saying, "Give us a break!" "They're tired of everyone being scared

of them . . . I feel bad for that guy,” she concluded.

We ended the regression at this point, and Sara’s mind began to doubt her experience and search for ways to “explain it [the session] away . . . It could be delusions and imagination,” she said. But then she observed, “It’s not imagination, either. I mean it is real. It’s more real than imagination. But it’s real in a hologram-like sense . . . like it’s projected, but I don’t know. I got bumped on the h . . . then you’re right back to, ‘My God! It hurt, didn’t it?’ . . . I went through something here, though, that was real,” Sara concluded, “all this pain that felt like a searing, burning . . .” After returning to ordinary reality the two realities seemed “more on a par” or “much more equal.”

The larger purpose of bringing these species together, Sara said later, was to bring about “personal evolution” in order to achieve “universal understanding.” The intense pain was used to penetrate the density of human denial, to reach us when we are “asleep.” Pain is the “extreme of physical tangibility.” Each species brings something to the merger. The Mengus-like beings, for example, Sara said, are more spiritually advanced than humans, who need to become “a little more Mengusy.” The Mengus-like creatures seek a greater physicality, “the ability to smell,” for example. In the connection of species each retains some of its original elements.

This process of species connecting involves “tremendous, tremendous, tremendous love.” Most ordinary human love, Sara said, is much more possessive, involving emotions like jealousy. This interspecies love is “more unconditional . . . I think that’s everybody’s sole reason for being here.

Soul/sole, in both senses of the word sole.” A few weeks later, Sara wrote to thank me for my help and said that “things seemed to calm down greatly” after the session.

Approximately six weeks after our session, Sara and I met for about one hour to integrate further the openings that had followed her regression and to discuss the possible forms that her life’s calling might take. After some discussion of folkloric studies of UFOs, abduction experiences and related matters, Sara suggested that the aliens may be assuming the forms of technology “in order to be more accessible to us,” to appear, for example, in something that looks “kind of like an airplane to make it a little easier.” She, like many of the other abductees with whom I have been working, spoke of the cataclysmic physical changes that may be ahead for the earth and wondered if somehow ecological and environmental concerns could unite humanity and help us transcend ethnic, cultural, and other boundaries.

Sara mentioned that she would sometimes sob because she missed “home,” but for her this has “nothing to do with my Earth parents.” It exists “in a different dimension.” It was, rather, a deeper sense of connectedness that she missed. We talked further of what this other “home” is like and means to her. “Home is dimensional, not spatial,” she said. But there is communication, nevertheless, between the dimensions. “You shut your eyes and there’s always communication,” she said. “The content is almost a hundred percent emotional,” she added. It was difficult for her to describe this coherently. “It’s all about . . . the emotion of love is the most . . . unconditional supportive life. I don’t mean that in human life, but creative-

ness, . . . growth-affirming kind of love. It bowls you over. When you feel that, and when you feel that connection to that, the love feeling is so tremendous.”

When Sara accesses this and other connected states, she says she feels “very happy.” She says that “it feels like the magnetic field around me completely changes . . . like space or something is fluctuating, like, if you could see a thermal crack or something. It feels like that.” She also feels that this state is somehow so familiar that she has always taken it for granted, and that if she focused her attention in this way more often, many additional things would become accessible.

Despite the joy she feels when she enters the other dimension, Sara feels it would not have been “ethically correct” for her to “jump” the chasm between the two planes totally or too readily. “In the past” she said it felt as if she “made a commitment, like an exchange student” spending a year abroad to be here on Earth. She was, in effect, in “an immersion program,” has “taken resources” and has “a responsibility” to see it through.

One way or another, Sara expresses a desire to use “ecology as a way to help people make a . . . transition . . . People have to redefine philosophically what they mean by environment. People think, ‘Oh, my environment.’ But, it’s like environment is [complete] . . . environment is . . . infinite. And it has an infinite number of characteristics, and they extend from physical to emotional psychic to interplanor and cross-sectional . . . You are your environment . . . It’s a much broader way than most people think,” she noted. Sara spoke then of how difficult it has been for the human species to reach a “creativity-affirming, life-affirming”

place of unconditional love, which she related to all the ways “by which we differentiate ourselves,” such as by creating gender, ethnic, and religious barriers. Ecology could be used to discover “commonalities” and “transform consciousness . . . If you truly, truly, truly do what’s good for yourself, you’re doing what’s good for the world. The two things are synonymous.”

Sara observed that she herself still experiences “emotional neediness.” Using her metaphor of the exchange student here from another dimension she said, “I might be able to take a vacation back home, or be in two places at one time,” but she says it may be more useful to reach a state of consciousness in which “it didn’t really matter to me if I went home or not. Then I can go home because I don’t need to go home.” She talked further of how her spiritual path was her way of reaching a place in herself where she could “give love” both “there” (in the other dimension) and “here” on Earth.

DISCUSSION

At one of our meetings, Sara asked me if I thought that the direction of her thinking and experience reflected something psychopathological—“like I’m making it all up.” She was reassured to learn that other abductees had been struggling with the same philosophical questions.

Sara has been preoccupied since childhood with philosophical and spiritual questions, and apparently from an early age has exhibited certain paranormal powers, such as the ability at least to create the impression of levitating another child. These concerns and abilities seem to have been intimately connected with reported lifelong

encounters with alien beings, beginning in early childhood with a mentor figure she calls Mengus whom she describes as her first teacher. Sara's abduction experiences, fun and joyous as a child, but always at another level deeply serious, appear directly related to her personal and spiritual growth and her determination to find a calling that will give sufficient scope for her desire to serve the planet as fully as she can. Ultimately, however, Sara believes that at its core the abduction phenomenon emerges from a place beyond the physical plane and cannot be grasped through technology alone.

It appears as if from childhood Sara's encounters were a kind of preparation of consciousness for a life's work she strives to accomplish. This work appears connected to using an expanded notion of ecology or "environment" to bring about a paradigm shift from a consciousness of division and separation to one of openness, creativity, and unconditional love. Sara relates her own evolution in this direction to her encounters and to her role as a kind of exchange student between the nonphysical universe from which the aliens or "light beings" emanate and the earth on which she has committed herself to live.

Sara tried repeatedly in our sessions to put into words the process by which she believes the alien beings can enter our physical universe and she, in turn, can access theirs. One striking image was that of a powerful cellophane membrane that is shattered, creating a slit through which some connection with the other, nonphysical, dimension may become possible. She says that she herself can access this other universe and that she has longed to surrender herself over entirely to the other domain, which she, like so many

abductees, considers to be "Home" and the place of her true parents. But she feels she is constrained from going there altogether by the continuing earthbound challenges of overcoming her own egoistic needs, especially the desire to be loved. Sara, like other abductees, understands that as she transforms her own consciousness and shares this process, she contributes in a subtle way at a wider level. As she put it, "If you truly do what's good for yourself, you're doing what's good for the world."

Sara, like all abductees perhaps, may be participating in some sort of project of species merger and evolution. The purpose of this project may be to create new life-forms that are more spiritually evolved and less aggressive, while retaining the acute sensory possibilities that accompany the dense embodiment of human physical existence. One Part of our lone hypnosis session involved Sara's memories of an encounter with an alien being that she experienced as occurring partly in our physical reality and partly in another, nonphysical, dimension. The most difficult aspect of the various kinds of interdimensional, interspecies connection that Sara described is the different vibrational frequencies by which beings from the other dimensions live and the radical adjustments that must occur for us to connect. Much of the intense bodily distress that Sara and other abductees experience during their relaxation sessions may relate to the bodily releasing of these vibrational incongruities that have been held in check, sometimes throughout the individual's life, by powerful repressing forces that may derive both from the human psyche and possibly from controls imposed by the aliens themselves.

Some of the most intense moments

in Sara's first session occurred when she recalled having been struck or "bumped" painfully when she misperceived a mirror in her hotel room for an open corridor, a "mistake" that might have been engineered by the beings themselves. Immediately following this shocking and painful impact she reported being able to recognize in her room a representative of another, more reptilian appearing, species of alien beings that she felt was possibly connected with her friend Miguel, as she has been linked with the Mengus-like species. The intense physicality of this sort of experience may be employed so that Sara and other human beings are forced to acknowledge the reality of entities and domains that our Western acculturation have taught us in recent centuries cannot, even must not, exist. Yet this kind of ontological, physical shock may, in my view, be an essential initial step in the process of human consciousness evolution that seems to lie at the core of the alien abduction phenomenon.

John E. Mack, M.D., is professor of psychiatry at the Cambridge Hospital, Harvard Medical School. He won the Pulitzer Prize for his biography of T.E. Lawrence, *A Prince of Our Disorder*.

An Astronomer's Personal Statement on UFOs

[*Skeptical Inquirer*, March-April 1997]

Alan Hale

When I am confronted with beliefs about UFOs or other paranormal phenomena—or, for that matter, just about anything—I am guided by three basic principles, to wit:

1) Extraordinary claims require extraordinary evidence. The discovery that there are other intelligent beings in the universe—and, as a corollary, that life and intelligence can and has evolved at locations other than Earth—and that, moreover, these beings are visiting Earth on a semi-regular basis in spacecraft that seem to defy the laws of physics as we now know them, would unquestionably rank as the greatest discovery in the history of science, and most definitely is an extraordinary claim. Therefore, in order for me to accept it, you must produce extraordinary evidence. What might this evidence be? For one thing, the aliens themselves. Not some story where someone says that someone says that someone says that they saw aliens, but the actual physical aliens themselves, where I and other trustworthy and competent scientists and individuals can study and communicate with them. I'd like to examine their spacecraft and learn the physical principles under which it operates. I'd like a ride on that spacecraft. I'd like to see their star charts and see where the aliens come from. I'd like to know the astronomical, physical, chemical, and biological conditions of their home world and solar system, and how they compare with and contrast with ours. If possible, I'd like to visit their home world, and any other worlds that might be within their sphere of

influence. In other words, I want the aliens visible front and center, where there can be no reasonable doubt as to their existence. Stories about "lights" or "things" in the sky do not impress me, especially when such reports come from people who have no idea of the vast array of natural and man-made phenomena that are visible in the sky if one would only take the time to look.

2) The burden of proof is on the positive. If you are making an extraordinary claim, the burden is on you to produce the extraordinary evidence to prove that you are correct; the burden is not on me to prove that you are wrong. Furthermore, you must prove your case by providing the direct and compelling evidence for it; you can't prove it by eliminating a few token explanations and then crying, "Well, what else can it be?"

3) Occam's Razor: If one is confronted with a series of phenomena for which there exists more than one viable explanation, one should choose the simplest explanation which fits all the observed facts. It is an undeniable fact that many people have seen, or at least claimed to see, objects in the sky and on the ground for which they have no explanation. But it is also an undeniable fact that people can make mistakes about their observations. It is an undeniable fact that reports can come from people who are unaware of the various phenomena that are visible in the sky and from people who are not equipped or trained at making reliable scientific observations. It is an undeniable fact that a person's preconceived

notions and expectations can affect his/her observations. It is an undeniable fact that some people will lie and will create hoaxes for any one of various reasons. Taking all these undeniable facts together, the simplest explanation—to me, anyway—for the UFO phenomenon is that every report is either a hoax or is a mistake of some sort. If this explanation is incorrect, then you have to increase the sphere of undeniable facts; and for this, see points 1) and 2) above.

To me, it seems extremely likely that life has started and evolved at other sites throughout the universe, quite possibly in a great number of places. It also seems rather possible that, at some of those sites, evolution has created an intelligent species which has developed technology far in advance of our own and which might be capable of interstellar space flight. Despite the incredible distances between stars, and despite the vast dispersion in evolutionary states that must exist throughout the sphere of races that have achieved some sort of sentience, it is possible—although, to me, extremely unlikely—that one or more of these races has visited Earth within the relatively recent past. Indeed, I would be absolutely ecstatic if any such visits have taken place. No one would be happier than me to meet with and converse with these beings and, I dare say, there are very few people who are better prepared intellectually and emotionally to deal with this prospect if it were to occur. But again, I want the direct evidence for their existence; I want the aliens themselves. I don't want to hear stories about some "thing" that some person somewhere might have seen.

As a lifelong amateur astronomer, as a professional astronomer, as someone

who has read countless science fiction stories and scientific essays, I have devoted my life to unraveling the secrets of the universe and to pushing humanity and humanity's knowledge as far into space as I can. (This is my reason for claiming that there are few people in the world who are better prepared than I am to meet with an alien race; if there is any human being who could meet with alien beings, it would be someone like me.) At the same time, I suspect there is hardly anyone who watches and studies the sky more than I do, and while I have almost continuously observed the sky for most of my lifetime, I have yet to see a single object for which there was not a prosaic explanation. I have seen such diverse phenomena as: fireballs, rocket launches, satellite re-entries, comets, auroras, bright planets, novae, orbiting satellites, ionospheric experiments, high-altitude balloons—all of which have been reported as "UFOs" by uninformed witnesses. If indeed there are alien spacecraft flying around Earth with the frequency with which UFO devotees are claiming, then I must ask how come I have never seen anything remotely resembling such an object, while at the same time I have managed to see all these various other types of phenomena.

In summary, I consider it likely that there are advanced alien races somewhere "out there," and I remain open to the possibility that, unlikely as it may seem, one or more such races could be visiting Earth. But if so, where are they? If they possess the technology capable of traveling interstellar distances, then they are so far ahead of us that there can be no reason for them to be afraid of us. If they wish to hide from us, they could do so easily; if they don't wish to, then they have no need to play games with

us and only show themselves to a few unwitting individuals. Let them reveal themselves to humanity at large, to our scientists, and to me.

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Kidnapped by UFOs?
[Nova, WGBH Television, 1996]
Carl Sagan

NOVA: Speculate for a moment on the parts of human nature, the commonality of believing in abductions, or aliens anyway, and the part of human nature that wants to search for other life forms in the universe.

