BOOK REVIEWS

The UFO Enigma: A New Review of the Physical Evidence by Peter A. Sturrock. New York: Warner Books, 1999. 404 pp. \$23.95. ISBN 0-446-52565-0.

Are UFOs real? What a silly question that is! UFOs are at least as real as unicorns, and maybe as real as protons. (Now, don't ask me whether protons are real!) Everyone knows what a unicorn is, but as far as I know—which isn't very far—even in our Society there are no claims that there are, or even were, actually existing unicorns anywhere. But UFOs are another story; there is no question at all that they are real. Unidentified Flying Objects. They are deeply ingrained in the common culture, and images of their supposed occupants are everywhere. Indeed, Unidentified Flying Objects have been companions of humans for probably as long as dogs. Phil Klass makes money off of them! It doesn't get more real than that.

But are they visitors from extraterrestrial civilizations? That is another question. And it is a question like no other! It is a question that has intrigued me since I was a graduate student at Princeton in the 1960s. What appealed to me about it then, and what appeals to me about it now, is that with no violation of scientific laws whatsoever, we are placed in a position where the impossible is possible. That is a direct consequence of the simple point, made most eloquently by Sir Arthur C. Clarke, that sufficiently advanced technology is indistinguishable from magic. If there are civilizations out there in our galaxy, then those civilizations are hundreds of millions of years in advance of our own, and their technology will be such that we are entirely at their mercy: They can run rings around us. And furthermore, if they exist at all, they should be here. A no-brainer. And furthermore, it is hard to believe that they don't exist, although equally clearly that is possible.

Once I realized all of that, I was hooked. The situation was (and is) an intellectual delight. Totally impossible to disprove, yet entirely possible from a scientific perspective. As I have gotten older, I have gotten more interested in UFOs, and my views on the likelihood of their "actual" reality have changed. I have realized more and more deeply that while the conservative position scientifically is of course that they should be assumed to be *not* extraterrestrial visitors—and that extraordinary claims *do* require extraordinary proofs—the *conservative* position, culturally and militarily, is that UFOs *probably are* actually extraterrestrial visitors, and that we would be well advised to assume that they do not wish us well. Any other opinion is liberal foolishness.

So, what do we do next? Well, all the while that I have been having my self-indulgent intellectual fun, Professor Peter A. Sturrock, in contrast, has been

walking the walk. He has proceeded, behaving as the quintessential scientist, and has actually started a journal—the present one, of course—to allow people to treat UFOs (and other non-standard phenomena) via the standard scientific method. Now it may be true—in fact I think it is—that the standard scientific method is not applicable to phenomena such as UFOs, but the fact remains that it is the best tool that we have for systematic inquiry of any kind, and we are better off using it, rather than instead, say, just sitting back and enjoying intellectual games, as I have admitted is unfortunately my own predilection.

But Peter Sturrock has taken other steps as well, always staying within the strict confines of ordinary, mundane, scientific procedure. He long ago took a poll of members of the American Astronomical Society as to their views on UFOs (with surprising results, which are briefly reviewed in the present volume). And he engineered a study of the UFO physical evidence, with a view to determining the nature of UFOs. It is this most recent activity that forms the focus of the book that I review.

Sturrock caused a panel to be formed (with the help of the sponsorship of Laurance S. Rockefeller, who provides a brief foreword to the book), before which some of the physical evidence regarding UFOs was exhibited over a period of days in 1997. The panel was composed of nine distinguished scientists who did not have extensive prior involvement with UFOs.

The panel concluded that if evidence of extraordinary things is examined and considered, there is the possibility that new scientific knowledge will result. And Sturrock points to that conclusion as the success of the panel's work. And it is a success, because generally such evidence has not been examined and considered in the past. For example, today scientists under NSF sponsorship scour Antarctica for meteorites from Mars, while in Thomas Jefferson's time, scientists declined to look at stones that were alleged to have fallen from the sky (of all absurd things!).

Some panel members drew an important contrast between UFOs (not respectable, let's face it) and SETI (the Search for Extraterrestrial Intelligence), which is now widely regarded as a highly respectable activity for the professional scientist. In the case of UFOs, the researchers are usually dedicated amateurs; in the case of SETI, they are overwhelmingly professional astronomers. Those panel members implied that UFO research should be professionalized. To do that takes money. How did that (the appearance of money) occur with SETI, which not so long ago was widely regarded as being in much the same category as is UFO research today? Well, not through federal funding! I myself had the pleasure of visiting Capitol Hill, back when I was Deputy Director of NASA's Astrophysics Division, to report to Senator Proxmire's aide in anticipation of the award (which duly followed), of the Golden Fleece to NASA's proposed SETI program. Federal funding, despite this, did occur for a while, but then ceased. Private funding supervened, and continues today.

I expect that private funding for full-blown UFO research would be quite possible, viewed simply financially. The money is there. I suspect that what

we have here is a classic chicken-and-egg situation. Private donors do not want to be regarded as suckers, providing the wherewithal such that hobbyists can gallivant around the country "interviewing witnesses." On the other hand, I suspect that if a truly professional effort to elucidate UFOs could be mounted and run in a disciplined and coherent fashion, the funding would be there to sustain it. And the effort would not demand rapid success, any more than the failure of SETI, thus far, to return the prize, has dampened *that* effort. No, it would merely demand clear professionalism, fiscal transparency, and a coherent plan. Such an effort would be a wise activity for the human race to undertake.

Wise, because we are so young. Wise, because it is a *conservative* policy. Wise because we need to know all we can about who we are and what is going on. I am sometimes almost terrified at the utter naiveté of *us*; you, me, and all those others, our happy little gang of six billion nitwits. We are so self-assured in our petty knowledge. We always know, of course, that we were wrong *before*, but are sure that we are not wrong *now*. Again, the *conservative* tack is to assume that we are dead wrong about all of our fundamental assumptions until proven otherwise. Inexpensive insurance policies, such as mapping the tracks of the Earth-crossing asteroids, and relentlessly tracking down bizarre stories of aliens, should be a very high priority, if only because such efforts are so inexpensive compared with the potential consequences of *not* doing them. Insurance is cheap; in contrast, failure to pay small insurance premiums can be, sometimes, utterly deadly.

Should you buy this book? No. Members of the general public should buy this book, and scientists who know nothing of UFOs should certainly buy this book, but subscribers to the present journal probably do not need to buy, or even to read, this book. That of course follows from the nature of the book, which describes a presentation of old evidence to naïve scientists, and which does a few other things, including yet another rehash of the profoundly flawed Condon report on UFOs. Probably most readers of this journal are already thoroughly familiar with most of the material presented, and will not be surprised at the scientists' reception of it. Did I learn anything myself through reading this book? Actually, one thing that did strike me rather forcibly: I quote, "After twenty-one years of activity, the GEPAN/SEPRA files now contain about 3,000 UFO reports supplied by the gendarmerie. About 100 of these reports were found to justify specific investigations. Of this number, only a few cases remain unexplained today." This long-term and serious French effort impressed members of the panel, and it impresses me, as perhaps the most professional effort ever undertaken to treat UFOs seriously. If the result ended up so thin, why should I continue to be interested in the subject? I would have appreciated more detail on how few is few, and on how solid those few are.

