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## The Ordinary Nature of Alien Abduction Memories

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In June 1962, a mysterious case of bug bites alleged to have caused 11 people to suffer “severe nausea and breaking out all over the body” made the national evening news. In the 3 weeks following the incident, some 57 of 200 employees of a cloth-and-garment manufacturing plant were stricken by an illness marked by nervousness, nausea, weakness, and numbness and attributed to insects that had arrived in a shipment of cloth from England. The plant building was fumigated, and doctors and entomologists from colleges, exterminating companies, and the U.S. Public Health Services Communicable Disease Center (now the Centers for Disease Control) worked to investigate the cause of the illness. According to their report, insect bites were not the cause. Instead, the controversial conclusion was that the events were due to anxiety and nervousness; not to put too fine a point on it, the “June bug” was a case of hysterical contagion. Life at the factory soon returned to normal, but Kerckhoff and Back (1968) were dissatisfied with a label as facile as *hysteria*. They argued that such events warranted explanation in addition to labeling and that such explanations “ought to be the business of social psychologists” (p. 18). Why did the outbreak occur where and when it did? How was it related to conditions prevailing at the plant at the time? What other sources of strain were present in the environment? What determined who succumbed to the illness and who remained unaffected? What features of the social context facilitated social contagion?

Newman and Baumeister do not refer to the June bug, but it is clear that their analysis of the unidentified flying object (UFO) abduction phenomenon is motivated by a similar interest in the creation of shared realities and beliefs and, in particular, how social, personality, and cognitive factors can interact to turn the speculation that one was abducted by aliens into a belief and then into a memory. What possesses hundreds or thousands of people to claim that they were abducted by alien beings, subjected to frightening and invasive

physical procedures, and then returned to Earth with only a vague recollection of their experience? And what possesses respected academic scholars (Jacobs, 1992; Mack, 1994) to take these reports seriously as representations of objective reality?

In the target article, Newman and Baumeister rightly doubt the literal accuracy of these reports, and they offer a psychological explanation of them in terms of both cognitive and motivational processes. On the cognitive side, they focus on the reconstructive nature of memory and on the liabilities of refreshing memory by means of hypnosis. We generally concur with Newman and Baumeister’s analysis of the construction of personal narratives, and we certainly agree with their analysis of the liabilities of hypnosis as a means for bringing forgotten events to consciousness (Kihlstrom & Barnhardt, 1993; Kihlstrom & Eich, 1994). In the past few decades, psychologists have learned a great deal about the role of suggestion, rehearsal, and time delay in memory distortion. Relatively little is still known about the social, political, and cultural factors that, in interaction with cognitive factors, produce the particular shape and form of distorted memories. Viewing any single factor that is responsible for memory distortions can be informative, but phenomena such as the one Newman and Baumeister selected point out the added advantage of focusing on the interplay of social, personality, and cultural factors in addition to the more familiar variables of expert suggestion and the hypnotic environment.

On the motivational side, Newman and Baumeister attribute the masochistic nature of contemporary UFO abduction narratives to a desire to escape ordinary self-awareness. There might be something to this, but much more supportive evidence will be needed before we are convinced that those who report alien abductions had preexisting sadomasochistic tendencies or recently suffered personal setbacks of the sort that make it difficult to maintain a positive self-image. The

fact, or example, that proportionately more women than men report themselves as having been humiliated through display might simply reflect women's experiences as sex objects in a male-dominated society—not to mention their experiences as patients in gynecologists' offices. And, as Newman and Baumeister admit, the sex difference in reports of pain might be an artifact of the sex difference in reports of display. Doubtless, being sucked out of one's bedroom or car and undergoing physical examinations and other procedures at the hands of extraterrestrials are not likely to be pleasant experiences or even pleasant fantasies. But it is a long way from such unpleasantness to a sadomasochistic escape from self.

In this commentary, we suggest an alternative cognitive-motivational hypothesis that focuses on people's need to explain anomalous personal experiences (Kihlstrom & Hoyt, 1988; Maher, 1974, 1988; Maher & Ross, 1984; Maher & Spitzer, 1993; Reed, 1974; Zimbardo, Andersen, & Kabat, 1981). Our point of view is that abduction memories are delusions. This is not to say that those who believe they were abducted by extraterrestrials are psychotic. Delusions are simply false, but highly valued, beliefs about oneself:

Delusions may be defined as anomalies of judgment or belief, commonly revolving around themes of persecution, grandeur, love, jealousy, and inferiority. They are false and even implausible beliefs that are assumed to be self-evident, and they are held with intense conviction by the believer, who shows a great deal of ego-involvement and preoccupation with them. Although incorrect, and even implausible, delusions are incorrigible in the face of persuasion, counterargument, and counterdemonstration. (Kihlstrom & Hoyt, 1988, p. 77)

Although delusions are commonly encountered in schizophrenia and affective disorder, it turns out that anyone can have them. They are natural byproducts of our attempts to explain the unusual things that can happen to us.