SAGAN: I personally have been captured by the notion of extraterrestrial life, and especially extraterrestrial intelligence from childhood. It swept me up, and I've been involved in sending space craft to nearby planets to look for life and in the radio search for extraterrestrial intelligence . . .

It would be an absolutely transforming event in human history. But, the stakes are so high on whether it's true or false, that we must demand the more rigorous standards of evidence. Precisely because it's so exciting. That's the circumstance in which our hopes may dominate our skeptical scrutiny of the data. So, we have to be very careful. There have been a few instances in the [past]. We thought we found something, and it always turned out to be explicable [by ordinary means]. . . .

So, a kind of skepticism is routinely applied to the radio search for extraterrestrial intelligence by its most fervent proponents. I do not see [in] the alien abduction situation a similar rigorous application of scientific skepticism by its proponents. Instead, I see enormous acceptance at face value—and leading the witness and all sorts of suggestions. Plus, the contamination by the general culture of this idea.

It seems to me there is a big difference between the two approaches to

extraterrestrial intelligence, although I'm frequently written to [to] say how could I search for extraterrestrial intelligence and disbelieve that we're being visited. I don't see any contradiction at all. It's a wonderful prospect, but requires the most severe and rigorous standards of evidence.

NOVA: Could you please comment on the part of the quality of the evidence that is put forward by these so-called "abduction proponents."

SAGAN: Well, it's almost entirely anecdote. Someone says something happened to them . . . And, people can say anything. The fact that someone says something doesn't mean it's true. Doesn't mean they're lying, but it doesn't mean it's true.

To be taken seriously, you need physical evidence that can be examined at leisure by skeptical scientists: a scraping of the whole ship, and the discovery that it contains isotopic ratios that aren't present on earth, chemical elements form the so-called island of stability, very heavy elements that don't exist on earth. Or material of absolutely bizarre properties of many sorts—electrical conductivity or ductility. There are many things like that that would instantly give serious credence to an account.

But there's no scrapings, no interior photographs, no filched page from the captain's log book. All there are are stories. There are instances of disturbed soil, but I can disturb soil with a shovel. There are instances of people claiming

to flash lights at UFOs and the UFOs flash back. But, pilots of airplanes can also flash back, especially if they think it would be a good joke to play on the UFO enthusiast. So, that does not constitute good evidence. . . .

NOVA: I want you to comment on John Mack.

SAGAN: Many of the principle advocates of UFO abduction seem to want the validation of science without submitting to its rigorous standards of evidence. When John Mack talks about parallel universes or other dimensions, he's using scientific ideas. Those have long been in play in the Physics and Astronomy community. But, there is no evidence for them. He also criticizes the current paradigm that is the skeptical scientific method. But, this isn't validated. We don't believe it just out of prejudice; we believe it because it works.

NOVA: In the absence of hard physical evidence about alien abductions, what does science tell us about the plausibility of what these aliens are supposed to do?

SAGAN: Well, if you look at the advantages in human technology in just the last few hundred years, the Voyager spacecraft on its way to the stars, compared to what we knew in the time of Charlemagne, let's say, that's less than a thousand years. And the progress is simply stunning.

So, if you postulate the existence of highly technical civilizations, thousands, much less millions of years in our future, unless the hypothesis strongly contradicts known laws of physics, I think you have to say it's possible. So, travel at very high speeds between the stars, that's by no means

out of the question. Walking through walls is a little tough for me. I don't see how it could be done. And the basic reading program idea of the alien abduction, the paradigm, they seem strangely backward in biology for all their advances in physics, if you take it seriously. Why are they doing breeding one on one at such a slow pace? Why not steal a few humans, sequence our DNA, look at variations and make whatever genetic engineering changes they want. We almost have the ability to do that. It seems naive in terms of molecular biology.

. . . Precisely because of human fallibility, extraordinary claims require extraordinary evidence. Now, I know that Budd Hopkins responds that extraordinary claims require extraordinary investigations. And I have two kinds of responses to that.

There is a claim that a brontosaurus is tramping through the jungles today in the republic of Congo. Should a massive expedition be mounted with government funds to find it, or it is so implausible as not to be worth serious sustained systematic attention?

And my second point is that to the extent that extraordinary claims require extraordinary investigations, those investigations must be true to the spirit of science. And that means highly skeptical, demanding, rigorous standards of evidence. And it's not a hint of that from alien abduction enthusiasts . . . I think that the alien abduction enthusiasts understand the need for physical evidence. It's the pathway to some degree of respectability. And for 40 years, they've been telling us that real evidence is just around the corner, it's about to be released, it's being studied at this moment—and nothing ever comes of it.

NOVA: Well, now we've run into this alleged alien abduction footage. Have you heard about this? What do you make of the film footage of this alleged animal autopsy?

SAGAN: I haven't myself seen it, but I have talked in some detail with those who have, and I've read an analysis in the *Times* of London. There are several things to notice. One is that the creature in question has a strong resemblance to the alien abduction paradigm, although with six fingers on each hand. It is dissected in a movie taken with lots of blocking of the body and numerous out of focus excursions by the camera. And the humans involved in the autopsy are all dressed in these 1950's radiation suits which are covered head to toe and there's just a little rectangular window to look out, which means that nobody can be identified.

The key piece of evidence that it's not a fake is said to be a leader from the beginning of one of the rolls that was—you know, and they're all encoded, and it was submitted to Kodak, the manufacturer. And Kodak came back and said this was shot in 1947 or some year close to that. And that demonstrates that it's not a fake. But, an important proviso is that Kodak was not given a reel that had the autopsy on it. They were just given a snippet, give to Kodak, and then alleged that it came from the beginning of the autopsy film. So, I think that it's a clever fake, if it's a fake. But, it's certainly not compelling

NOVA: According to Hopkins and others, the main evidence for these stories—in the absence of other evidence—is the similarity of details. In your opinion, what other explanations might account for the similarity and the

details of the stories or hallucinations of these abductees?

SAGAN: The culture contaminates movies, television programs, books, haunting pages of aliens, and television interviews with passionate abductees—all communicate to the widest possible community the alien abduction paradigm. So, it's not as if each abductee has been hermetically sealed from the outside world and has no input about what others are saying. It's all cross contaminated and it has been for decades. I think that's the clearest evidence for it not being good evidence—that many people tell the same story.

NOVA: If you could speak directly to the multitudes of people who believe they're going to bed and perhaps being abducted by aliens, what is it you would like to say to them?

SAGAN: If I were speaking to a group of abductees, I think the first thing I would do would be to tell them that I'm sure to many of them the pain that is expressed is genuine, that they're not just making this up. And it's very important to be compassionate. At the same time, I would stress that hallucinations are a human common place, and not a sign that you are crazy. And that absolutely clear hallucinations have occurred to normal people and it has a compelling feeling of reality, but it's generated in the head.

And that being the case, I would ask them to try to be as objective as they can and see if anything like that might, in fact, explain what they said happened to them. And I'd remind them that children, universally, have terrible nightmares, especially around 7 to 11,

and wake up from sleep absolutely terrified about a monster, a witch, a goblin, a demon, and why shouldn't some of us retain that? I mean, there's no question that those monsters don't exist and they're hiding in the closet or under the bed. That's something generated in the mind. Why should it all go away when we grow up? We should retain some of that. And could not something like that be an explanation?

I would try to simply ask them to adopt the scientific method of multiple working hypothesis. Right now, they have only one hypothesis and their minds are, in many cases, closed to the alternative. I would ask them to do a serious consideration of the alternative, see if it makes sense.

NOVA: Can you tell us how you feel if someone came to you with good evidence that there was, in fact, alien life trying to communicate with us? How would that make you feel as a scientist?

SAGAN: If someone came to me with compelling, bona fide evidence that we're being visited, my reaction would be "Whoopee!" And I'd want to play a role in analyzing the evidence. I would try very hard to bring in the absolute best scientists in the world to study it, depending on what the evidence is like. And I don't doubt that there would be a lot of cooperation from the scientific community. I don't think that scientists are prejudiced to begin with. Prejudice means pre-judging. They're post-judice. After examining the evidence they decide there's nothing to it. There's a big difference between prejudice and post-judice.

The late Carl Sagan, an astronomer at Cornell University and a Pulitzer-Prize-winning author, is best known as the author and host of *Cosmos* and the author of *Contact*. He died in 1996, just before the film version of *Contact* was released.

Kidnapped by UFOs?
[Nova, WGBH Television, 1996]
Philip J. Klass

NOVA: Phil, you've been following the so-called alien abduction movement very closely, perhaps more closely than anyone. Tell us how long you've been studying this, and how much evidence you have found to date, that supports the contentions of people like John Mack and Budd Hopkins?

KLASS: . . . I've been interested in and investigating and following claims of UFO abductions for almost 30 years.

NOVA: In all that time, how much hard evidence have you found?

KLASS: . . . In nearly 30 years of searching, investigating famous cases, I have yet to find one that cannot be explained in down-to-earth prosaic terms. Therefore, if somebody says to me, "I have been abducted by strange looking creatures that do these dreadful things to me," I'm quite confident that they could not possibly be extraterrestrials. Maybe they're mischievous Irish leprechauns; maybe they're the mischievous elves of Santa Claus; maybe they are agents of the devil—now I don't believe in any of these. But I have not spent 30 years investigating whether the leprechauns exist. But I am quite confident that there is no scientific credible evidence to show that we've had alien visitors, let alone that they're doing these dreadful things.

NOVA: Phil, tell us about "The Phil Klass Ten Thousand Dollar Challenge," please?

KLASS: If extraterrestrials are abducting earthlings, as is claimed, then it is time to alert the federal government to defend us, for our government to join with other governments to defend this planet. To encourage those who claim to have been abducted, to report it to the FBI—our national law enforcement agency responsible for kidnapping.

I have gone into my lifetime savings, and offer to pay 10 thousand dollars to any person who believes they've been abducted, to report it to the FBI. Let the FBI investigate it. If the FBI comes back and says, 'We believe this person's story,' I will then go into my life savings and present this check for 10 thousand dollars to that person. And thereby, we will have alerted our federal government.

We can enlist the defenses of this nation to defend our people. And if this is simply a cult where people are needlessly being manipulated, and alien abductions are fantasy, then we can free the public from worrying about a non-existent threat. So I risk my life savings for the well-being of those who claim they have been abducted. If they have, then let's defend and protect them. And if this is simply fantasy, then let's dispel it, let's push it off our plate of things to worry about.

NOVA: Budd Hopkins and alien investigators claim there's a lot of hard physical evidence from these experiences. How compelling do you find that evidence?

KLASS: The evidence, first off, is not

universal and it is not compelling. Budd Hopkins likes to claim that anyone with a scar on their body, that they cannot remember how they got it—maybe in their childhood—that that scar was caused by aliens. Nonsense.

When I give UFO lectures, I ask people in the audience: How many of you have a scar on your body somewhere? And nearly every hand goes up. And then when I ask: Can you remember how you got the scar? Almost no hands go up. Because most of our scars and bodily injuries—particularly the minor ones—occur when we're children, when we are learning how to roller skate and ride bicycles and doing the sort of things where we injure ourselves.

Missing time is supposed to be another mark of abduction. Heavens, I experience missing time every time that I look at my watch and say: My goodness, it's two p.m., I thought it was only around noon. When I go for a drive, I typically experience missing time, because I don't recall passing this bridge or passing that bridge. It is automatic. It is routine.

. . . So—now it is claimed that the aliens leave implants. Fine. And a few such things have been removed from the hands or the bodies of people who allegedly were abducted. Are they micro, tiny electronic, micro electronic devices? No. Nothing unusual about them.

And, in fact, the—Dr. Mack has admitted that he's pretty much given up hope of coming up with a single physical artifact. Now, wait a minute. If aliens are abducting thousands or millions of Americans, and if they're putting implants in many of them. All it would take would be one little micro electronic, or one unusual device that we could say: This could not have been

made on this earth. And that would be the evidence that would convince even me. But so far, they cannot come up with any scientifically credible evidence.

[The interviewer shows Klass a series of photographs.]

NOVA: Budd Hopkins presents this as very good hard physical evidence, of scoop marks, what do you think you're seeing? What's going on there?

KLASS: It's simply a small scar on the leg. I have a small scar on my leg. Many people have scars that they obtained in childhood, skating, riding bike, and they can't remember exactly how they got it.

NOVA: Now, what about this? This looks pretty compelling to me.

KLASS: This is a spiral in the nose and of (Jane Doe). And it was—the x-ray allegedly was taken by a cousin of hers. When Budd Hopkins learned of it and said: Let's try to get that spiral out, lo and behold (Jane Doe) awakened one morning, nose bleed—the spiral was missing. I suspect that it was some sort of a spiral device that she inserted in her own nose.

And this is simply a fungus which is sometimes referred to as fairy rings. Because it typically grows or forms in a circle [on the ground]. Two hundred years ago, when farmers found this, they said—they named it fairy rings, because they assumed that fairies came and danced around the circle at midnight. Today, Budd Hopkins says this must be where a UFO landed. Simply no evidence for that. It's simply a fungus.

NOVA: What do you mean when you say that you cannot prove a negative?

KLASS: Let me give an example. No one has ever proved, to my knowledge, that Santa Claus does not exist. And if one were to fly to the North Pole and say: Well, look, there's no toy factory there. A believer could argue: Well, Santa Clause knew you were coming and moved his operations to the South Pole. So you fly down to the South Pole. No Santa Claus factory, toy factory there. So the believer would say: Oh, he moved it back up to the North Pole. So you simply cannot prove—one cannot prove that ghosts do not exist; one cannot prove that leprechauns too do not exist. One simply cannot prove a negative.