The second half of the book contains some of the "Case Material" that was presented to the panel, including GEPAN/SEPRA material, and this material does reassure me that there is indeed a mystery. I do not know the answer to UFOs, but it is clear that one should not simply dismiss them. I conclude that

Professor Peter A. Sturrock has performed a signal service in creating the review panel and in preparing this book.

RICHARD CONN HENRY Henry A. Rowland Department of Physics and Astronomy The Johns Hopkins University

The UFO Enigma: A New Review of the Physical Evidence by Peter A. Sturrock.

This valuable overview of the technical aspects of UFO investigation and debate (historically the two words are all but synonymous) grows out of a conference held at the Pocantico Conference Center in Tarrytown, New York, from September 29 to October 3, 1997, and a follow-up, smaller gathering between November 27 and 30 in San Francisco. In the first, scientifically trained UFO proponents presented their case to a panel of skeptical but curious scientists. An initially tense confrontation gave way to a degree of mutual understanding and, a month and a half later when the panel met without the ufologists, a cautiously worded public statement endorsing further scientific research and—perhaps most interestingly—explicitly (albeit briefly) criticizing Edward U. Condon (of the 1966–69 Air Force–sponsored University of Colorado UFO Project) and his infamous conclusion that "further extensive study of UFOs probably cannot be justified in the expectation that science will be advanced thereby."

When the statement was released to news media, the result was a burst of surprisingly positive coverage (for example a front-page story in the *Washington Post*). Perhaps unprepared for the attendant publicity and controversy, those panel members who consented to interviews subtly or not so subtly hastened to distance themselves from the subject and effectively to deny that they had said anything of consequence. By the time the affair had run its course, UFOs remained where they were to start with: out in a wilderness toward which, as far as elite opinion is concerned, only fools would rush. It will be left to a later generation of scientists to do the collective head-shaking about how a question of such manifest interest and potential importance engaged so very few scientists of the latter twentieth and early twenty-first centuries. Fortunately, this book, with its useful summaries of evidential cases and attendant evidence, will remain to enlighten those who will take up the finally unavoidable discipline of UFO science—no doubt, sad to say, long after all who participated in the two conferences are gone.

Neglect of the UFO phenomenon by science probably owes as much to the late Harvard astronomer Donald H. Menzel (1901–1976) as to any other single individual. Menzel became the first major American scientist not only to express a firm, consistent, relentlessly negative opinion of "flying saucers" but to devote a whole book (with the imprint of a major university press [Harvard]

yet) to them in the very early years. In *Flying Saucers* (1953), Menzel—who, it should be noted, conducted no field investigations, basing his speculations on what he gleaned from newspaper clippings and Air Force documents—declared that all sightings could be explained, mostly as meteorological phenomena compounded by naïve witness testimony. Though even Project Blue Book, hardly friendly to UFOs as extraordinary anomalies, took issue with this reading, it did not have the ear of Menzel's colleagues or his considerable clout in the highest offices of science. Eventually, two other American scientists of note, astronomer and Blue Book advisor J. Allen Hynek and atmospheric physicist James E. McDonald, would take on Menzel and, though they may have won the argument on points, lost it in all other regards.

Thus, sympathetic UFO books by working scientists are rare. McDonald died before he could write his. Hynek produced the classic *The UFO Experience* (1972) and a critical retrospective on Blue Book, *The Hynek UFO Report* (1977). Jacques Vallee's *Anatomy of a Phenomenon* (1965) and (with Janine Vallee) *Challenge to Science: The UFO Enigma* (1966) are worthy efforts to make scientific sense of an elusive phenomenon. Bruce Maccabee and Richard F. Haines have published well-researched books and monographs. Unfortunately, these came from small, specialty publishers, and few outside ufology are likely to be aware of them. Happily, Sturrock's *The UFO Enigma* will not be so hard to find.

Most UFO literature is ephemeral, and most of it would try the patience even of the well-meaning, inquiring scientist. Still, it is discouraging to read, "The panel was intrigued to learn that ground traces appear to be associated with some UFO reports" (p. 96). If even the scientists assembled in Tarrytown did not know that such phenomena have been reported—and, with rare exception, ignored by all but helpless witnesses and resourceless ufologists—throughout the five decades of the UFO era, perhaps much of the behavior of mainstream science that seems otherwise inexplicable begins to make a kind of sense. To what, I am sure, what will be two or three generations of scientists' everlasting embarrassment.

JEROME CLARK 612 North Oscar Avenue Canby, Minnesota 56220 jkclark@frontiernet.net Rare Earth: Why Complex Life is Uncommon in the Universe by Peter D. Ward and Donald Brownlee. New York: Copernicus/Springer Verlag, 2000.

Here Be Dragons: The Scientific Quest for Extraterrestrial Life by David Koerner and Simon LeVay. New York: Oxford University Press, 2000.

Life Everywhere: The Maverick Science of Astrobiology by David Darling. New York: Basic Books, 2001.

Interest in the existence of extraterrestrial life continues unabated at both the public and professional levels. On Earth, discoveries of life in extreme environments are now commonplace, while theories of the origin of life on our home planet are debated in increasingly sophisticated detail. In our solar system the analysis of Martian meteorite ALH 84001 has given rise to five years of contentious but enlightening debate, and the possibility of water on several Jovian moons has fueled speculation of life outside the traditional "habitable zone" of our Sun. Extrasolar planets continue to be discovered at a steady rate (60 have been announced to date, with the nature of some still in contention), although Earth-size planets still elude detection around normal stars. In recent years the Search for Extraterrestrial Intelligence (SETI) has expanded its approach from radio to optical regions of spectrum, and entire arrays of radio telescopes are being built around the country to research life's past, present, and future in the universe (though by curious Congressional mandate, NASA has not funded SETI research since 1993). In the last year not just one, but two respected publishers have announced plans to launch astrobiology journals. And the popular media excitedly reports the latest results to an eager public.

All of this is no surprise. The outcome of the astrobiology endeavor, after all, bears on our place in the universe, a subject of perennial interest. A universe full of life—what I have termed elsewhere a "Biological Universe"—is a world view of its own with profound implications. Increasingly, the social, philosophical and theological promise and problems of astrobiological success are debated. A good part of science fiction literature, as well as the extraterrestrial hypothesis of UFOs, may be seen as ways of working out this world view in popular culture. The scientific arguments are passionate and full of interest precisely because of these high stakes. That the subject is at the very limits of science makes it even more interesting, as philosophy, metaphysics and even theology mingle with empiricism in ways not always obvious to the public, or even to scientists themselves.