This view on delusions goes back at least as far as Jaspers (1923/1963), who noted that the systematized delusions of the classic paranoid schizophrenic are actually secondary to a primary delusional experience in which objects and events appear uncanny, mystifying, ineffable, and imbued with personal significance. According to Jaspers, delusional beliefs reflect the individual's attempt to structure a diffuse, contentless experience or an attempt to give content to such an experience—reminiscent of Bartlett's (1932) notion of "effort after meaning."

Fifty years later, Jaspers's ideas were revived by Maher (1974) and Reed (1974). According to Reed, the patient first becomes aware of a change in the signifi-

cance of some object, event, idea, or memory. This awareness then stimulates attempts to describe and explain the change itself—"effort after meaning"—which makes use of the patient's fund of world knowledge and his or her repertoire of inferential processes:

Given the necessary information, the observer can empathize with the subject: if he himself were to have such an unusual experience he would express beliefs about it which would be just as unusual as those of the subject. ... They can occur in anybody who experiences disturbing phenomena, whilst retaining the ability to think clearly enough to devise explanations of those phenomena. (Reed, 1974, p. 152)

Similarly, Maher (1974), drawing on attribution theory, argued that delusions are formed in a particular sequence:

1. An unusual (in Reed's terms, *anomalous*) perceptual experience—intense and pervasive but not shared by others.
2. The conclusion that the experience, because it is not shared, is personally significant.
3. The arousal of anxiety due to the presence of an unexplained experience.
4. Explanation of the experience by means of intellectual processes that are essentially normal.
5. Reduction of the anxiety after the explanation is achieved.
6. Persistence of the explanation as a defense against further anxiety.

Mahe's use of attributional theory was relatively informal. Kihlstrom and Hoyt (1988) attempted to apply social-cognitive research on normative inference rules and judgment heuristics to schizophrenic delusions, and we follow their example here.

First, let us consider the kinds of anomalous experiences that can give rise to UFO abduction reports in the first place. According to Jacobs (1992), five experiences are commonly associated with UFO abduction reports. They are presented here, along with the frequency with which they were reported in a representative sample of the population surveyed by the Roper Organization in 1991 (Bigelow Holding Corporation, 1992):

1. A person wakes up paralyzed, with the sense that there is a strange person or presence or something else in the room—once or twice (13%), more than twice (5%).
2. A person is apparently lost for 1 hr or more but, later, cannot remember why this happened or where he or she was—10%, 4%.
3. A person feels that he or she is actually flying through the air but does not know how or why—7%, 3%.

4. A person sees unusual lights or balls of light in a room but does not know what causes them or whence they came—6%, 2%.
5. A person finds puzzling scars on his or her body, but neither the person nor anyone else remembers how or where the person received the scars—6%, 2%.

A total of 2% of those surveyed endorsed at least four of these experiences—a cutpoint Jacobs (1992) believed indicates that the person is likely to have been abducted by UFOs. In fact, most people who have such experiences probably shrug them off and attribute them to some minor sleep disorder—which is almost certainly what they are (Baker, 1992). For a few individuals, however, these experiences are both anomalous and frightening—the fright compounded by the fact that they are anomalous—and the individuals seek a different explanation. And here is where the attribution process begins.

Note, first, that these experiences are high in distinctiveness and low in consistency (i.e., they rarely happen) and also low in consensus (i.e., they rarely happen to other people). According to H. H. Kelley's (1967) covariation calculus for causal attribution, as summarized by Brown (1986), such a pattern drives attributions toward an unstable interaction between the person and the situation. Therefore, the person will search for an explanation involving both himself or herself and some element of the environment. Something happened to him or her, but not to anyone else. The social uniqueness of the experience itself might be sufficient for seeking a cause that is fittingly unique.