NOVA: What accounts for the alleged great similarity of these stories, if not true experience?

KLASS: It is claimed by the leaders of the cult, that there is great similarity in these people's stories. That is what they say when they're on television. In private, they admit that there are great differences. For example, an analysis of 95 abductees' stories in terms of what were the extraterrestrials wearing? Thirty-seven percent of the people said they were wearing capes or cloaks, like a minister. Ah, I think 28 percent said they were wearing coveralls. Ah, 20-odd percent said they were wearing jumpsuit; and 22 percent said the ET's were naked. Now, is that similar?

David Jacobs has admitted that some of the abductees—in quotation marks—say the creatures had three fingers; some say they had four fingers; some say they had six fingers; some say they have crab-like claws; some say they have web fingers, like a duck and so on. There—this is the party line, that there's great similarity. But in fact, there is great

difference.

Some describe the aliens as being short and bald and large-headed, big eyes and so on. Others describe them as being tall Nordic with long blond hair. Other abductees say that the ET's look like giant praying mantis like giant insects. And still others say that they look like lizards.

If that is similarity, then I suppose that somebody would say that Dolly Parton and I are quite similar. We both have one head, two eyes, one mouth, two ears, four fingers and a thumb on each hand. Similarity is like beauty, is in the eyes of the beholder. So if an extraterrestrial saw me standing alongside Dolly Parton, the extraterrestrial might say that I and Dolly Parton are similar. But I think the average human would say that we're quite different.

NOVA: So just give us a brief summary of what's behind—the prosaic reasons (for) most UFO sightings.

KLASS: In my nearly 30 years of investigating UFO reports, I've found that roughly 97, 98 percent of the people who report seeing UFO's, are fundamentally intelligent honest people who have seen something—usually at night, in darkness—that is unfamiliar, that they cannot explain.

There are dozens of different things that can generate UFO reports: Re-entering satellites, meteor fireballs, hoax hot-air balloons. I was about to give a lecture out at Seattle, Washington, last June, around seven o'clock. And before going into the lecture auditorium, several other people were outside. And one of them said: 'What's that?' And we looked up, and here was an orange-structured shape UFO. And I said: 'I don't know what it is, maybe it's a

balloon reflecting the rays of the setting sun.' And the other one, said: 'No, it's not moving.' Somebody said: 'Maybe it's a kite.' And I said: 'Oh, I've never seen a kite that high.' It seemed like it was up several thousand feet.

And we stood there, and finally, one man said: 'I think I've got binoculars in the car.' He ran to the car, got his binoculars, looked and said: 'It's a kite.' Now, if that man had not been there, had not had binoculars in the car, I would have to say to you that I had seen an object—broad daylight—in Seattle, that I could not identify. It didn't do anything extraordinary. It didn't abduct me, it didn't do sudden maneuvers and so on. So being able to find out what generates a UFO report takes a lot of time, a lot of effort, and a bit of luck. But there are many, many different trigger mechanisms that can generate UFO reports.

NOVA: So what about John Mack?

KLASS: John Mack, being a psychiatrist, puts him—and a doctor—in a special position, in my view. That he has an obligation, if somebody comes and reports strange experiences, as a trained psychiatrist he has an obligation to explore all possible prosaic explanations. He has an obligation to, if he thinks he has discovered a new psychiatric phenomenon, he has an obligation, I think, to conduct scientific investigations. Rigorous—rigorous scientific methodology. And he has not done that, to the best of my knowledge.

NOVA: So, in short, how much evidence is there for UFOs—hard evidence of alien abduction?

KLASS: There simply is no scientifically

credible evidence that we have alien visitors. If there were, there would no longer be a mystery; there would no longer be a controversy . . . so even if the idea of extraterrestrial visitors is a bit far out, we've had more than 50 years to come up with artifacts, with evidence. And nobody has been able to come up with it. And in fact, Betty and Barney Hill, in 1961, who claimed they'd been aboard a flying saucer—or they made the claim in 1966. If they had brought back a quartz watch, wristwatch, in mid '66—could not have made this on this earth—and we would have looked at that and would have said: My goodness, that proves their story is true, they were on board an extraterrestrial craft. That single artifact. 'Cause a quartz watch could not have been made on this earth at any price in 1966. But in all of 50 years, nearly 50 years since UFOs were first reported or discovered or invented, nobody has come up with any credible evidence.

Philip J. Klass is a science writer and experienced UFO investigator. He is the author of *UFOs: The Public Deceived* and *The Real Roswell Crashed Saucer Coverup*.

Alien Implants: The New “Hard Evidence”

[*Skeptical Inquirer*, Sept-Oct 1998, p18]

Joe Nickell

Science fiction author Whitley Strieber continues to promote the notion of extraterrestrial visitations. *His Communion: A True Story* (1987) told of his own close encounter—actually what psychologist Robert A. Baker has diagnosed as “a classic, textbook description of a hypnopompic hallucination” (or “waking dream”) (Baker and Nickell 1992). Now, several money-making books later, Strieber offers *Confirmation: The Hard Evidence of Aliens Among Us*. The evidence is threefold: UFO sightings (yawn), close encounters (been there, done that), and—the hard evidence, quite literally—alien implants!

Implants are the latest rage in UFO circles, and Strieber marshals the diagnostic, radiographic, surgical, photographic, and analytic evidence that supposedly indicates—but admittedly does not prove—extraterrestrials are implanting devices in human beings. To put Strieber’s claims into perspective, we should first look at the development of the implant concept.

The notion of induced mind/body control is pervasive, with paranormal entities typically having some means of monitoring mortals as a prelude to control. Examples range from mythological beings—like Cupid, whose magical arrows infected men’s hearts with love, and Morpheus, who formed sleepers’ dreams—to superstitious belief in angelic guidance, demonic possession, Voodoo hexes, and zombie slaves. Folklore told of abductions to fairyland from which people returned with addled wits or sapped vitality. Popular

literature brought such examples as Bram Stoker’s *Dracula* (1891) and the mesmerizing Svengali in George du Maurier’s *Trilby* (1894). Science fiction helped develop the alien-takeover concept, with such movies as *The Invasion of the Body Snatchers* (1956). A 1967 Star Trek TV episode, “Errand of Mercy,” featured a “mind-sifter,” a device used by the alien Klingons to probe prisoners’ thoughts during interrogations (Okuda and Okuda 1997).

Meanwhile, Kenneth Arnold’s 1947 “flying saucer” report touched off the modern era of UFOs and with it an evolving mythology. By the 1950s “contactees” were claiming to receive messages from the Space People. Then in 1961 came the first widely publicized abduction case, that of Betty and Barney Hill. (Their psychiatrist concluded the couple had shared their dreams rather than having had an actual experience [Klass 1974]).

With the publicizing of the Hill case—notably by John G. Fuller’s *The Interrupted Journey* in 1966 and NBC television’s prime-time movie “The UFO Incident” in 1975—claims of alien abductions and “medical” examinations began to proliferate. So did another phenomenon, the abduction guru: a self-styled alien researcher and often amateur hypnotist who elicits fantasy abduction tales from suitably imaginative individuals (Baker and Nickell 1992, p. 203).

Reports of alien implants may have begun with the alleged abduction of a Massachusetts woman, Betty Andreasson, which supposedly took

place in early 1967. However, the case was not publicized widely until 1979 when Raymond E. Fowler published his book *The Andreasson Affair*. Andreasson, who seems to have had a predisposition to fantasize under hypnosis, claimed the aliens had removed an apparently implanted device, in the form of a spiked ball, by inserting a needle up her nose. Fowler speculated that the BB-size implant could have been “a monitoring device” (Fowler 1979, p. 191). About this time, the concept of “psychotronic technology”—i.e., mind control by means of physical devices—entered UFOlogy (Sachs 1980, pp. 200, 262).

Andreasson’s abduction report was followed by that of a Canadian woman named Dorothy Wallis. She described a similar implant under hypnosis, which seemed to explain an earlier “compulsion” to meet with the aliens (Klass 1989, p. 122). When we appeared together on the Canadian television talk show program *The Shirley Show* (which aired April 15, 1993), I suggested that Mrs. Wallis’s story appeared to imitate Andreasson’s. She countered that her abduction came first, but I observed that she did not come forward until about 1983 and that Andreasson’s much earlier publication gave the latter the stronger claim (Nickell 1995; Wray 1993).

In time, David Jacobs, a historian-turned-abduction-researcher, found the Andreasson/Wallis-type implant to be stereotypical among abductee claimants.

The object is as small as or smaller than a BB, and it is usually smooth, or has small spikes sticking out of it, or has holes in it. The function of this device is unknown: It might be a locator so that the targeted individu-

al can be found and abducted; it might serve as a monitor of hormonal changes; it might facilitate the molecular changes needed for transport and entrance; it might facilitate communication Sometimes nosebleeds occur after this procedure. Both child and adult abductees have seen physicians for nosebleed problems, and have discovered odd holes inside their noses. [Jacobs 1992, pp. 95-96]

Alas, Jacobs relates,

Several abductees have reported that a ball-shaped object either dropped out of their nose or was expelled when they blew their nose. All of these expulsions happened before they knew they had been abducted; in each case they thought they had inexplicably inhaled something and discarded the object or lost it. [p.96]

Actually, one of these items did survive and was thoroughly investigated by the Center for UFO Studies (CUFOS) in the late 1980s. Possessed by a self-claimed abductee, the “implant” had supposedly been stuck up the man’s nostril by his extraterrestrial abductors, but was later dislodged when he caught a cold and blew his nose. CUFOS investigator Don Schmitt accompanied UFO historian Jerome Clark, editor of CUFOS’s journal *International UFO Reporter*, to meet the man in an Illinois restaurant. As Clark relates the incident, after brief exchanges, the man unwrapped the object. “Don and I stared at it incredulously. It was a ball bearing. “Despite the obvious identification, the CUFOS team sought the man’s X-rays, which “showed nothing out of the ordinary,” Clark states. Nevertheless,

CUFOS went on to have the alleged implant scientifically examined, whereupon it proved to be “an utterly ordinary terrestrial artifact” (Clark 1992).

In contrast to Jacobs’s similar-but-generally-unavailable brain/nasal implants are the current devices. The change in the situation is remarkable. Since 1994 alleged implants have been surgically recovered but they’ve become notably diverse: one looks like a shard of glass, another a “triangular” (or possibly “star-shaped”) piece of metal, still another a carbon fiber, and so on. None was located in the brain or nasal cavity, instead being recovered from such extremities as toe, hand, shin, external ear, etc.; some were accompanied by scars while others were not (Linderman 1998; Strieber 1998, pp. 171-247).

Indeed, so varied are the implants, their sites, and other characteristics that they recall a similar craze of yore. During the witch mania of the sixteenth and seventeenth centuries, inquisitors identified certain “witch’s marks” which could be almost anything. As one writer explains, “Papillomas, hemangiomas, blemishes, warts, welts, and common moles were seized upon as authentic witch’s marks, and these marks invariably determined the destiny of the suspect” (Rachleff 1971).

Several disparate implants are described in the bestselling *Abduction: Human Encounters with Aliens* by Harvard psychiatrist John E. Mack. For example, two small nodules that appeared on an abductee’s wrist were surgically removed and analyzed in a pathology laboratory. The lab found the tissue unremarkable (Mack 1994, pp. 27-28). Another implant was supposedly placed at the base of an abductee’s skull. Under hypnosis the man who believes

he has an alternate identity as a humanoid named Orion—described a small, pill-shaped object with protruding wires that, he said, would make it easier for the aliens “to follow me.” Astonishingly, Mack makes no mention of any subsequent attempt to locate and remove the reported implant (Mack 1994, p. 172).

Many of the removals have been performed by “California surgeon” Roger Leir. Actually Dr. Leir is not a physician, but a podiatrist (licensed to do minor surgery on feet). He was accompanied by an unidentified general surgeon (who did not want to be associated with UFO abduction claims). The latter performed all of the above-the-ankle surgeries.

A critic of implant claims, Dr. Virgil Priscu, a department head in an Israeli teaching hospital, observes that a foreign object can enter the body unnoticed, as during a fall, or while running barefoot in sand or grass—even as a splinter from a larger impacting object (Priscu 1998). Such foreign objects may become surrounded by a membrane, like several of the “implants” removed by Dr. Leir et al. (Lindemann 1998); depending on the material, they may also degrade over time, leaving only a small bit of “reaction” tissue in place of the foreign object—“No mystery, no ‘implants,’” says Dr. Priscu. He challenged Dr. Leir’s associate, a hypnotherapist named Derrel Sims, to provide specimens, or at least color slides of them, for analysis at a forensic medical institute, but reported he received no cooperation. Dr. Priscu also noted the lack of the scientific peer-review process in the case of implant claims. Although he is himself an admitted UFO believer, he states, “I also firmly believe that meticulous research

by competent persons is the way to the truth” (Priscu 1998).

In *Confirmation* Whitley Strieber describes several of the implants including one removed from his own external ear by a physician. It turned out to be collagen, the substance from which cartilage is formed (Strieber 1998, p. 228). Strieber admits that the promised “hard evidence” provided by implants is not so hard after all: “I hope this book will not cause a rush to judgement,” he writes, “with skeptics trying to prove that evidence so far retrieved is worthless while UFO believers conclude that it is proof. Both approaches are a waste of time, because the conclusive evidence has not yet been gathered” (Strieber 1998, p. 255).