The three books under review come to quite different conclusions regarding this world view, and are a vivid illustration of diverse interpretation of the same evidence. As implied by its title, the most optimistic of the books is Darling's *Life Everywhere*, which states up front that "almost beyond doubt, life exists elsewhere." The author, a writer with a PhD in astronomy, is clearly enamored of his subject, and indeed it is difficult not to be. *Here Be Dragons* is also an optimistic assessment of the biological universe. The authors, an as-

tronomer and a biologist, describe themselves as "professional skeptics" who admit there is no direct evidence for life beyond Earth, doubt that ETI has visited Earth, and admit the possibility that we are alone. Nevertheless, they venture into the "rough seas of speculation" and conclude in the end that life is likely: "human surely not, but maybe someone wiser."

Both books are written at a similar "intelligent layman" level, and cover much the same ground: the latest theories and experiments on the origin of life, the search for life in the solar system, and the search for extrasolar planets. Curiously, Darling says very little about SETI, perhaps because it is not part of astrobiology as currently programmatically defined at NASA. But both touch on the relevance of the debate of concepts like artificial life and Gaia, with Koerner and LeVay sensibly remarking that they dislike the "New-Agey" branch of Gaia expressed in books such as *Gaia* and *God: An Ecofeminist Theology of Earth Healing.* Although both books are optimistic with respect to a biological universe, Koerner and LeVay are more cautious in seeing the underlying assumptions that enter into their conclusions.

Rare Earth is by far the most skeptical of the three books and is itself a rarity: a book that concludes that, while microbial life may be abundant in the universe, intelligent life is rare, resulting in what might be called a weak, rather than a strong, biological universe. Although the authors may not know it, theirs is the type of book that comes along about every 50 years or so. In 1853 the British philosopher William Whewell bucked prevailing opinion by arguing in Of the Plurality of Worlds that the locations where life might flourish in the universe are very restricted. In 1903 A. R. Wallace, the cofounder with Darwin of the theory of evolution by natural selection, updated the argument in Man's Place in the Universe: A Study of the Results of Scientific Research in Relation to the Unity and Plurality of Worlds. Wallace used the latest research in astronomy and biology to come to the distinctly non-Darwinian conclusion that "our position in the material universe is special and probably unique, and ...it is such as to lend support to the view, held by many great thinkers and writers today, that the supreme end and purpose of this vast universe was the production and development of the living soul in the perishable body of man." Despite the optimism generated by Lowell and the canals of Mars, by 1940 British astronomer Royal Sir Harold Spencer Jones was almost as pessimistic as Wallace in Life on Other Worlds, particularly in light of the Jeans-Jeffreys hypothesis of the rarity of planet formation. Once that hypothesis was discarded, later editions of Spencer Jones were more optimistic, and since the 1950s and 1960s, with the writings of Harlow Shapley, Carl Sagan, Frank Drake, and a host of others, optimism for a Biological Universe has been on the rise. Thus the shock and media attention when Ward and Brownlee pronounced in Rare Earth that ETI might be rare.

Unbeknownst to Ward and Brownlee (since they do not seem to be aware of Wallace's book), they repeat many of Wallace's century-old arguments regarding what is essential to a habitable planet and complex life: the distance of the planet from its Sun, the right planetary mass, the tilt of its axis, the right

amount of ocean, the right atmosphere, the essential biogenic elements, biological evolution, the right position in the galaxy, and so on. They add new arguments based on recent research, including the need for a large moon to stabilize the Earth's tilt; no global sterilizing impacts after an initial period, perhaps necessitating a Jupiter-like giant planet to clear out comets and asteroids; and the need for plate tectonics as a regulator of global climate and promoter of biodiversity. Ward and Brownlee add these elements to the famous Drake Equation for the number of technological civilizations in the Galaxy, resulting in a "Rare Earth Equation."

Yet, what have Ward and Brownlee proven? They are careful at times to couch their discussion in terms of the Rare Earth "hypothesis." With that I have no problem. But after stating that their additional parameters in the Rare Earth Equation "are known only in the sketchiest detail," they go on to conclude that "it is our contention that any strong signal can be perceived, even when only sparse data are available. To us, the signal is so strong that even at this time, it appears that Earth indeed may be extraordinarily rare" (p. 275). With this declaration, they transform hypothesis to highly probable fact, reflected in the subtitle of their book "why complex life is uncommon" rather than "why complex life may be uncommon" in the universe. Surely the sweeping claim that the Earth is rare in the universe is extraordinary and breathtaking in its scope, yet the evidence does not match the claim any more than did Wallace's a century ago. Surely Sagan's dictum that extraordinary claims require extraordinary evidence applies to negative claims as well as positive ones. For each Rare Earth argument there is a counterargument; Darling provides some of them in his book. Thus Ward and Brownlee's argument seems to me no more conclusive than that of Frank Tipler, who claimed a decade ago he had proven from the "Where are They?" Fermi Paradox that extraterrestrials do not exist, since they should have arrived on Earth long ago given the timescale of the universe. Tipler's conclusion that all SETI programs are a waste of money impressed politicians, but not most scientists. I expect "Rare Earth" as fact, rather than as hypothesis, will have the same reception.

Rare Earth is a book that needed to be written. Science must look at all sides of the debate in all the detail the data will merit. But I cannot help comparing Ward and Brownlee's method and conclusions to those of Wallace, also a careful scientist who used the latest evidence from biology and astronomy to conclude not only that Earth harbored the single case of intelligent life in the universe, but also that it was very near the center of the universe! Ward and Brownlee seem to have proven that complex life on Earth does not, or should not, exist. Yet, here we are! This leaves the reader at least three options: (1) the Earth is the result of miraculous intervention; (2) the Earth is extremely rare; or (3) we do not yet have enough data to warrant such a conclusion. I come down firmly in favor of option (3). We have indeed learned a great deal in the century since Wallace, but not enough to make the sweeping claim of Rare Earth. Moreover, while Ward and Brownlee avoid some of Wallace's more obvious metaphysical assumptions, they undoubtedly have introduced some of

their own. Darling, whose book is recent enough to include a chapter on "Rare Earths and Hidden Agendas," turns up the interesting fact (p. 111) that an astronomer who had significant input into the Rare Earth arguments (not one of the authors) has also written extensively on intelligent design in the universe and is an active proponent for such design. Anthropocentric thinking and metaphysics in science are not as dead as we might think.