In addition to normative inference rules, several other processes will also drive the person's attention toward the environment. For example, the person is attempting to explain his or her own anomalous experiences rather than those of another person; accordingly, the self-other difference in causal attribution (Jones & Nisbett, 1972) will lead the person to focus on environmental rather than personal factors. Factors such as contiguity, precedence, and salience (H. H. Kelley & Michela, 1980) will lead the person to connect his or her anomalous experience to other recent anomalies.

Other judgment heuristics (Kahneman, Slovic, & Tversky, 1982; Nisbett & Ross, 1980; Sherman & Cortsy, 1984) might also come into play. The experiences to be explained are strange and unpleasant; therefore, according to the representativeness heuristic (by which causes resemble their effects), the cause must also be strange and unpleasant. What could be stranger, and more unpleasant, than abduction by extraterrestrials engaged in invasive medical procedures? In view of the amount of media attention given to UFO abductions since publication of Strieber's (1987) *Communion: A True Story*, and especially in view of the controversy

over Mack's (1994) work, UFO abductions would seem to be readily (and increasingly) handy as explanations of anomalous experiences. The publication of *Michelle Remembers* (Padzer & Smith, 1980) appears to have played a similar role in the current epidemic of satanic (or sadistic) ritual abuse. Certainly the details of these experiences, as publicized in the UFO literature, offer easy simulations of how these anomalous experiences come to pass. As research on implicit memory suggests, the causes of false memories are not easily available to conscious recollection (Jacoby, C. M. Kelley, & Dywan, 1989), and it is unlikely that those who have heard or read accounts of UFO abductions would be able to point to them as sources of influence. After an explanation is generated, of course, it might be maintained by processes of anchoring and adjustment as well as by confirmatory bias, other inefficiencies in hypothesis testing, and mere repetition and social support.

Thus, given the occurrence of anomalous experiences, and the basic human motivation to engage in explanatory activity, a whole host of cognitive factors involving memory and judgment comes into play, which, when combined with ordinary social influence processes, might lead some individuals to conclude that they have been abducted by UFOs.

What we question is the believability of Newman and Baumeister's linking such a phenomenon to sadomasochism. Abduction by aliens is an attribution that is likely because many of the pieces that can lead to it are in place—there are existing accounts of alien abductions (and the number of reports appears to be a function of highly publicized accounts); the inexplicability of the feeling of being missing fits well with a story involving being away; and the prevalent human fear of all alien encounters (e.g., with members of unfamiliar ethnicity or culture) might account for the fear content of the stories. The sexual component might equally easily be attributed to the repression that still keeps sexual matters outside the purview of ordinary conversation, and moments of uncertainty about one's physical location might simply provide the opportunity for thinking and articulating thoughts about sex and sexuality. We do not believe that sadomasochism is more prevalent in the United States than in other parts of the Western world, and, yet, as Newman and Baumeister point out, the UFO syndrome is very much a phenomenon restricted to the United States and the United Kingdom. We admit that the link between tales of UFO abduction and sadomasochism is a creative one, but it is probably the case that more mundane explanations capture the reality of such experiences. What is important about Newman and Baumeister's target article is not the explanation they offer but rather that they have alerted us to a class of phenomena to which psychologists should pay attention. From a systematic analysis of such events, a great deal can be learned about how humans attribute cause and weave narratives and about the power of

social influence processes; the unconscious contagion of memory; implicit theories of the nature of self, humans, and foreigners; and the power and pervasiveness of "effort after meaning."

A variety of naturalistic hypotheses concerning UFO abduction narratives have now been proposed, many of which were summarized by Baker (1992) and Bryan (1995). From an anthropological point of view, reports of UFO abductions might be contemporary versions of a ubiquitous form of folklore—narratives of capture by supernatural beings. From a neurological point of view, UFO experiences might be related to naturally occurring bursts of electromagnetic energy that affect neural functions of those nearby. It has been suggested that stories of UFO abduction are actually screen memories for child sexual abuse, although some argue, in turn, that memories of child sexual abuse are themselves screen memories for UFO abduction; in either case, uncorroborated recollections of one type of event are taken as evidence for uncorroborated inferences about another type of event. Perhaps UFO abduction reports are quasi-delusional products of the attributional process. Perhaps, as Newman and Baumeister argue, they are attempts to escape the self. Whatever they are, they should not merely be dismissed as evidence of individual credulity or lunacy, of mass hysteria, or of our society's increasing antiscientific preoccupation with the supernatural and the paranormal. They are interesting social-psychological phenomena, and, as with the June bug, explaining them in naturalistic terms and demystifying them ought to be the business of social psychologists.

### Note

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