A similar admission comes from UFOlogist David E. Pritchard, an M.I.T physicist who, with Mack, hosted the 1992 Abduction Study Conference at M.I.T. (Pritchard emphasized that the conference was merely held there; it was not an M.I.T. conference.) Pritchard gave a presentation on a suspected implant, a tiny object with a collagen sheen that he acknowledged might have grown in the alleged abductee. . . . Pritchard conceded:

I don't have anything conclusive. What I have is just what you usually get in this business: it will provide more beliefs for the believers and will be instantly skeptified by the skeptics, and it's not very good evidence if it won't move the lines at all. The point is to convince the jury . . . (Bryan 1995, pp. 50-51)

Of course, it is not skeptics but implant advocates who have the burden of proof a burden they have emphatically failed to meet. Indeed, the implant concept—like the larger alien abduction

phenomenon itself—lacks proof that it has an objective reality. Instead, the evidence indicates it is simply part of an evolving UFO mythology. Its theme of entities exerting influence over humans is one seen in many variants, ranging from ancient mythical lore to modern science fiction and persisting in some form in popular culture. There have always been individuals—fantasizers as well as paranoid schizophrenics who have heard voices that directed or controlled them, voices that are expressions of hopes and fears. Therefore it seems safe to predict that, as the millennium draws near, there will be further claims of “hard evidence” of extraterrestrial visitation. We may also expect that misperceptions and exaggerations of natural phenomena, as well as hoaxes, will abound.

Acknowledgments

I am grateful to Barry Karr and Tim Binga for research assistance, Ranjit Sandhu for manuscript preparation, and Ben Radford for reading the manuscript and making helpful suggestions.

References

- Baker, Robert A., and Joe Nickell 1992. *Missing Pieces: How to Investigate Ghosts, UFOs, Psychics, and Other Mysteries*. Buffalo, N.Y.: Prometheus Books, 227.
- Bryan, C. D. B. 1995. *Close Encounters of the Fourth Kind*. New York: Knopf, 50-51.
- Clark, Jerome. 1992. “Abduction Artifact,” *Fate* April, 19-22.
- Fowler, Raymond E. 1979. *The Andreasson Affair*. Englewood Cliffs, N.J.: Prentice-Hall.
- Jacobs, David. 1992. *Secret Life: First-*

- hand Documented Accounts of UFO Abductions*. New York: Simon & Schuster.
- Klass, Philip J. 1974. *UFOs Explained*, New York: Vintage Books, 299.
- . 1989. *UFO Abductions: A Dangerous Game*. Buffalo, N.Y.: Prometheus Books.
- Linderman, Debra L. 1998. "Surgeon Tells First Results of Implant Analysis." Excerpted from CNI News vol. 15.8 (February 26, 1996).
- Mack, John E. 1994. *Abduction: Human Encounters with Aliens*. New York: Ballantine.
- Nickell, Joe. 1995. *Entities: Angels, Spirits, Demons, and Other Alien Beings*. Amherst, N.Y.: Prometheus Books, 211.
- Okuda, Michael, and Denise Okuda. 1997. *The Star Trek Encyclopedia*. New York: Pocket Books, 141, 303.
- Priscu, Virgil. 1998. "Rebuttal to Derrell Sims the Implant Guy!" Internet posting to the UFO Folklore Center.
- Rachleff, Owen S. 1971 *The Occult Conceit*. Chicago: Cowles Book Co., 108.
- Sachs, Margaret. 1980. *The UFO Encyclopedia*. New York: Perigee Books.
- Strieber, Whitley. 1985. *Communion: A True Story*. New York: William Morrow.
- . 1998. *Confirmation: The Hard Evidence of Aliens Among Us*. New York: St. Martin's press.
- Wray, Shannon. 1993. Notes of interview with Dorothy Wallis for *The Shirley Show*, n.d. (faxed to Joe Nickell March 31; show taped April 1).

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Dr. John Mack Could Use the Help

[*The Boston Globe*, April 21, 1994]

Joseph P. Kahn

The big Mack attack has just begun. And no one has heard from the little people yet.

The aliens, that is.

Abduction, the much-publicized book by Harvard psychiatrist John Mack about extraterrestrial visitations, had barely touched down in bookstores this week before it came under heavy groundfire from critics of both Mack's methodology and his UFO-friendly mindset.

Time magazine fired the loudest shot in a report that one "experiencer" on whom Mack practiced hypnotic regression therapy, Donna Bassett, says she faked tales of her encounters with space aliens—and that Mack not only believed the stories but also failed to obtain consent forms from his research subjects. Mack has seen or treated more than 100 abductees since 1991, most of whom say they are victims of sexual or genetic experimentation by their captors. "Abduction" contains detailed case studies on 13 of those patients.

Bassett also charges Mack with billing insurance companies improperly for therapy sessions that were actually research. Furthermore, the *Time* story, written by veteran investigative reporter James Willwerth, suggests that Mack's work is riddled with scientific improprieties, including supplying patients with accounts of other abduction experiences before hypnotizing them.

For Mack, a tenured Harvard professor and Pulitzer Prize-winning biographer, these attacks on his credibility have hit a raw nerve. Mack is in the launch phase of an all-out publicity

blitzkrieg ("Oprah," "48 Hours," *People*, Larry King) that includes network TV interviews with several of his research subjects. These people are clearly emotionally and psychologically vulnerable, whatever the underlying cause might be. And so, to a degree, is Mack, whose credentials far outweigh those of any previous investigator publicly aligned with the abduction-recovery movement.

Yes, Mack says, he anticipated the mainstream media would have difficulty swallowing his conclusion that these abduction reports are reality-based. Skeptical criticism of his work is to be expected, he says, even welcomed.

Moreover, Mack harbors few illusions that anyone hung up on Western scientific rationalism will cede much ground to him in this debate. Mack himself calls abductions a "great mystery" that defy proof, one way or another. Or logic. Only reluctantly did he come to believe in them himself, Mack says.

But this latest flurry hits below the professional belt, the clinician contends.

"Why do they pick the most destructive part of the story and focus on that?" Mack asks. "One or two disaffected persons come forward. Why don't they look into her background? It surprises me they *Time* would go so far to discredit me when they claim to be seriously interested in the phenomenon."

Mack insists he is bound by doctor-patient confidentiality not to discuss in any detail his work with Bassett, a researcher now living in North

Carolina. He will say, however, that he dealt with Bassett “in good faith” and that if he gave her any UFO-related articles to read, it was only to satisfy her own curiosity about the abduction experience.

“People can be angry for all sorts of reasons,” he maintains. “I doubt the writer checked out her background.”

Mack also says that while he did bill third-party insurers for some therapy sessions, he kept none of the money for himself. The total amount, he says, which he estimates to be between \$2,000 and \$3,000, went to a now-defunct support group known as Group for Research and Aid to Last year, Mack founded The Program for Extraordinary Experience Research (PEER) to oversee his abduction research. PEER in turn is overseen by, and funded through, the Center for Psychology and Social Change, a nonprofit organization co-founded by Mack in 1983 to facilitate scholarly research into topics such as human psychology and the nuclear arms race.

According to Karen Wesolowski of PEER, billing and consent procedures changed once Mack stopped treating incoming abductees as private psychiatric patients. At that point, she says, PEER mailed out consent forms to all of Mack’s abductee patients, current and former. Most, though not all, signed the forms, she maintains. Meanwhile, Mack stopped billing insurers in order to be “absolutely scrupulous” about the clinical division between research and therapy.

As for his methodology, Mack calls it “very legitimate” to raise questions about how he has gone about recovering memories of alien encounters. In “Helping Abductees,” a 1992 article in the *International UFO Reporter*, Mack

noted that he “had little training in hypnosis as a psychiatric resident and had virtually to teach myself.” He credits pioneering investigator Budd Hopkins with helping him refine his techniques. Hopkins, a visual artist, has written two popular books on the abduction phenomenon, *Missing Time* and *Intruders*.

On numerous occasions, Mack continues, sitting in his cramped office located behind Cambridge Hospital, other therapists and researchers have been present to observe—and validate—the relived trauma that subjects experience under hypnosis. Tapes of these sessions leave little doubt that their emotional suffering is real, not invented.

“It’s conceivable somebody could dupe me, of course,” Mack says, referring to Bassett, “but I’ve had a lot of clinical experience. And this *Time* article says I’m damaging people. Where is the evidence for that?”

Furthermore, he asks, “How could I possibly keep everybody happy? There are bound to be one or two disaffected people. That’s what I object to, the focus on them. It ignores the dozens and dozens of people I’ve helped.”

Mary (who asks that her last name not be used) is one of those people. A data management specialist in Rhode Island—and an experiencer who claims her first abduction took place when she was 7, and her last encounter just 10 days ago—she met Mack in 1992 after reading about his abductee work in the *Boston Globe*. She says she is “furious” and “saddened” at the way *Time* and Bassett have gone after Mack.

“The piece tries to slant opinion that John is leading people on in hypnotic regression,” Mary says. “That’s a sad misrepresentation of his research. I’ve

had quite a few conscious experiences that I've had no trouble remembering."

To attack Mack, she says, is to make it more difficult and more painful for other abductees to come forward. No one has been coerced into doing so, she says. And no one she knows was predisposed to believe in the alien explanation.

Has Mack lived up to his therapeutic duties? "Definitely," Mary says. "But it's unfair to think Dr. Mack can be all things to all people. In my opinion it is Bassett's ethics that should be questioned, not his."

Time reporter Willwerth is more skeptical. He dismisses Mack's complaints about lack of background checking as nonsense. A specialist in health-research abuse, Willwerth says he thoroughly reviewed both Bassett's charges and the supporting evidence, while *Time's* lawyers in turn thoroughly vetted his piece. "The bottom line is, there was no informed consent going on," says the writer. "We checked this out 13 ways from Sunday."

Bassett first met Mack in September 1992 and underwent three "regression" sessions with him over the next four months. She says reading other articles by Mack about abductions "told me exactly what he was looking for" when she pretended to be hypnotized. She also maintains that real harm may have been done to at least some of his research subjects, who have been stripped of other psychological support systems.

"This isn't about UFOs," Bassett insists, speaking by phone from her home in North Carolina. "This is a way to hide human experimentation that's been undertaken for a personal political agenda."

That agenda, contends Bassett, is

reflected in the message Mack claims to have distilled from patients' encounters with aliens: that the planet is threatened by ecological destruction, that earthlings must wake up before the destruction goes too far and that human-alien cross-breeding may be the only way to save a doomed race. Mack would hardly quibble with that assessment of the message, only with how the messenger—himself—is being treated by opponents like Bassett.

"Contrary to what some critics say," says Mack, "I was surprised by the message of earth's destruction."

Mack does admit, though, that colleagues warned him long ago that he would open himself up to professional criticism—if not outright ridicule—by pursuing abduction research. Still, he insists, he has no regrets.

"I have this innocent confidence that if you do your work in a comprehensive and objective way," he says, "it stands on its own."

"I'm not worried the attacks will silence me. What I worry about is giving support to the wonderful abductees and others who are helping this process. I don't want to disappoint them."

Hypnosis and Memory: A Hazardous Connection

[Journal of Mental Health Counseling October 1997]

Joseph Barber

It has been claimed that repressed memories can be recovered by hypnotic suggestion and other interventions. This claim has great relevance to mental health counselors faced with distressed clients who attribute their symptomatology to repressed early life trauma. However, the scientific evidence does not support the claim. This paper evaluates this issue and suggests ways clinicians might productively confront the attendant clinical dilemmas.

Recently, the mental health profession has become polarized by views about the nature of memory in general and of repressed memory in particular. This polarization is characterized by two disparate, often stridently expressed views: (1) Repressed memory is a myth and no method can reliably uncover forgotten memories. (2) Repressed memories can be recovered and the apparently recovered memories are essentially reliable.

I will review the state of knowledge concerning the recovery of memories with the use of hypnotic methods and illustrate the clinical significance of the problem of attempting to recover memories. Finally, I will offer suggestions for the consideration of clinicians who encounter clients who believe that they are troubled by repressed traumatic memories and also believe that their troubles can be relieved by hypnotically uncovering the memories.

Let me begin with my own view of the problem: Without independent verification, no one—not even the most talented clinician—has a reliable means for determining the accuracy of a client's

report. Even the use of sodium amytal—the so-called truth serum—does not yield reliable reports. Further, if, despite this evidence, we nonetheless believe in the reliability of an otherwise unverified report, we risk harm to our client by facilitating a misguided search for a mythic truth.

THE HYPNOTIC EXPERIENCE

Hypnosis is a condition in which a person's imagination creates vivid reality from suggestions offered either by someone else, by suggestions inferred from ambient social cues, or by suggestions initiated by the person himself or herself. In this circumstance, the person is unusually able to alter perception, memory and physiological processes not ordinarily susceptible to conscious control.

In this condition, reality fades into the background of awareness, replaced in the foreground by a believed-in blend of fantasy and reality. There is greater receptivity to the clinician's point of view and greater dissociation of the observing ego from the experiencing ego. In general, there is enhanced awareness of unconscious mental processes. Transference is also accelerated and intensified and becomes what Shot described as archaic involvement. All of these characteristics render the hypnotized client unusually suggestible to his or her own imagination and to that of the clinician.

Three of these characteristics are especially pertinent to the issue of recovering forgotten memory: 1) the

capacity to create vivid reality from suggestions, 2) the capacity to alter memory, and 3) the tendency to regress to an archaic relationship.

The capacity to systematically create amnesia through hypnotic methods has led to the investigation of the possibility of recalling material that is not ordinarily available to the memory process. Although there are intriguing anecdotal accounts of hypnotic methods used to retrieve forgotten information, such accounts seem exceptional and are hard to interpret in the context of our contemporary understanding of memory processes.

Perhaps the first experimental attempt to examine the potential for hypnotically facilitated recall was made in 1932 by Stalnaker and Riddle. They found that hypnotized subjects' recall of literary selections learned in a prior year could be improved by the use of hypnosis. This finding seems to support the possibility of hypnotically enhanced memory. However, upon further reflection, this improvement in recall was discovered to be confounded by substantial inaccuracies. By reference to Stalnaker and Riddle's original lists, it was possible to determine that the apparent improvement in memory was unreliable; therefore, this report did not actually confirm the lore that hypnotic methods can improve memory.