The meaning and impact of the Rare Earth hypothesis also hinges on the definition of "rare." With billions of Sun-like stars in the galaxy and billions of galaxies, even after paring down by the Rare Earth Equation, surely some planets will have conditions similar to Earth. I would find 100 civilizations in the Galaxy only slightly less interesting than 1000. Moreover, while other planets may not be similar to the Earth, surely in the wake of recent discoveries of life in extreme environments at the microbial level, we should be open to the possibility that intelligence may have found different paths than on Earth. There may be as many paths to intelligence as to microbial life. Earth has been only a finite laboratory, and one can argue how many times intelligence has arisen even here.

In the end, the jury is still out. We do not yet know whether we live in the strong biological universe of Darling, Koerner and LeVay, or the weak biological universe of Ward and Brownlee. Or, for that matter, in a purely physical universe in which we are the great exception. Most scientists understand this, but one can only hope that the book does not have the same effect as Tipler's work, in which he pushed the Fermi paradox to the extreme conclusion that no further search was necessary. This claim, while flying in the face of empirical methods of science, nevertheless aided Congressional efforts to bring federal funding for SETI to a screeching halt in 1993, amidst irrelevant ridicule about UFOs and Martians. Even with the outrageous "is," rather than "maybe," in the subtitle of *Rare Earth*, politicians should realize that the authors support the current thrust of astrobiology; in fact their home institution at the University of Washington is a pioneer in the field.

Even the discovery of microbial life would be the greatest event in the history of science, allowing terrestrials at least to glimpse the principles of a more generalized biology if informed by an independent second genesis. Meanwhile, I predict that both astrobiology and the search for ETI will have careers long past the 21st century and continue in the vanguard of the long and venerable tradition of the search for ourselves. Koerner and LeVay explicitly state the optional underlying assumptions of the search: the Copernican-based "principle of mediocrity" that there is nothing special about our view of the universe, or the belief that we do have a privileged view, embodied in the anthropic principle. Alas, we cannot know which of these metaphysical principles is true—until we look.

Steven J. Dick U.S. Naval Observatory Washington, D.C. dick.steve@usno.navy.mil **UFOs and Abductions: Challenging the Borders of Knowledge** edited by David M. Jacobs. Lawrence, KS: University Press of Kansas, 2000. 382 pp.

A serious book about UFOs, published by a university press, may strike many academics as puzzling and incongruous. But should it? One consistent theme throughout this collection of scholarly essays is that the UFO phenomenon, no matter what it may be, raises serious issues that deserve scientific and scholarly attention. The ten contributors include eight academics from a variety of disciplines and two other authors who have researched UFOs carefully and published extensively about them. The content of these essays demonstrates that there is a substantial body of documented information about UFOs and much thoughtful analysis and interpretation. Why should so many scholars and scientists dismiss this whole area of inquiry, usually without taking the time to examine it?

Jacobs has a brief introduction pointing out the need for serious attention to this area of inquiry and the failure of qualified researchers to meet that need. Then, in Chapter 1, Appelle summarizes the relation of academia to ufology—its history and present status. He covers briefly a wide range of research by academics in the "Invisible College" that does take this subject seriously, as well as major historical events, such as the 1969 Condon Report, the 1969 AAAS Symposium on UFOs, the 1992 Abduction Research Conference at MIT, and the 1997 Physical Science Review Panel.

Westrum focuses on six important figures in the history of UFO research—Menzel, Sagan, McDonald, Hynek, Vallee, and Condon. He examines the influence of each one and some of the ways in which they exerted that influence—e.g., posing key questions, gathering empirical data, serving as an exemplar or model, and creating organizations or intellectual enterprises. Some (Menzel and Condon) opposed research and influenced others to ignore UFOs. Others—especially McDonald, Hynek, and Vallee—exerted influence for serious research.

Donderi's excellent, provocative chapter analyzes three frameworks for examining and interpreting the UFO evidence—science, law, and military intelligence. He argues, on the basis of Kuhn's philosophy of science, that the scientific framework is systematically unsuited to the task of interpreting UFO evidence. In his analysis, legal procedures for assessing evidence would probably win the case for ufology on the criterion of preponderance of evidence. The modes of operation of military intelligence are, in his opinion, the ones most likely to make sense of the UFO evidence—and may already have done so but kept it secret. His thoughtful analysis is well worth reading, and, whether one agrees with his conclusions or not, his analysis is guaranteed to provoke thought and argument.

Swords focuses on the entanglement of ufology with the cold war and the military. He presents a densely detailed factual history of military and other intelligence activity concerning UFOs. Although there were clearly great divi-

sions and conflicts within these services about how to handle UFO evidence, by and large they did not treat that evidence in a scientific context but in a context of national security. The net effect of this has been to follow the recommendation of the Robertson panel to debunk and ridicule the UFO evidence, rather than try to understand it. To my eyes at least, this chapter contains much interesting new detail about the tangled history of the military and intelligence agencies handling UFO evidence.

Clark's chapter is another historical treatment, this one focusing on the rise and decline of the extraterrestrial hypothesis over the 19th and 20th centuries. This history covers many aspects of UFO history, including 19th-century airship reports, the 1947 Kenneth Arnold sighting, the important influence of Donald Keyhoe, the occultist contactees (such as Adamski and Van Tassel), and Peter Sturrock's Physical Science Review Panel in the Fall of 1997.

Bullard's chapter focuses on the relation of UFOs to religion and to myth. It is a long, wide-ranging, discursive treatment, informed by vast scholarly knowledge of mythology, and densely packed with provocative ideas and interpretations. Though I found many little gems in this chapter, I had difficulty finding an underlying flow of an argument that puts it all together. Perhaps someone closer to this area of knowledge would see the forest where I see some beautiful trees.

The chapter by Jacobs is an account of the UFO abduction controversy in the U.S. written by one of its most active participants. After summarizing abduction reports of the 1960s, 1970s, and 1980s, he describes the developing arguments among abduction researchers and their differences as seen by an active participant. Part of this is "first-person history," and it is a valuable source for understanding UFO abduction research, including the conflicts and disagreements within the area.

The next chapter, by Hopkins, fits well with the preceding, as he is another pioneer and very active participant in abduction research. While Jacobs focused on the history of this research, Hopkins focuses on the role of hypnosis and the nature of evidence in abduction research. He summarizes assessments of the effects of hypnosis on recall and argues strongly that the abduction phenomenon is not an artifact of hypnosis. He discusses the corroborative evidence that is used to support information from hypnosis—eyewitnesses, photos, physical traces, etc. He also points out that many cases have developed without hypnosis, and an important part of the information in nearly all cases comes without hypnosis.

Mack, a psychiatrist who has worked with many self-reported abductees, describes his approach to this task and his interpretation of the meaning of the abduction phenomenon. He argues that there is powerful resistance to the acceptance of the reality of these abductions because they challenge our culture's fundamental assumptions about reality. He summarizes the basic features that are regularly reported in UFO abductions, and he concludes that no psychosocial explanation fits the observations. In effect, to make sense of this

phenomenon we need to change some of our fundamental conceptions of reality, and that, needless to say, results in powerful resistance to accepting that the abductions really occur.

Persinger's chapter is entitled, "The UFO Experience: A Normal Correlate of Human Brain Function." He is conducting research in the laboratory in an effort to generate in human subjects the same subjective experience as is reported by UFO abductees, and he claims success in producing some elements of that experience. Apparently the argument is that producing the experience in this way will support a hypothesis that the abduction experience is strictly a psychological/neurological one, produced in some way by forces in the environment such as electromagnetic fields. Although this is a difficult chapter for anyone not trained in neurological science, it is very provocative in its implications. Certainly it leaves completely unanswered important questions about what kind of field outside the laboratory impinges on the brains of so many people, what produces that field, and how it manages to generate so many matching details in the recollections of widely disparate people. Though I applaud the idea of this line of research, it seems to me at this point to raise more questions than it answers.

Jacobs concludes the book with a brief chapter on research directions. There is a wide-open question about what kinds of research might be most productive. Is this a cultural phenomenon, or psychosocial, or neurological, or something totally outside our current body of knowledge, as John Mack suggests? Or perhaps some complex amalgam of these things. Clearly there are psychological, sociological, and historical aspects of this phenomenon that are worthy of study. The whole area of false memory is surely very relevant. And there are important issues for other fields including philosophy, jurisprudence, optical physics, folklore, etc.

Looking now at Jacobs' book as a whole, I find a generally thoughtful, scholarly collection that makes a case that the phenomenon of UFOs is, in the words of McDonald, "an area of extraordinary scientific interest." The volume has the strengths and the weaknesses of most essay collections: a diversity of perspectives, a variety of provocative issues raised, but little coherence. The unifying theme is that UFOs constitute an important anomaly that deserves far more serious research attention. Perhaps it is asking too much, in an inchoate and anomalous field such as this, to expect any more coherence than that. Academics—indeed all open-minded intellectuals—should read this book and contemplate it carefully. There is much misinformation presently circulating among those who refuse to look at the evidence themselves, and the history of science is full of cases of refusal to face and deal with anomalies—and of major advances in knowledge when the anomaly is finally acknowledged and confronted.

ROBERT L. HALL Emeritus Professor of Sociology University of Illinois at Chicago **UFOs and Abductions: Challenging the Borders of Knowledge** edited by David M. Jacobs.

Out of this World: Otherworldly Journeys from Gilgamesh to Albert Einstein by I. P. Couliano. Boston: Shambhala, 1991. 287 pp.

At the time when the editors of JSE suggested that I review UFOs and Abductions, I was absorbed in reading Professor Couliano's book Out of this World. I was struck by the parallels between the subject matter of these two equally serious works, and even more by the fact that they were written for two communities of researchers working in almost complete disregard—and indeed, frequent disdain—of each other. What this alienation says about our supposed age of openness in research and increasing interdisciplinary debate in academia is a fascinating question best left for the sociologist or the historian of science. Whatever its cause, I hope to highlight the fact that it is deplorable.

A Neglected Field of Research

The reluctance of academic scholars to become involved in the study of UFOs and abductions is a central theme of the collective work edited by David Jacobs. He makes it clear that this study "can easily encompass the entire breadth of intellectual inquiry." With contributors as qualified as Stuart Appelle for his overview of academic attitudes toward the phenomenon; Ron Westrum for his analysis of the formative years of the research; Don Donderi for its legal, scientific and military framework; Michael Swords and Jerome Clark for the early UFO age; and Thomas Bullard for the mythical backdrop of the reports, *UFOs and Abductions* opens with a welcome diversity of viewpoints that underlines the relevance of the subject to many disciplines.

These sections serve as an introduction to the meat of the book, written by three authors who have been intensely involved in investigations and theories of abduction events, namely David Jacobs—himself the author of a classic historical study and two earlier abduction books: Secret Life (Jacobs, 1992) and The Threat (Jacobs, 1998)—Budd Hopkins and John Mack. Following their contributions, Michael Persinger offers a contrasting statement from the point of view of neurological research. David Jacobs closes with suggestions for future research that bring the reader back to his central theme, emphasizing "the existence of a potentially important phenomenon" while recognizing that "the present volume displays some of the deep divisions in UFO and abduction research." Although the knowledgeable ufologist is unlikely to find anything really new in this compilation (the contributors are widely published and are not reporting here on any novel research), its strength lies in the fact that, as a summary of the extant literature, it highlights mysteries that are indeed begging for scientific scrutiny.

Two Problems, Many Viewpoints

In his introduction Jacobs proposes a statement of the dual problems of contemporary UFO research: (1) all the work done by ufologists over the last 50 years "has not solved the problem of building bridges between them and the scientific community," and (2) the key issue is to decide whether people "are accurately recalling real events, or are they generating psychologically based accounts?"

Stuart Appelle begins the book with a good historical summary that will be especially useful for the curious reader who is new to the field. It is weak in at least two places, however: it repeats the history of the Robertson panel—that turning point in official attitudes towards UFO reports—in terms that have become standard in statements about the phenomenon but fail to alert us about more recently discovered documents, such as the long-secret Battelle memorandum that was unearthed in 1992 (Vallee, 1992). This document recommended in the strongest terms that the eminent panel *not be given access* to all the data in the possession of the CIA and the Air Force. It also hinted at the existence of a covert project, quite separate from Blue Book and the Robertson panel, whose extent is now being analyzed by a few historical researchers. This section also fails to note the progress made in physical analyses of UFO events over the last ten years or so, as evidenced by presentations at the Pocantico symposium, the French Gepan project and other places (Sturrock, 1999).

Ron Westrum's chapter entitled "Limited Access" offers the observation that "science in the making is dynamic": in changing times it can be anything but dispassionate and objective. To illustrate this point he reviews the contributions and motivations of six natural scientists whose work influenced early research directions in the field, namely Donald Menzel, Carl Sagan, James McDonald, J. Allen Hynek, the present reviewer and Edward Condon. The parallels are as striking as the differences, and certainly prove Westrum's point that "there are many barriers to the conduct of this research." He astutely notes in passing that "Menzel's level of commitment to this subject is curious and remains unexplained."

As the sole survivor from the group selected by Westrum, I may be forgiven for questioning his reference to me as a "theorist," a term that fails to reflect the extensive field research I have conducted (Vallee, 1990). Even in the early years I had met with Blue Book witnesses as an associate of Hynek and had spent two days in New Hampshire with Betty and Barney Hill. My book *Confrontations* highlights 47 first-hand cases of close encounters and abductions among 100 selected field investigations on three continents.