Dywan and Bowers also came to the conclusion that hypnotic methods do not reliably improve memory. They found that memory seemed to be credibly enhanced, but that it was actually distorted by the hypnotic experience. Further, Laurence and Perry also demonstrated that the mere subtle cueing of hypnotized subjects could produce profoundly believed-in but totally false memory. With one modest ex-

ception, the scientific literature is consistent in its failure to find evidence supporting the claim that hypnotic suggestion can reliably improve recall. A particularly telling series of investigations of hypnotic age regression yielded unequivocal evidence of the confounding of subjects' memories and of the resulting unreliability of their reports. It may be that hypnotic methods potentially facilitate recall, but they do so at the cost of also potentiating imaginal processes.

Of interest to clinicians is the evidence that the highly malleable nature of memory is not limited to laboratory research. M. Orne, Whitehouse, Dinges, and E. Orne reported a number of forensic cases in which hypnotized witnesses testified to remembering seeing events that they could not have seen, as well as to a variety of other demonstrably false recollections.

It is worth emphasizing that it is not only the distortion of memory which is at issue, but also the utter sincerity with which people believe their distorted memories to be accurate. It is in this context that the other two characteristics of the hypnotic experience are pertinent: Suggestibility and the regressed hypnotic relationship. These features interact to foster the client's sense that the experience is real and not imaginary; more, they support his or her confidence that the apparent memory is an accurate and integral part of his or her life history. Because the hypnotic experience tends to foster a sense of deep safety and trust, the client is ineluctably led to the belief that the thoughts and feelings and images that the treatment evokes are actually remnants of historical memory.

Because such sincerity in the reporting of their memories powerfully enhances the credibility of these

completely mistaken witnesses, the application of hypnotic methods in forensic circumstances is a very hazardous undertaking (and, in most circumstances, is now prohibited by law). As we shall see, the clinical application of hypnotic methods for the recovery of memory is similarly hazardous.

The crucial importance of independent verification has become clarified in recent years in the forensic context and the courts have taken these facts into appropriate consideration. However, although this same capacity for memory distortion operates in the clinical context, clinicians often seem unaware of the problem.

THE CLINICAL PROBLEM

When a hypnotized client reports an experience, it is characteristically a compelling report and the clinician commonly believes the client's report to be historically true—as opposed to psychologically true—because of the added credibility of the hypnotic experience. As the literature amply demonstrates, however, clinicians are highly susceptible to misinterpreting a hypnotized client's reports.

It is not an exaggeration to suggest that any clinical intervention involving the imagination—including, but not confined to hypnotic intervention—increases the likelihood that the client's memory will be distorted. That is, it is likely that the client will have images, feelings, thoughts, perceptions, and other experiences that he or she believes to be memories—but that are at least partly, and perhaps mostly, the result of imagination and not memory.

Garry et al. demonstrated that merely imagining an event can lead to subsequent belief that the event actually

occurred. So, even if we are exceedingly careful in our attempt to avoid contaminating the client's memory with our own beliefs and expectations, it is inevitable that the experience of discussing events in the context of heightened imagination will alter the client's memory, however subtly. Moreover, it is likely that the client honestly will believe and then confidently report the distorted memory to be accurate. According to Loftus:

False memories are constructed by combining actual memories with the content of suggestions received from others. During the process, individuals may forget the source of the information. This is a classic example of source confusion, in which the content and the source become dissociated.

Consequently, we must be willing to acknowledge that a hypnotized client's report—however compelling—may be completely accurate, partially accurate and partly imagined, or completely imagined.

However, despite the abundance of evidence to the contrary, many clinicians believe they can discern when a client is telling the truth. Our confidence in our ability to discriminate truth from fiction rests largely with our appreciation of sincerity. That is, we tend to believe the client's report if it is plausible, internally consistent, congruent with accompanying affect, or some combination of the above. Our tenacious confidence in this belief is understandable: The ambiguity of not knowing if someone is telling the truth is quite uncomfortable. Unfortunately, however, there is no evidence to support our confidence in these criteria.

Unless we have independent verification, we cannot know if someone's report is accurate or not. Moreover, the issue is not whether the client believes in the truth of what is said—we assume this is so—but whether the events are accurately reported. However, even though the client is being honest and is conscientiously attempting to be truthful and accurate in reporting, he or she cannot correct for the constant activity of the human imagination, hypnotized or not, which leads to the vagaries of individual perception and, inevitably, to distortion of memory.

In this context, then, let us examine further the third hypnotic experience creation of believed-in reality from imagination. A dream is a universal example of a fully believable yet completely imagined experience. Similarly, the hypnotic experience offers the occasion for an individual to experience imagery, laden with affect, and surely also laden with psychological import. Such imagery, because of its meaning and affect, provides the opportunity for an important clinical intervention. But psychological meaningfulness does not equate with reality. That is, even if the imagery yields clinically meaningful material, the material may not be factually accurate.

Just as we generally accept a dream as a metaphor—not as a journalistic account of the client's life—so, too, any client's report, hypnotically-induced or otherwise, may be psychologically meaningful, even if it may not be an accurate account of an event.

For example, a female client may present with symptoms of depression and interpersonal difficulties, including avoidance of sexual contact. These symptoms are consistent with (though

not unique to) a history of sexual abuse. Suppose that the clinical intervention includes either ordinary suggestion or hypnotic suggestion—initially, perhaps, merely to promote a more comfortable, trusting relationship with the counselor. Or perhaps this method is used to facilitate the development of primary process material if she seems unable to generate such material on his or her own. Suppose, further, she now begins to report images that increasingly seem to the counselor to indicate that the client has experienced physical or sexual trauma. As the client reports these images, she is also likely to experience increasingly disturbed affect in response. As the we witness this affect-laden report, we naturally find it quite compelling.

How, though, does the competent counselor interpret this experience? Is there independent reason to believe that these images, thoughts and feelings are an historically accurate reflection of events in the client's life? Symptoms of depression and avoidance of intimacy are often associated with abusive histories. But there are other etiologies [causes] for such symptoms, as well, and these reports may or may not represent memories of actual trauma. Faced with a client's emotional drama, however, the counselor may feel confirmed in his or her hypothesis of abuse.

Frankel's review of reports of childhood events in the multiple personality literature clearly suggests the rarity with which a client's self-reported history, including claim of abuse, is ever independently documented. While this is usually inevitable given the practical and clinical difficulties in attempting to document an adult's childhood history, the fact should also give us pause, for two reasons:

1. Troubled people are seeking a solution to their unhappiness when they seek counseling. Even if they had no prior memory of childhood abuse, nor reason to suspect abuse, the current widespread cultural emphasis on childhood abuse as a primary etiology of adult unhappiness provokes at least the question in many people's minds about their own childhood histories.

In addition to the ubiquity of childhood abuse stories in the media, a clinical specialty has developed to assess and treat this problem. Certain books in the popular press, despite the absence of supporting evidence, assert that childhood abuse is the primary source of most neurotic symptomatology. It is only natural, then, that some naive readers will be encouraged by such assertions to search for memories of such abuse in order to explain their problems.

2. Although anyone is potentially susceptible to suggestion from such an affect-charged cultural environment, some people's suggestibility is unusually high. Clients with a diagnosis of Dissociative Identity Disorder, for example, tend also to be remarkably responsive to suggestion; but many other clients whose disorders are far less severe are similarly suggestible. Especially within the current cultural focus on trauma and abuse, it is quite possible for an unhappy person, especially if he or she has boundary confusion, pondering the source of his or her unhappiness, to unconsciously generate images, feelings, and thoughts which he or she then begins to interpret as recall of actual experiences—even though the source for the images, feelings and thoughts is imagination (or the counselor's subtle cueing), not memory. Yet, he or she (nor the

counselor) may not consider the possibility that these experiences are primarily the product of the need to make sense of his or her life.

Rather, he or she is supported by a variety of sources in the otherwise groundless interpretation that the experiences are de-repressed memories of traumatic events in childhood. If the counselor is also a source for this interpretation, then a fully realized and totally erroneous belief about a traumatic experience is likely to develop. Ganaway reminds us that part of our clinical responsibility to such a client is to offer psychological understanding and support, while, simultaneously, not actually adopting nor promoting the client's point of view.

When such apparent memory recovery occurs through the use of either hypnotic or other methods, the pressure on the clinician to interpret the experience as historical fact rather than psychological coping can become very compelling. This is especially likely to occur when the clinician already believes that the client was traumatized—but this is also the case when more cautious clinicians are faced with such a dramatic and credible narration of events.

WHY WOULD ANYONE MAKE THIS UP?

It is sometimes asserted that no one would intentionally create the horrific histories that develop within claims of abuse. Yet, a substantial literature explains why an individual might do so. The unsettling fact is that all of us—clients and clinicians—make up our memories, in the sense that all of our memories are constructed, all of the time. Sometimes what we construct is a

generally accurate representation of events and sometimes it is not. Aside from this, of course, is the more complex issue of any client's motive for confabulation, which may be considerable.

A substantial body of research effectively demonstrates that the so-called videotape recorder model of memory is an inaccurate one. This appealingly simple model has been replaced by one that may be less appealing, since it does not substantiate our confidence in the reliable recovery of forgotten memories. By contrast, the evidence has led to a contemporary model that portrays memory as a highly complex, constantly evolving interactive process, always susceptible to continuing modification by the individual's psychological needs. Unlike the videotape recorder model, this empirically-based, dynamic model demands the need for caution in the way a clinician interprets a client's reports of memory.

In rare cases, it may be that there is accurate recall of memories that have been forgotten for years; however, the literature yields no evidence to credit the contemporary widespread reports of sudden recovery of long-repressed memories of early trauma. Yet, without factual verification of these reports, what actual evidence do we have to determine their accuracy?

Often, clinicians interpret the processing, the working-through of such so-called recovered memories in the course of counseling—and the subsequent resolution of symptoms—as proof that the reports were accurate. While this criterion has appeal and seems to be supported by common sense, closer examination suggests its inadequacy. Nash describes a client who presented

with anxiety symptoms which he attributed to his abduction by extraterrestrials. In the course of treatment, the anxiety symptoms were relieved, but the client still believed that he was once abducted by aliens. Clearly, we cannot interpret this symptomatic relief as evidence for abduction by aliens.

The successful use of imagination is ubiquitous to all psychological interventions, even among the most basic behavioral methods. If the attribution, however imaginary, of the apparent underlying cause of a symptom has personal meaning to the client, would we not predict the therapeutic usefulness of this attribution, accurate or not? Nash's case demonstrates the inherent problem with interpreting such claims as accurate historical reports, even if clinically relevant: The one may be independent of the other.

In another case involving the treatment of dyssomnia, the client reported the recall of bizarre, traumatic incestuous abuse throughout his childhood. (Again, it is often the drama of the client's story which is so compelling to us, not necessarily its inherent plausibility.) After several treatments, his presenting symptoms began to abate. However, there was no way to verify the reality of the traumatic events he described. Perhaps they were largely, if not entirely, the product of his imagination. Or perhaps they were largely, even entirely, true. We cannot know.

Fortunately, in this case, it was not necessary to know. The ultimate resolution of the symptoms was sufficiently satisfying. This case occurred in the late 1970s. In the current litigious climate, however, such a client might well seek legal recourse against the apparent perpetrator of these childhood traumas. And what defense could be

offered, after so many years? The ensuing conflict becomes simply an issue of the client's word against the accused—powerfully enhanced by the credibility of a counselor's testimony of the reliability of the client's claim.

As a consequence of society's current emphasis on believing victims' claims of abuse and punishing the perpetrators of abuse, there is a growing vulnerability to creating victims of the falsely accused as well as the resulting development of a backlash against victims. A poignant example is described by Wright, who recounted the dramatic story of two adolescent daughters claiming to be the victims of satanic ritual abuse. Despite the lack of any evidence that a crime had actually occurred, their father was subsequently convicted and imprisoned for abuse.

One of the challenges of a just society is the maintenance of the balance between both prosecuting and defending the criminally accused. A crucial element in that balance is the proper understanding of the fallibility of memory. As counselors whose work affects the lives of our clients and their families, we have a responsibility to remain aware of these issues. We cannot afford the intuitively appealing but scientifically groundless beliefs many of us have held for so long about the nature of memory. Wright's account is eloquent testimony to the grave consequences of these beliefs for individuals and families.

Moreover, Ofshe's instructive description of this same case suggests that the failure on the part of clinicians to appreciate the defendant's unusually high suggestibility was a contributing factor in the elaborate, yet apparently wholly fictitious creation of this man as a perpetrator of ritual abuse.

We all know the seemingly limitless human capacity for harming one another. There is ample evidence of the grotesque abuse that is done, usually by men, to women and to children. But the fact that physical and sexual abuse of children is a significant social problem does not indicate that every report of abuse is a valid one. Our regard for women and children and our recognition of abuse need not blunt our awareness of the unreliability of memory. Our misguided reliance on the archaic videotape recorder model of memory and our uninformed belief in hypnosis as a method for discovering the truth create a further permutation of the problem of abuse. A credulous acceptance of any and all claims of abuse has serious and harmful consequences.

RECOMMENDATIONS

How should a clinician respond when a client reports dreams, images or memories that might suggest a history of traumatic abuse?

1. Do no harm: Obtain appropriate consultation. We must all remain aware of the possibility of our countertransference reactions to clients. For a simple example, if a clinician has unresolved feelings about abuse, it is natural that these feelings will exert pressure, perhaps unwittingly, to interpret the client's symptoms or reports in the context of abuse, rather than to remain open to other interpretations.