More generally, the chapter gives the misleading impression that most independent researchers, like the "six natural scientists" studied by Westrum, somehow vanished from the field some 20 years ago, and that this vacuum was filled by abduction specialists who did all the subsequent work. It is to be hoped that Westrum's important contribution will be expanded into a wider study of scientists who have participated in shaping our ideas about the phe-

nomenon, including such prominent researchers as Sturrock or Haines in the United States and Poher in Europe, all of whom are still alive and could testify about their experiences in the academic and scientific milieu.

The Nature of Evidence

Don Donderi continues the compilation with a statement of the UFO problem in terms of science, law and the military, stressing the question of what constitutes "evidence." He illustrates the point brilliantly by staging an imaginary trial in which the believer and the skeptic take opposite sides. Donderi poses another key question: "How would military intelligence deal with the UFO-related information?" Yet when he discusses the history of the field he, too, oversimplifies the actual role of military intelligence in shaping the Robertson panel. He cites standard sources like Ruppelt and Condon but remains silent (like other contributors in this volume) about the secret role played by Battelle and by the early developers of the science of mind control and psychological warfare. The same remark could be made about Swords' chapter on "UFOs, the military and the early Cold War era." His description of the inner workings of the Pentagon as it tried to come to grips with reports from citizens and from its own personnel is as fascinating in its human aspects as it is chilling in its implications for decision-making at the highest level. Swords is the only contributor who brings up the topic of psychological warfare, but again he stops short, rather than delving into its implications. One would have wished to know more about the use of the abduction theme in the manipulation of individuals by the military, such as was evident in the case of physicist Paul Bennewitz. In an effort to take his attention away from a classified project, agents of the Air Force led him to believe that the strange lights he was tracking over Kirtland Air Force Base were involved in alien encounters. Was that an isolated incident?

Jerome Clark covers some of the same historical ground in his chapter titled "The extra-terrestrial hypothesis in the early UFO age," retracing the steps of Kenneth Arnold and the early Contactees up to the time when Donald Keyhoe, of NICAP fame, channeled the public debate into scientific and policy-based arguments in the 1950s. These are all useful summaries of documented facts, but it is clear that the complete story has not yet been told and that much is left for a new generation of UFO historians to uncover.

At this stage in the book the reader may be forgiven for feeling a bit weary of hearing about the history of the field, which has now been covered in five different ways by five contributors, all of whom make reference to the intricacies of project Blue Book, the Robertson panel, the Kenneth Arnold sighting and the Condon study. The chapter by Thomas Bullard, entitled "UFOs: Lost in the myths," therefore comes as welcome relief.

Bullard wonders why students of religion shy away from a subject that ought to attract them in droves. He gives an excellent definition of "myth" and goes on to explore parallels between UFO reports and shamanistic traditions,

witchcraft and fairyland abductions. Recounting the Native American story of Handsome Lake's sky journey and his tour of heaven and hell around 1800, he observes that the tale "borrows from Seneca religion and Christian influences, but the parallels with abduction accounts are plain."

Bullard brings the subject up-to-date with an analysis of the Heaven's Gate collective suicide, in which the believers thought "their spirits could ascend to a UFO traveling in the wake of the Hale-Bopp comet." At this point the irresponsible attitude of some notable ufologists who rushed before the media to capitalize on the alleged mystery of Hale-Bopp and the supposed cover-up of the elusive spacecraft by NASA (a spacecraft that turned out to be nothing more than an optical artifact in the telescope of an amateur astronomer), could have been exposed. And the fact that the death of the followers of Marshall Applewhite had been forecast by this author as early as 1979 could have been quoted, if only to serve as a demonstration that such cultist movements are amenable to rational analysis, and that potential victims can be alerted against them. Whatever the stimulus, however, the followers of Heaven's Gate stand as a reminder of the powerful spiritual context of the phenomenon (Vallee, 1979).

Abductions Research Revisited

Chapter Seven, entitled "The UFO abduction controversy in the United States," introduces the central topic of the book, which will represent its main attraction to readers. In this chapter Jacobs defines the debate between the "Realists" who argue that "beings from somewhere else are coming to the Earth to fulfill an unknown agenda of which the abduction of humans is central" and the "Positives" who demand nothing less than a revision of the concept of reality. Jacobs places himself in the former group, further defining his view of the phenomenon as "a complex and systematic program of the production of hybrids for an eventual integration into human society." In the second group he places John Mack and others who think that abductions are "harbingers of the onset of positively transformational aliens" who have the best interests of humanity at heart (p. 206).

This clear statement of the present debate constitutes the hinge of this book. Once the problem is posed in this fashion, there is an added attack by Jacobs on the Positive scenario as "based on unproven metaphysical assumptions and incompetent hypnosis."

Hopkins follows with a chapter entitled "Hypnosis and abduction accounts" in which the entire history of the field is, once again, retold, including the Hill case, the contribution of NICAP, and several classic cases. John Mack contributes a chapter called "How the alien abduction phenomenon challenges the boundaries of our reality." Mack is the only contributor who brings in the experience of parapsychological research and physical theories of nonlocality to support his arguments. He also recognizes that the witnesses who volunteer their stories to abduction researchers represent a self-selected population, an

observation that must have significant consequences for the subsequent interpretation of their stories, whether or not hypnosis is used.

Reality and the Brain

The last chapter of the book is written by Persinger, who refreshingly restates the obvious: "All of your experiences are generated within your brain. They emerge from complex, subtle EM patterns created within the intricate, minute interactions that represent your cerebral state." As a consequence, "Any [underlined in the text] stimulus that can induce specific patterns of activity within groups of brain cells can generate experiences that are equally as real and as compelling" as actual events. Persinger goes on to argue that this process offers a natural explanation for the reported effects.

True enough in the laboratory and in very specific conditions, but how can this observation be extended to outdoor, open-field situations? The present reviewer is currently investigating a case involving six male witnesses in four groups, all of whom describe a low-flying object of extraordinary appearance. One of these men suspects that he was abducted during the time when the object overflew his car. I have repeatedly scanned the site and the vicinity for abnormal electromagnetic effects, to no avail. Even if the main witness suffered a personal episode such as described by Persinger, what happened to the others? One man was a mile away, another three miles away from the scene. Yet all describe the object in the same terms. This is the challenge that faces us as researchers, whether we describe ourselves as Positive, Realists, or prefer, as I do, to remain independent of either denomination. Persinger's theory is an important avenue to deepen our understanding of the phenomena, but it has yet to be tested in the field.

What Was Left Unsaid

The reader who is unacquainted with the literature will find *UFOs and Abductions* to be educational and intellectually stimulating. David Jacobs and his co-authors must be congratulated for a superb job of production, with extensive coverage of notes, a bibliography and the indispensable index. (One disappointment is the presentation of selected books, which the publisher ran together in such condensed form as to be almost unreadable, perhaps to save on the number of pages? It contains some notable errors, such as misquoting my own *Forbidden Science* as "*Forbidden Knowledge*"!)

To the more experienced reader, a number of problems do arise with the work. First, one wonders why abductions should stop at the borders of the United States, which only cover less than 5% of the Earth's land mass. While similar reports have been made in Great Britain, South America and other parts of the world, they do not seem to have aroused as much fervor as in the United States. The cultural aspects of differing attitudes toward the problem could have been touched on.

Next is the problem of glaring omissions that could hardly be anything but deliberate. For example the *Journal of Scientific Exploration* is not even cited in the index, although *JSE* has long provided that rare commodity, a neutral venue for discussion of UFO phenomena. Notwithstanding the useful role of the *Journal of UFO Studies*, *JSE* is arguably the only peer-reviewed journal encompassing both ufology and parapsychology, and has published relevant articles about abductions. Some of these articles stood in sharp contrast to those cited in the book, which could have made for interesting debate.

Not only is the *JSE* ignored, but the authors of *UFOs* and *Abductions* are silent on basic findings of parapsychology, which they could have found directly relevant to their investigative work. In that respect it is striking that no one has cited Joost Meerloo's classic works on the communication theory of telepathy (Meerloo, 1964). Meerloo had presented a definitive exploration of "the non-verbal conversation and communication between the unconscious minds of therapist and patient" with observations that seem critical to the methodology of abduction interviews, whether or not they use hypnosis.

Equally disturbing is the fact that the seminal work of Dr. David Gotlib, who founded the *Bulletin of Anomalous Experience* and edited it from 1990 to 1994, has been ignored. Dr. Gotlib is a professional psychotherapist specializing in the treatment of anxiety and depressive disorders. He began working with abductees in the mid-eighties. The *Bulletin* includes articles and letters from most of the contributors to *UFOs and Abductions*, who could hardly be unaware of its role in their community. It has presented the most unbiased framework for a healthy debate about abductions but was frequently at variance with the "leaders" of the field.

More generally, contributions to abduction research made by those who refuse to join either the "Realist" or the "Positive" school, or those who are neither in Jacobs' camp or in Mack's camp (like the present reviewer) are simply treated as irrelevant. Many important contributors to our knowledge of abductions thus fall victim to a subtle form of censorship. They include Dennis Stillings, whose work on the cyberbiology of the experience is central to the issue (Stillings, 1989), and Keith Thompson (1991) whose book on UFOs and the mythic imagination would have deserved at least a passing reference. The cover of Thompson's book included praise from John Mack himself, who hailed the work for its "courageous attack on the boundaries between the material and the psychological, the mythic and the real" (Thompson, 1991).

Even when certain authors are quoted, it is only for some favorable comment about the contributors to the book. Thus French journalist Marie-Therese de Brosses is cited (p. 239) for being impressed with Hopkins' technique, but her skepticism toward other aspects of abduction research is not mentioned. In her well-researched book (De Brosses, 1995), de Brosses had some sharp things to say about the negative impact of the hypnosis process on the lives of abductees she interviewed, yet those comments are ignored.

It is in these missing citations and omissions that we may find a partial explanation for the reluctance of the academic community at large to enter into a

field of research so obviously riddled with selection effects and so slow to acknowledge its previous errors and learn from them.

What Happened to All the Evidence?

Ten years ago the situation seemed very different indeed, and the same writers were making statements that were far more positive about the imminence of a breakthrough. In his introduction to Ed and Frances Walters' book *The Gulf Breeze Sightings*, for instance, Budd Hopkins described their experience as "hard, unavoidable fact." Commenting on the case of the woman he refers to as Kathie Davis in *Intruders*, Hopkins stated that the affair "has yielded more new information—unsettling information, it must be said—about the nature and purpose of the UFO phenomenon than any case yet investigated" (Hopkins, 1987). In his foreword to Jacobs' *Secret Life*, John Mack wrote that "surveys suggest that hundreds of thousands and possibly more than a million persons in the U.S. alone may be abductees." Following Hopkins' investigation of the Linda Cortile affair in New York City it was even reported that U.N. General Secretary Perez de Cuellar had been abducted and that this "Case of the Century" would soon force recognition of the reality of the phenomenon once and for all.

Faced with such strong assertions the impartial scientist reading the literature today may be justified to ask, What happened to all that evidence? The Gulf Breeze sightings and the Case of the Century are rarely mentioned anymore as evidence by ufologists. As for survey responses indicative of abduction, they have actually decreased among the American population. Why has this community made no visible progress if the solution appeared to be so close at hand ten years ago? And if errors of analysis have been made, what lessons are we drawing from them?

Writing in *Secret Life*, Jacobs himself had stated, "We have been invaded. It is not an occupation, but it is an invasion. At present we can do little or nothing to stop it" (p.316), and he had posed what he called "the central question of abduction research" in simple, ominous terms: "What happened to the babies?"

Today the evidence for an alien invasion of the planet seems very tenuous indeed, whether one adheres to the Realist or the Positive school.

As for the babies, most of them should be in their thirties by now.

The bottom line is that abduction research—as practiced by the contributors to this book—may not give us the ultimate answer to the UFO problem after all. The academic community may be forgiven for staying away from an immature field where blatant errors of the recent past have not been acknowledged and where the normal give and take of scientific debate is so severely biased by selective citing of the evidence. It may be that the problem is more fundamental and pervasive than the "extraterrestrial alien" theory assumes. In the words of Persinger, "within the universe there may be phenomena whose existence we can only infer but at present cannot measure because our tools are too crude or too insensitive."

Journeys Out of This World

In contrast with the murky issues raised by contemporary abduction reports, Couliano's scholarly book is a breath of fresh air. Professor Couliano is editor in chief of the journal *Incognita* and teaches history of religions at the University of Chicago. Admittedly, he has the luxury of looking back at events and myths from the calm viewpoint of many centuries, while Jacobs and his co-authors are in the middle of the contemporary action.

Couliano's work makes it clear that abductions by beings from beyond the Earth are mankind's oldest story. This statement itself will be hotly disputed among ufologists. For instance, Jerome Clark has posed as an axiom (without citing any evidence) that "the UFO phenomenon is a recent historical occurrence, apparently no more than two centuries old." But in chapter ten of the same book edited by Jacobs, Persinger argued that "for thousands of years and within every known human culture, normal individuals have reported brief and often repeated 'visitations' by humanoid phenomena whose presence produced permanent changes within the psychological organization of the experient. When these phenomena were labeled as deities the 'messages' were employed to initiate religious movements that changed the social fabric of society."