2. When thinking about your clients' memories or fantasies, keep your hypotheses open to review. We need to remember that the context of counseling itself often inclines us toward searching for a history of trauma as the etiology of

contemporary troubles. Is such a potentially hazardous search necessary for successful treatment? The possibility of confirmatory bias—the inclination to search only for reasons to confirm our personal hypotheses (and not, also, to disconfirm them)—makes us vulnerable to misinterpretations.

3. We must recognize the possibility of memory contamination as an inadvertent but likely complication of counseling. This possibility is greater when hypnotic or other suggestive methods are used, but it exists in every case. We must be aware of and contain our own personal beliefs about a client's history and keep those beliefs from influencing the therapeutic environment. For example, leading questions, comments about abuse, and the intensity of our response to clients' reports can all contribute to the unwitting creation of a client's apparent memory, including the apparent memory of traumatic abuse.

4. Finally, the pursuit of our own psychological growth is essential to sustaining our awareness of unconscious attitudes or feelings and to finding a means to their successful resolution. Our own counseling or psychotherapy is critical to our competent conduct as clinicians.

It can be challenging for us to remain intellectually and emotionally open, without resolution, to the question of the veracity of a client's report, for example, of abuse. However, unless we can independently evaluate a client's report, we must be willing to remain open to all possibilities. It may be that the client was abused; it also may be that the client was not abused. It may be that

the client's sense of having been abused is an accurate reflection of how the client felt as a child—not physically or sexually abused, necessarily, but not well cared-for, either. It is likely that there is no way to know. We may need to help the client accept this openness to interpretation, as well.

While the evidence clearly and consistently suggests that there are no methods, hypnotic or otherwise, that can reliably be used to recover forgotten memories, there is no evidence that hypnotic methods should be generally abandoned in the therapeutic enterprise. The current debate about memory recovery has unfortunately distorted the various appropriate applications of hypnotic methods in the clinical setting.

It can be exceedingly difficult to convey both an empathic alliance with the client and an openness to various interpretations of the client's experiences. Fortunately, it is not necessary for us to develop a credulous attitude about a client's reports in order to offer effective treatment.

As clinicians, we need to be vigilant and cautious in our treatment of clients where there is a possibility of traumatic abuse. I have tried to convey my own anxiety, concern, and empathy about the difficulty of contending with these issues without exaggerating the gravity of the problem. Perhaps a certain amount of wariness about our capacity to deal with these cases supports a salutary degree of good clinical judgment.

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Creating False Memories

[*Scientific American*, September 1, 1997]

Elizabeth F. Loftus

In 1986 Nadean Cool, a nurse's aide in Wisconsin, sought therapy from a psychiatrist to help her cope with her reaction to a traumatic event experienced by her daughter. During therapy, the psychiatrist used hypnosis and other suggestive techniques to dig out buried memories of abuse that Cool herself had allegedly experienced. In the process, Cool became convinced that she had repressed memories of having been in a satanic cult, of eating babies, of being raped, of having sex with animals and of being forced to watch the murder of her eight-year-old friend. She came to believe that she had more than 120 personalities—children, adults, angels and even a duck—all because, Cool was told, she had experienced severe childhood sexual and physical abuse. The psychiatrist also performed exorcisms on her, one of which lasted for five hours and included the sprinkling of holy water and screams for Satan to leave Cool's body.

When Cool finally realized that false memories had been planted, she sued the psychiatrist for malpractice. In March 1997, after five weeks of trial, her case was settled out of court for \$2.4 million.

Nadean Cool is not the only patient to develop false memories as a result of questionable therapy. In Missouri in 1992 a church counselor helped Beth Rutherford to remember during therapy that her father, a clergyman, had regularly raped her between the ages of seven and 14 and that her mother sometimes helped him by holding her down. Under her therapist's guidance,

Rutherford developed memories of her father twice impregnating her and forcing her to abort the fetus herself with a coat hanger. The father had to resign from his post as a clergyman when the allegations were made public. Later medical examination of the daughter revealed, however, that she was still a virgin at age 22 and had never been pregnant. The daughter sued the therapist and received a \$1-million settlement in 1996.

About a year earlier two juries returned verdicts against a Minnesota psychiatrist accused of planting false memories by former patients Yvonne Hamanne and Elizabeth Carlson, who under hypnosis and sodium amytal, and after being fed misinformation about the workings of memory, had come to remember horrific abuse by family members. The juries awarded Hamanne \$2.67 million and Carlson \$2.5 million for their ordeals.

In all four cases, the women developed memories about childhood abuse in therapy and then later denied their authenticity. How can we determine if memories of childhood abuse are true or false? Without corroboration, it is very difficult to differentiate between false memories and true ones. Also, in these cases, some memories were contrary to physical evidence, such as explicit and detailed recollections of rape and abortion when medical examination confirmed virginity. How is it possible for people to acquire elaborate and confident false memories? A growing number of investigations demonstrate that under the right

circumstances false memories can be instilled rather easily in some people.

My own research into memory distortion goes back to the early 1970s, when I began studies of the “misinformation effect.” These studies show that when people who witness an event are later exposed to new and misleading information about it, their recollections often become distorted. In one example, participants viewed a simulated automobile accident at an intersection with a stop sign. After the viewing, half the participants received a suggestion that the traffic sign was a yield sign. When asked later what traffic sign they remembered seeing at the intersection, those who had been given the suggestion tended to claim that they had seen a yield sign. Those who had not received the phony information were much more accurate in their recollection of the traffic sign.

My students and I have now conducted more than 200 experiments involving over 20,000 individuals that document how exposure to misinformation induces memory distortion. In these studies, people “recalled” a conspicuous barn in a bucolic scene that contained no buildings at all, broken glass and tape recorders that were not in the scenes they viewed, a white instead of a blue vehicle in a crime scene, and Minnie Mouse when they actually saw Mickey Mouse. Taken together, these studies show that misinformation can change an individual’s recollection in predictable and sometimes very powerful ways.

Misinformation has the potential for invading our memories when we talk to other people, when we are suggestively interrogated or when we read or view media coverage about some event that we may have e-

xperienced ourselves. After more than two decades of exploring the power of misinformation, researchers have learned a great deal about the conditions that make people susceptible to memory modification. Memories are more easily modified, for instance, when the passage of time allows the original memory to fade.

False Childhood Memories

It is one thing to change a detail or two in an otherwise intact memory but quite another to plant a false memory of an event that never happened. To study false memory, my students and I first had to find a way to plant a pseudo-memory that would not cause our subjects undue emotional stress, either in the process of creating the false memory or when we revealed that they had been intentionally deceived. Yet we wanted to try to plant a memory that would be at least mildly traumatic, had the experience actually happened.

My research associate, Jacqueline E. Pickrell, and I settled on trying to plant a specific memory of being lost in a shopping mall or large department store at about the age of five. Here’s how we did it. We asked our subjects, 24 individuals ranging in age from 18 to 53, to try to remember childhood events that had been recounted to us by a parent, an older sibling or another close relative. We prepared a booklet for each participant containing one-paragraph stories about three events that had actually happened to him or her and one that had not. We constructed the false event using information about a plausible shopping trip provided by a relative, who also verified that the participant had not in fact been lost at about the age of five. The lost-in-the-

mall scenario included the following elements: lost for an extended period, crying, aid and comfort by an elderly woman and, finally, reunion with the family.

After reading each story in the booklet, the participants wrote what they remembered about the event. If they did not remember it, they were instructed to write, "I do not remember this." In two follow-up interviews, we told the participants that we were interested in examining how much detail they could remember and how their memories compared with those of their relative. The event paragraphs were not read to them verbatim, but rather parts were provided as retrieval cues. The participants recalled something about 49 of the 72 true events (68 percent) immediately after the initial reading of the booklet and also in each of the two follow-up interviews. After reading the booklet, seven of the 24 participants (29 percent) remembered either partially or fully the false event constructed for them, and in the two follow-up interviews six participants (25 percent) continued to claim that they remembered the fictitious event. Statistically, there were some differences between the true memories and the false ones: participants used more words to describe the true memories, and they rated the true memories as being somewhat more clear. But if an onlooker were to observe many of our participants describe an event, it would be difficult indeed to tell whether the account was of a true or a false memory.

Of course, being lost, however frightening, is not the same as being abused. But the lost-in-the-mall study is not about real experiences of being lost; it is about planting false memories of being lost. The paradigm shows a way of

instilling false memories and takes a step toward allowing us to understand how this might happen in real-world settings. Moreover, the study provides evidence that people can be led to remember their past in different ways, and they can even be coaxed into "remembering" entire events that never happened.

Studies in other laboratories using a similar experimental procedure have produced similar results. For instance, Ira Hyman, Troy H. Husband and F. James Billings of Western Washington University asked college students to recall childhood experiences that had been recounted by their parents. The researchers told the students that the study was about how people remember shared experiences differently. In addition to actual events reported by parents, each participant was given one false event—either an overnight hospitalization for a high fever and a possible ear infection, or a birthday party with pizza and a clown—that supposedly happened at about the age of five. The parents confirmed that neither of these events actually took place.

Hyman found that students fully or partially recalled 84 percent of the true events in the first interview and 88 percent in the second interview. None of the participants recalled the false event during the first interview, but 20 percent said they remembered something about the false event in the second interview. One participant who had been exposed to the emergency hospitalization story later remembered a male doctor, a female nurse and a friend from church who came to visit at the hospital.

In another study, along with true events Hyman presented different false events, such as accidentally spilling a

bowl of punch on the parents of the bride at a wedding reception or having to evacuate a grocery store when the overhead sprinkler systems erroneously activated. Again, none of the participants recalled the false event during the first interview, but 18 percent remembered something about it in the second interview and 25 percent in the third interview. For example, during the first interview, one participant, when asked about the fictitious wedding event, stated, "I have no clue. I have never heard that one before." In the second interview, the participant said, "It was an outdoor wedding, and I think we were running around and knocked something over like the punch bowl or something and made a big mess and of course got yelled at for it."

Imagination Inflation

The finding that an external suggestion can lead to the construction of false childhood memories helps us understand the process by which false memories arise. It is natural to wonder whether this research is applicable in real situations such as being interrogated by law officers or in psychotherapy. Although strong suggestion may not routinely occur in police questioning or therapy, suggestion in the form of an imagination on exercise sometimes does. For instance, when trying to obtain a confession, law officers may ask a suspect to imagine having participated in a criminal act. Some mental health professionals encourage patients to imagine childhood events as a way of recovering supposedly hidden memories.

Surveys of clinical psychologists reveal that 11 percent instruct their clients to "let the imagination run

wild," and 22 percent tell their clients to "give free rein to the imagination." Therapist Wendy Maltz, author of a popular book on childhood sexual abuse, advocates telling the patient: "Spend time imagining that you were sexually abused, without worrying about accuracy, proving anything, or having your ideas make sense.... Ask yourself... these questions: What time of day is it? Where are you? Indoors or outdoors? What kind of things are happening? Is there one or more person with you?" Maltz further recommends that therapists continue to ask questions such as "Who would have been likely perpetrators? When were you most vulnerable to sexual abuse in your life?"

The increasing use of such imagination exercises led me and several colleagues to wonder about their consequences. What happens when people imagine childhood experiences that did not happen to them? Does imagining a childhood event increase confidence that it occurred? To explore this, we designed a three-stage procedure. We first asked individuals to indicate the likelihood that certain events happened to them during their childhood. The list contains 40 events, each rated on a scale ranging from "definitely did not happen" to "definitely did happen." Two weeks later we asked the participants to imagine that they had experienced some of these events. Different subjects were asked to imagine different events. Sometime later the participants again were asked to respond to the original list of 40 childhood events, indicating how likely it was that these events actually happened to them.

Consider one of the imagination exercises. Participants are told to imagine playing inside at home after

school, hearing a strange noise outside, running toward the window, tripping, falling, reaching out and breaking the window with their hand. In addition, we asked participants questions such as “What did you trip on? How did you feel?”

In one study 24 percent of the participants who imagined the broken-window scenario later reported an increase in confidence that the event had occurred, whereas only 12 percent of those who were not asked to imagine the incident reported an increase in the likelihood that it had taken place. We found this “imagination inflation” effect in each of the eight events that participants were asked to imagine. A number of possible explanations come to mind. An obvious one is that an act of imagination simply makes the event seem more familiar and that familiarity is mistakenly related to childhood memories rather than to the act of imagination. Such source confusion—when a person does not remember the source of information—can be especially acute for the distant experiences of childhood.

Studies by Lyn Goff and Henry L. Roediger III of Washington University of recent rather than childhood experiences more directly connect imagined actions to the construction of false memory. During the initial session, the researchers instructed participants to perform the stated action, imagine doing it or just listen to the statement and do nothing else. The actions were simple ones: knock on the table, lift the stapler, break the toothpick, cross your fingers, roll your eyes. During the second session, the participants were asked to imagine some of the actions that they had not previously performed. During the final session, they answered

questions about what actions they actually performed during the initial session. The investigators found that the more times participants imagined an unperformed action, the more likely they were to remember having performed it.

Impossible Memories

It is highly unlikely that an adult can recall genuine episodic memories from the first year of life, in part because the hippocampus, which plays a key role in the creation of memories, has not matured enough to form and store long-lasting memories that can be retrieved in adulthood. A procedure for planting “impossible” memories about experiences that occur shortly after birth has been developed by the late Nicholas Spanos and his collaborators at Carleton University. Individuals are led to believe that they have well-coordinated eye movements and visual exploration skills probably because they were born in hospitals that hung swinging, colored mobiles over infant cribs. To confirm whether they had such an experience, half the participants are hypnotized, age-regressed to the day after birth and asked what they remembered. The other half of the group participates in a “guided mnemonic restructuring” procedure that uses age regression as well as active encouragement to re-create the infant experiences by imagining them.

Spanos and his co-workers found that the vast majority of their subjects were susceptible to these memory-planting procedures. Both the hypnotic and guided participants reported infant memories. Surprisingly, the guided group did so somewhat more (95 versus 70 percent). Both groups remembered the colored mobile at a relatively high

rate (56 percent of the guided group and 46 percent of the hypnotic subjects). Many participants who did not remember the mobile did recall other things, such as doctors, nurses, bright lights, cribs and masks. Also, in both groups, of those who reported memories of infancy, 49 percent felt that they were real memories, as opposed to 16 percent who claimed that they were merely fantasies. These findings confirm earlier studies that many individuals can be led to construct complex, vivid and detailed false memories via a rather simple procedure. Hypnosis clearly is not necessary.

How False Memories Form

In the lost-in-the-mall study, implantation of false memory occurred when another person, usually a family member, claimed that the incident happened. Corroboration of an event by another person can be a powerful technique for instilling a false memory. In fact, merely claiming to have seen a person do something can lead that person to make a false confession of wrongdoing.

This effect was demonstrated in a study by Saul M. Kassin and his colleagues at Williams College, who investigated the reactions of individuals falsely accused of damaging a computer by pressing the wrong key. The innocent participants initially denied the charge, but when a confederate said that she had seen them perform the action, many participants signed a confession, internalized guilt for the act and went on to confabulate details that were consistent with that belief. These findings show that false incriminating evidence can induce people to accept guilt for a crime they did not commit

and even to develop memories to support their guilty feelings.

Research is beginning to give us an understanding of how false memories of complete, emotional and self-participatory experiences are created in adults. First, there are social demands on individuals to remember; for instance, researchers exert some pressure on participants in a study to come up with memories. Second, memory construction by imagining events can be explicitly encouraged when people are having trouble remembering. And, finally, individuals can be encouraged not to think about whether their constructions are real or not. Creation of false memories is most likely to occur when these external factors are present, whether in an experimental setting, in a therapeutic setting or during everyday activities.

False memories are constructed by combining actual memories with the content of suggestions received from others. During the process, individuals may forget the source of the information. This is a classic example of source confusion, in which the content and the source become dissociated.

Of course, because we can implant false childhood memories in some individuals in no way implies that all memories that arise after suggestion are necessarily false. Put another way, although experimental work on the creation of false memories may raise doubt about the validity of long-buried memories, such as repeated trauma, it in no way disproves them. Without corroboration, there is little that can be done to help even the most experienced evaluator to differentiate true memories from ones that were suggestively planted.

The precise mechanisms by which

such false memories are constructed await further research. We still have much to learn about the degree of confidence and the characteristics of false memories created in these ways, and we need to discover what types of individuals are particularly susceptible to these forms of suggestion and who is resistant.

As we continue this work, it is important to heed the cautionary tale in the data we have already obtained: mental health professionals and others must be aware of how greatly they can influence the recollection of events and of the urgent need for maintaining restraint in situations in which imagination is used as an aid in recovering presumably lost memories.

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A Study of Fantasy Proneness in the Thirteen Cases of Alleged Encounters in John Mack's 'Abduction'

[*Skeptical Inquirer*, May-June 1996]

Joe Nickell

Since Robert A. Baker's pioneering article appeared in the *Skeptical Inquirer* (Baker 1987-1988), a controversy has raged over his suggestion that self-proclaimed "alien abductees" exhibited an array of unusual traits that indicated they had fantasy-prone personalities. Baker cited the "important but much neglected" work of Wilson and Barber (1983), who listed certain identifying characteristics of people who fantasize profoundly. Baker applied Wilson and Barber's findings to the alien-abduction phenomenon and found a strong correlation. Baker explained how a cursory examination by a psychologist or psychiatrist might find an "abductee" to be perfectly normal, while more detailed knowledge about the person's background and habits would reveal to such a trained observer a pattern of fantasy proneness.

For example, Baker found Whitley Strieber—author of *Communion*, which tells the "true story" of Strieber's own alleged abduction—to be "a classic example of the [fantasy-prone personality] genre." Baker noted that Strieber exhibited such symptoms as being easily hypnotized, having vivid memories, and experiencing hypnopompic hallucinations (i.e. "waking dreams"), as well as being "a writer of occult and highly imaginative novels" and exhibiting other characteristics of fantasy proneness. A subsequent, but apparently independent, study by Bartholomew and Basterfield (1988) drew similar conclusions.

Wilson and Barber's study did not

deal with the abduction phenomenon (which at the time consisted of only a handful of reported cases), and some of their criteria seem less applicable to abduction cases than to other types of reported phenomena, such as psychic experiences. Nevertheless, although the criteria for fantasy proneness have not been exactly codified, they generally include such features as having a rich fantasy life, showing high hypnotic susceptibility, claiming psychic abilities and healing powers, reporting out-of-body experiences and vivid or "waking" dreams, having apparitional experiences and religious visions, and exhibiting automatic writing. In one study, Bartholomew, Basterfield, and Howard (1991) found that, of 152 otherwise normal, functional individuals who reported they had been abducted or had persistent contacts with extraterrestrials, 132 had one or more major characteristics of fantasy-prone personality.

Somewhat equivocal results were obtained by Spanos et al. (1993), although their "findings suggest that intense UFO experiences are more likely to occur in individuals who are predisposed toward esoteric beliefs in general and alien beliefs in particular and who interpret unusual sensory and imagined experiences in terms of the alien hypothesis. Among UFO believers, those with stronger propensities toward fantasy production were particularly likely to generate such experiences" (Spanos et al. 1993, p. 631).

A totally dismissive view of these attempts to find conventional psycho-

logical explanations for the abduction experience is found in the introduction to psychiatrist John Mack's *Abduction: Human Encounters with Aliens* (1994). Mack states unequivocally: "The effort to discover a personality type associated with abductions has also not been successful." According to Mack, since some alleged abductions have reportedly taken place in infancy or early childhood, "Cause and effect in the relationship of abduction experiences to building of personality are thus virtually impossible to sort out" (Mack 1994, p. 5). But surely it is Mack's burden to prove his own thesis that the alien hypothesis does have a basis in fact beyond mere allegation. Otherwise the evidence may well be explained by a simpler hypothesis, such as the possibility that most "abductees" are fantasy-prone personality types. (Such people have traits that cut across many different personality dimensions; thus conventional personality tests are useless for identifying easily hypnotizable people. Some "abductees" who are not fantasy prone may be hoaxers, for example, or exhibit other distinctive personality traits or psychological problems.) Mack's approach to the diagnosis and treatment of his "abductee" patients has been criticized by many of his colleagues (e.g., Cone 1994).

Methodology

To test the fantasy-proneness hypothesis, I carefully reviewed the thirteen chapter-length cases in Mack's *Abduction* (Chapters 3-15), selected from the forty-nine patients he most carefully studied out of seventy-six "abductees." Since his presentation was not intended to include fantasy proneness, certain

potential indicators of that personality type—like a subject's having an imaginary playmate—would not be expected to be present. Nevertheless, Mack's rendering of each personality in light of the person's alleged abduction experiences was sufficiently detailed to allow the extraction of data pertaining to several indicators of fantasy proneness. They are the following:

1. Susceptibility to hypnosis. Wilson and Barber rated "hypnotizability" as one of the main indicators of fantasy proneness. In all cases, Mack repeatedly hypnotized the subjects without reporting the least difficulty in doing so. Also, under hypnosis the subjects did not merely "recall" their alleged abduction experiences but all of them reexperienced and relived them in a manner typical of fantasy proneness (Wilson and Barber 1983, pp. 373-379). For example, Mack's patient "Scott" (No. 3) was so alarmed at "remembering" his first abduction (in a pre-Mack hypnosis session with another psychiatrist) that, he said, "I jumped clear off the couch" (Mack 1994, p. 81); "Jerry" (No. 4) "expressed shock over how vividly she had relived the abduction," said Mack (1994, p. 112); similarly, "Catherine" (No. 5) "began to relive" a feeling of numbness and began "to sob and pant" (Mack 1994, p. 140).

2. Paridentity. I have used this term to refer to a subjects having had imaginary companions as a child (Wilson and Barber 1983, pp. 346-347) and/or by extension to claiming to have lived past lives or to have a dual identity of some type. Of their fantasy-prone subjects, Wilson and Barber stated: "In fantasy they can do anything—experience a previous lifetime, experience their own

birth, go off into the future, go into space, and so on.” As well, “While they are pretending, they become totally absorbed in the character and tend to lose awareness of their true identity” (Wilson and Barber 1983, pp. 353, 354). Thus, as a child, “Ed” (No. 1) stated: “Things talked to me. The animals, the spirits I can sense the earth” (Mack 1994, p. 47); “Jerry” (No. 4) said he has had a relationship with a tall extraterrestrial being since age five (Mack 1994, p. 113). At least four of Mack’s subjects (Nos. 5, 7, 9, and 10) said they have had past-life experiences (pp. 160-162, 200, 248, 259), and seven (Nos. 3, 6, 7, 8, 9, 11, and 12) said they have some sort of dual identity (pp. 92-93, 173, 200, 209, 243, 297, and 355-356). For example “Dave” (No. 10) said he considers himself “a modern-day Indian”; while “Peter” (No. 11) under hypnosis said he becomes an alien and speaks in robotic tones (Mack 1994, pp. 275, 277, 297). In all, eleven of Mack’s thirteen featured subjects exhibited paraidentity.

3. *Psychic experiences.* Another strong characteristic of fantasy proneness according to Wilson and Barber (1983, pp. 359-360) is that of having telepathic, precognitive, or other types of psychic experience.

One hundred percent of Mack’s thirteen subjects claimed to have experienced one or more types of alleged psychical phenomena, most reporting telepathic contact with extraterrestrials. “Catherine” (No. 5) also claimed she can “feel people’s auras”; “Eva” (No. 9) said she is able to perceive beyond the range of the five senses; and “Carlos” (No. 12) said he has had “a history of what he calls ‘visionary’ experiences” (Mack 1994, pp. 157, 245, 332).

4. *“Floating” or out-of-body experiences.* Wilson and Barber (1983, p. 360) stated: “The overwhelming majority of subjects (88 percent) in the fantasy-prone group, as contrasted to few (8 percent) in the comparison group, report realistic out-of-the-body experiences” (which one subject described as “a weightless, floating sensation” and another called “astral travel”). Only one of Mack’s thirteen subjects (No. 2) failed to report this; of the other twelve, most described, under hypnosis, being “floated” from their beds to an awaiting spaceship. Some said they were even able to drift through a solid door or wall, that being a further indication of the fantasy nature of the experience (more on this later). Also, “Eva” (No. 9) stated that she had once put her head down to nap at her desk and then “saw myself floating from the ceiling My consciousness was up there. My physical body was down there” (Mack 1994, p. 237). Also, in the case of “Carlos” (No. 12), “Flying is a recurring motif in some of his more vivid dreams” (Mack 1994, p. 338).

5. *Vivid or “waking” dreams, visions, or hallucinations.* A majority of Wilson and Barber’s subjects (64 percent) reported they frequently experienced a type of dream that is particularly vivid and realistic (Wilson and Barber 1983, p. 364). Technically termed hypnogogic or hypnopompic hallucinations (depending on whether they occur, respectively, while the person is going to sleep or waking), they are more popularly known as “waking dreams” or, in earlier times as “night terrors” (Nickell 1995, p. 41). Wilson and Barber (1983, p. 364) reported that several of their subjects “were especially grateful to learn that the ‘monsters’ they saw nightly when they were children could

be discussed in terms of 'what the mind does when it is nearly, but not quite, asleep.'" Some of Wilson and Barber's subjects (six in the fantasy-prone group of twenty-seven, contrasted with none in the comparison group of twenty-five) also had religious visions, and some had outright hallucinations (Wilson and Barber 1983, pp. 362-363, 364-365, 367-371).

Of Mack's thirteen selected cases, all but one (No. 13) reported either some type of especially vivid dream, or vision, or hallucination. For example, "Scott" (No. 3) said he had "visual hallucinations" from age twelve; "Jerry" (No. 4) recorded in her journal "vivid dreams of UFOs" as well as "visions"; and "Carlos" (No. 12) had the previously mentioned "visionary" experiences and dreams of flying (Mack 1994, pp. 82, 112). Almost all of Mack's subjects (Nos. 1-11), like "Sheila" (No. 2), had vivid dreams with strong indications of hypnogogic/hypnopompic hallucination (Mack 1994, pp. 38, 56, 80, 106, 132, 168-169, 196, 213, 235, 265-267, and 289).

6. Hypnotically generated apparitions. Encountering apparitions (which Wilson and Barber define rather narrowly as "ghosts" or "spirits") is another Wilson-Barber characteristic (contrasted with only sixteen percent of their comparison group). A large number of the fantasizers also reported seeing classic hypnogogic imagery, which included such apparitionlike entities as "demon-type beings, goblins, gargoyles, monsters that seemed to be from outer space" (Wilson and Barber 1983, p. 364).

Mack's subjects had a variety of such encounters, both in their apparent "waking dreams" and under hypnosis. Only the latter were considered here; all

thirteen subjects reported seeing one or more types of outer-space creatures during hypnosis.

7. Receipt of special messages. Fifty percent of Wilson and Barber's fantasizers (contrasted with only eight percent of their comparison subjects) reported having felt that some spirit or higher intelligence was using them "to write a poem, song, or message" (Wilson and Barber 1983, p. 361).

Of Mack's thirteen abductees, all but one clearly exhibited this characteristic, usually in the form of receiving telepathic messages from the extraterrestrials and usually with a message similar to the one given "Arthur" (No. 13) "about the danger facing the earth's ecology" (Mack 1994, p. 381). Interestingly, many of these messages just happen to echo Mack's own apocalyptic notions (e.g., pp. 3, 412), indicating Mack may be leading his witnesses.

In the case of "Eva" (No. 9), the aliens, who represented a "higher communication" (Mack 1994, pp. 243, 247), purportedly spoke through her and described her "global mission." "Jerry" (No. 4) produced a "flood of poetry," yet stated, "I don't know where it's coming from" (p. 99); "Sara" (No. 7) has been "spontaneously making drawings with a pen in each hand [of aliens!]" although she had never used her left hand before; and "Peter" (No. 11) stated he has "always known that I could commune with God" and that the aliens "want to see if I'm a worthy leader" (Mack 1994, pp. 99, 192, 288, 297).

Results

One of Mack's subjects ("Sheila," No. 2) exhibited four of the seven fantasy-prone indicators, and another

("Arthur," No. 13) exhibited five; the rest showed all seven characteristics. These results are displayed in Figure 1.

Although not included here, healing—that is, the subjects' feeling that they have the ability to heal—is another characteristic of the fantasy-prone personality noted by Wilson and Barber (1983, p. 363). At least six of Mack's thirteen subjects exhibited this. Other traits, not discussed by Wilson and Barber but nevertheless of possible interest, are the following (together with the number of Mack's thirteen subjects that exhibit it): having seen UFOs (9); New Age or mystical involvement (11); Roman Catholic upbringing (6 of 9 whose religion was known or could be inferred); previously being in a religio-philosophical limbo/quest for meaning in life (10); and involvement in the arts as a vocation or avocation (5). For example, while apparently neither an artist, healer, nor UFO sighter, "Ed" (No. 1) had "a traditional Roman Catholic upbringing" and—as rather a loner who said he felt "lost in the desert"—he not only feels he can "talk to plants" but said he has "practiced meditation and studied Eastern philosophy in his struggle to find his authentic path" (Mack 1994, pp. 39, 41-42). "Carlos" (No. 12) is an artist/writer/"fine arts professor" involved in theatrical production who said he has seen UFOs and has a "capacity as a healer"; raised a Roman Catholic, and interested in numerology and mythology, he calls himself "a shaman/artist teacher" (Mack 1994, pp. 330, 332, 340-341, 357).

Also of interest, I think, is the evidence that many of Mack's subjects fantasized while under hypnosis. For example—in addition to aliens—"Ed" (No. 1) also said he saw earth spirits whom he described as "mirthful little

playful creatures" (p. 48); and "Joe" (No. 6) said he saw "mythic gods, and winged horses." "Joe" also "remembered" being born (Mack 1994, pp. 170, 184). "Catherine" (No. 5), "Sara" (No. 7), "Paul" (No. 8), and "Eva," (No. 9) said they had past-life experiences or engaged in time-travel while under hypnosis. Several said they were able to drift through solid doors or walls, including "Ed" (No. 1), "Jerry" (No. 4), "Catherine" (No. 5), "Paul" (No. 8), "Dave" (No. 10), and "Arthur" (No. 13). "Carlos" (No. 12) claimed his body was transmuted into light. I have already mentioned that under hypnosis "Peter" (No. 11) said he becomes an alien and speaks in an imitative, robotic voice. In all, eleven of Mack's thirteen subjects (all but Nos. 2 and 3) appear to fantasize under hypnosis. Of course it may be argued that there really are "earth spirits" and "winged horses," or that the extraterrestrials may truly have the ability to time travel or dematerialize bodies, or that any of the other examples I have given as evidence of fantasizing are really true. However, once again the burden of proof is on the claimant and until that burden is met, the examples can be taken as further evidence of the subjects' ability to fantasize.

Conclusions

Despite John Mack's denial, the results of my study of his best thirteen cases show high fantasy proneness among his selected subjects. Whether or not the same results would be obtained with his additional subjects remains to be seen. Nevertheless, my study does support the earlier opinions of Baker and Bartholomew and Basterfield that alleged alien abductees tend to be fantasy-prone personalities. Certainly,

that is the evidence for the very best cases selected by a major advocate.

Note

I am grateful to psychologists Robert A. Baker and Barry Beyerstein for reading this study and making helpful suggestions.

References

- Baker, Robert A. 1987-1988. The aliens among us: Hypnotic regression revisited. *Skeptical Inquirer* 12(2) (Winter): pp. 147-162.
- Bartholomew, Robert E., and Keith Basterfield. 1988. Abduction states of consciousness. *International UFO Reporter*, March/April.
- Bartholomew, Robert E., Keith Basterfield, and George S. Howard. 1991. UFO abductees and contactees: Psychopathology or fantasy proneness? *Professional Psychology: Research and Practice* 22(3): 215-222.
- Cone, William. 1994. Research therapy methods questioned. *UFO* 9(5): 32-34.
- Mack, John. 1994. *Abduction: Human Encounters with Aliens*. New York: Simon and Schuster.
- Nickell, Joe. 1995. *Entities: Angels, Spirits, Demons and Other Alien Beings*. Amherst, N.Y.: Prometheus Books.
- Spanos, Nicholas P., Patricia A. Cross, Kirby Dickson, and Susan C. DuBreuil. 1993. Close encounters: An examination of UFO experiences. *Journal of Abnormal Psychology* 102 (4): 624-632.
- Wilson, Sheryl C., and Theodore X. Barber. 1983. The fantasy-prone personality: Implications for understanding imagery, hypnosis, and parapsychological phenomena.

In *Imagery, Current Theory, Research and Application*, ed. by Anees A. Sheikh, New York: Wiley, pp. 340-390.

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Sleep Disorder May Explain Alien Abduction Stories

[San Francisco Chronicle, Friday, July 9, 1999]

Nicholas D. Kristof

About once a week, Jean-Christophe Terrillon wakes up and senses the presence of a threatening, evil being beside his bed.

Terror ripples through him, and he tries to move or call out, but he is paralyzed—unable to raise an arm or make a sound. His ears ring, a weight presses down on his chest, and he has to struggle for breath.

“I feel an intense pressure in my head, as if it’s going to explode,” said Terrillon, a Canadian physicist doing research in Japan. Sometimes he finds himself transported upward and looking down on his body, or else sent hurtling through a long tunnel, and these episodes are terrifying even for a scientist like him who does not believe that evil spirits go around haunting people.

Called sleep paralysis, this disorder—the result of a disconnect between brain and body as a person is on the fringe of sleep—is turning out to be increasingly common, affecting nearly half of all people at least once. Moreover, a growing number of scholars believe that sleep paralysis may help explain many ancient reports of attacks by witches and modern claims of abduction by space aliens.

“I think it can explain claims of witchcraft and alien abduction,” said Kazuhiko Fukuda, a psychologist at Fukushima University in Japan and a leading expert on sleep paralysis. Research in Japan has had a head start because sleep paralysis is well-known to most Japanese, who call it *kanashibari*, while it is little-known and less studied

in the West.

“We have a framework for it, but in North America there’s no concept for people to understand what has happened to them,” Fukuda said. “So if Americans have the experience, and if they have heard of alien abductions, then they may think, ‘Aha, it’s alien abduction!’ ”

Sleep paralysis was once thought to be very rare. But recent studies in Canada, Japan, China and the United States have suggested that it may strike at least 40 percent or 50 percent of all people at least once, and a study in Newfoundland, Canada, found that more than 60 percent had experienced it.

There, as in Japan, people have a name for the condition, and some scholars believe that people are therefore more likely to identify it when it happens to them. In Newfoundland, it is called “old hag” because it is associated with visions of an old witch sitting on the chest of a paralyzed sleeper, sometimes throttling the sleeper’s neck with her hands.

“People will draw on the most plausible account in their repertoire to explain their experience,” said Al Cheyne, an associate professor of psychology at the University of Waterloo in Canada. “Trolls or witches no longer constitute plausible interpretations of these hallucinations.

“The notion of aliens from outer space is more contemporary and somewhat more plausible to the modern mind,” he said. “So a flight on a broomstick is replaced by a teleportation to a waiting spaceship.”

Cheyne said that in a survey he worked on involving more than 2,000 people identified as experiencing sleep paralysis, hundreds described experiences similar to alien abduction.

“A sensed presence, vague gibberish spoken in one’s ear, shadowy creatures moving about the room, a strange immobility, a crushing pressure and painful sensations in various parts of the body—these are compatible not just with an assault by a primitive demon but also with probing by alien experimenters,” Cheyne said. “And the sensations of floating and flying account for the reports of levitation and transport to alien vessels.”

In recent years there has been a huge increase in the number of people who insist that they have been kidnapped by alien creatures from outer space, perhaps subjected to medical experiments and then released again. These claims have been a bit of a scientific puzzle, because they strike most people as utterly wacky and yet they are relatively widespread. One well-publicized (and widely criticized) Roper Poll published in 1992 suggested that nearly 4 million American reported experiences akin to alien abduction.

Surprisingly, one study found that these people were no more fantasy-prone than the general population and had slightly higher intelligence. Many shun publicity and show signs of feeling traumatized and humiliated.

Several scholars have found that people are more likely to report alien abductions when they have been exposed to movies or books about the idea. Simon Sherwood, a researcher on sleep paralysis in England, said that in one case study he gathered, a regular sufferer of sleep paralysis watched an alien film and then had a hallucination

of “little blue aliens” inserting a metal probe into his forehead.

The growing professional literature on sleep paralysis has often mentioned the parallels with reports of alien abductions. Still, many scholars are reluctant to research the connection for fear of tainting their reputations. Others say that a connection is plausible but unproved.

Those who believe in alien abductions deny that sleep paralysis could be behind it all. John E. Mack, a Harvard University Medical School professor who is the most prominent defender of the possibility of abductions, argues that sleep paralysis simply does not fit the evidence. He notes that at least a few abduction reports come from remote places where people are not exposed to movies or tales of UFO’s, and that many happen in daylight and involve people who seem to have been awake and alert.

Other defenders of abduction theories say aliens may be clever enough to use sleep paralysis in their kidnappings.

Sleep paralysis researchers say that as many as 60 percent of intense abduction experiences were linked to sleep, and some of the reported symptoms—noises, smells, paralysis, levitation, terror, images of frightening intruders—are very similar to those of sleep paralysis.

So what is sleep paralysis?

Even after many years of study, particularly in the last decade, it remains mysterious. Experts have trouble even saying definitively whether a person is asleep or awake during sleep paralysis.

“In the classic definition, you are awake,” said Emmanuel Mignot, director of the Center for Narcolepsy at Stanford University Medical School. “But in practice, there’s a gradient between being awake and being in REM

sleep,” he said.

During REM sleep—the period when rapid eye movement takes place—the body essentially turns itself off and disconnects from the brain. This is a safety measure, so that people do not physically act out their dreams, and it means that people are effectively paralyzed during part of their sleep. Even automatic reflexes, like kicking when the knee is tapped, do not work during REM sleep.

Sleep paralysis seems to occur when the body is in REM sleep and so is paralyzed and disconnected from the brain, while the brain has emerged from sleep and is either awake or semiawake. Usually after a minute or two the spell is broken and the person is able to move again, as the brain and body re-establish their connection.

What is going on in the brain during sleep paralysis is unclear. The person experiencing the paralysis feels completely awake and “sees” the room clearly, but laboratory experiments in Japan show that sometimes people experiencing sleep paralysis do not even open their eyes.

Aside from witchcraft and alien abduction, sleep paralysis is also sometimes mentioned as a possible link to shamanism and to dream interpretation and even to near-death experiences. But for many sufferers, the growing research in the field is reassuring simply because it demonstrates that they are not alone in their terrifying nighttime paralysis and hallucinations.

“Sometimes I’m just glad that I didn’t live a long time ago,” said Terrillon, the Canadian physicist in Japan. “Because maybe people who had this in the olden days were put in madhouses.”

Abduction by Aliens or Sleep Paralysis? (Excerpt)

[Skeptical Inquirer, May-June 1998]

Susan Blackmore

In a typical sleep-paralysis episode, a person wakes up paralyzed, senses a presence in the room, feels fear or even terror, and may hear buzzing and humming noises or see strange lights. A visible or invisible entity may even sit on their chest, shaking, strangling, or prodding them. Attempts to fight the paralysis are usually unsuccessful. It is reputedly more effective to relax or try to move just the eyes or a single finger or toe. Descriptions of sleep paralysis are given in many of the references already cited and in Hufford's (1982) classic work on the "Old Hag." I and a colleague are building up a case collection and have reported our preliminary findings (Blackmore and Rose 1996).

Sleep paralysis is thought to underlie common myths such as witch or hag riding in England (Davis 1996-1997), the Old Hag of Newfoundland (Hufford 1982), Kanashibari in Japan (Fukuda 1993), Kokma in St. Lucia (Dahlitz and Parkes 1993), and the Popobawa in Zanzibar (Nickell 1995), among others. Perhaps alien abduction is our modern sleep paralysis myth.

Spanos et al. (1993) have pointed out the similarities between abductions and sleep paralysis. The majority of the abduction experiences they studied occurred at night, and almost 60 percent of the "intense" reports were sleep related. Of the intense experiences, nearly a quarter involved symptoms similar to sleep paralysis.

Cox (1995) divided his twelve abductees into six daytime and six nighttime abductions and, even with such small groups, found that the

nighttime abductees reported significantly more frequent sleep paralysis than either of the control groups.

I suggest that the best explanation for many abduction experiences is that they are elaborations of the experience of sleep paralysis.

Imagine the following scenario: A woman wakes in the night with a strong sense that someone or something is in the room. She tries to move but finds she is completely paralyzed except for her eyes. She sees strange lights, hears a buzzing or humming sound, and feels a vibration in the bed. If she knows about sleep paralysis, she will recognize it instantly, but most people do not. So what is she going to think? I suggest that, if she has watched TV programs about abductions or read about them, she may begin to think of aliens. And in this borderline sleep state, the imagined alien will seem extremely real. This alone may be enough to create the conviction of having been abducted. Hypnosis could make the memories of this real experience (but not real abduction) completely convincing.

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