Couliano reinforces this observation, asserting on the basis of ethnosemiotics that "human beings had beliefs concerning other worlds long before they could write" and that "the most ancient documents of humankind and the study of its most 'primitive' cultures ... both show that visits to other worlds were top priorities." And he defines the basic question in terms similar to those used by Jacobs: "Where did those people who pretended to travel to another world actually go?"

It is impossible to catalogue the information accumulated by Couliano, who cautions us that he barely scratched the surface: "To collect all historical documents referring to otherworldly journeys is a gigantic task, a task that has never been undertaken before."

Clear examples of this material cover every culture, from eastern Melanesia (where living people had access to a netherworld called Panoi, either in body or in spirit) to Mesopotamia, the source of abundant material about otherworldly journeys. In a typical example Etana, king of Kish, made an ascent to the sky in order to bring down a plant that cured childlessness—that reference to the theme of reproduction again. "Along with Etana we move from heaven to heaven and see the land underneath becoming smaller and smaller, and the wide sea like a tub," a classic abductee's statement.

Otherworldly Beings and Vehicles

While some individuals in antiquity have left the Earth by nonphysical means, many were taken away by beings who actually used flying vehicles, variously described in the language of their time and culture. Taoists often de-

scribe such vehicles involved with "dragons." Thus K'u Yuan, about 300 BCE, wrote about the experience of flying over the Kun-lun mountains of China in a chariot drawn by dragons and preceded by Wang-Shu, the charioteer of the moon. Modern ufologists might characterize this description as a screen memory of a classic abduction. But the Taoist literature goes further, describing a ritual in which otherworldly beings actually come down to Earth to meet the celebrant. At the end of the ritual "they mount the cloud chariot, and the team of cranes takes off."

The cloud chariots are reminiscent of the "cloudships" seen over southern France in the ninth century, to which Archbishop Agobard of Lyon devoted part of one of his books. It will be recalled that Saint Agobard had to preach to the crowd to dissuade the citizens of Lyon from killing four individuals, "three men and one woman" who had alighted from one of these cloudships, alleged to have come from Magonia (Vallee, 1969).

The Middle East is one of the most fertile source for such stories. Ezekiel was transported by the "wheels within wheels" of his vision to a far-away mountain in a state of stupor. The testament of Abraham tells us he was given a heavenly tour by Archangel Michael in his chariot. In Jewish mysticism such descriptions sound like actual physical observations, witness the experience of Rabbi Nehuma ben Hakana: "When I caught sight of the vision of the Chariot I saw a proud majesty, chambers of chambers, majesties of awe, transparencies of fear, burning and flaming, their fires fire and their shaking shakes" (Maaseh Merkhabah, v. 714–718).

In the words of Couliano, "all Jewish apocalypses (a word that means revelation, uncovering) share a framework in which the individual is accompanied by an angelic guide, the revelation is obtained in dialogue form, multiple levels of heaven are visited ..."

Enoch ascends through the sky in a chariot of fire (2 Kings 2:1–15). The Slavonic Book of Enoch gives additional details about his abduction: Enoch was asleep on his couch when two angels looking like oversized men came and took him on a heavenly trip. Similarly, Elijah goes to heaven without dying. Couliano adds that "a third one might have been abducted to heaven as well, for 'no one knows the place of his burial to this day' [Deuteronomy 34:6], that one is Moses." Also in the Mediterranean region, Muslim stories of the Mi'Raj recount the ascent of Prophet Muhammad to heaven, while the Greeks have preserved the records of the travels in space of Phormion of Croton and Leonymus of Athens. Heraclides himself (circa 350 BCE) was fascinated by air travel, otherworldly journeys and knowledge of previous incarnations.

Physical Interpretations of the Abduction Experience

Oddly enough, Couliano spends more time speculating about possible physical interpretations of the material he studies than do Jacobs and those of his co-authors who eschew non-physicalistic accounts. His first chapter itself is entitled "A Historian's Kit for the Fourth Dimension." Citing Charles Howard

Hinton, Robert Monroe, Charles Tart, Ouspensky and Albert Einstein, he observes that "physics and mathematics are to be held responsible to a large extent for the return of interest in mystical ways of knowledge."

If the soul is a "space shuttle," as religious tradition and folklore seemed to suggest, does it follow special laws of physics yet to be discovered? And what conclusion can we draw from the multiplicity of current representations of other worlds? Simply that we live in a state of advanced other-world pluralism, where the "coarse hypothesis of a separable soul" is becoming obsolete. New models of mind, "inspired by cybernetics and artificial intelligence, are replacing the old ones."

Later in his analysis (p. 234) Couliano remarks that "science itself has opened amazing perspectives in the exploration of other worlds, and sometimes in other dimensions in space. Accordingly, our otherworldly journeys may lead to parallel universes or to all sorts of possible or even impossible worlds."

Conclusion

The major characteristic of UFO phenomena is their diversity. Therefore advocates of any particular theory (such as the idea that ufonauts come from another planet and are abducting humans to create a hybrid race) can generally "prove" their point as long as they are allowed to ignore, exclude or censor those cases that contradict the theory. The result is that much of UFO research now lies outside the realm of the self-defined "UFO community" and many important cases are no longer published at all. This situation should be of concern to all students of the field.

After careful reading of both books one is left with the feeling that the authors have touched on a subject that transcends our history, our mythology and science itself. Therefore it would be unreasonable to expect answers at this point, or even to demand a single methodological framework. Pointing the finger at this or that researcher for lapses in technique or theoretical extremism is futile. In the end it is not to any book that we should turn to in our search for data but to the experiencers themselves. It is in their struggle with the phenomenon and in their efforts to make sense of it that a new generation of researchers will have to find inspiration. The apparent failure of abduction research during the decade of the 1990s should not deter us from taking a fresh look at a phenomenon that is so closely linked to our definition of reality. As Couliano puts it, "it is unlikely that we will ever return to the certainties of the past, which might have been reassuring but were usually cheap as well. Other worlds without limit will continue to be multiplied in our minds, which in so doing will be exploring their own limitless possibilities."

Jacques F. Vallee
San Francisco
mabillon@pacbell.net

References

De Brosses, Marie-Therese. *Enquete sur les Enlevements Extraterrestres*. Paris: Plon, 1995. Deuteronomy 34:6.

Hopkins, Budd. Intruders. NY: Random House, 1987. pp. 4.

Jacobs, David M. Secret Life. NY: Simon & Schuster, 1992.

Jacobs, David M. The Threat. NY: Simon & Schuster, 1998.

Maaseh Merkhabah, v. 714-718 in Janowitz, Poetics, p.51.

Meerloo, Joost A.M. Hidden Communion: Studies in the Communication Theory of Telepathy. New York: Helix Press, 1964.

Stillings, Dennis. Cyberbiological studies of the imaginal component in the UFO contact experience. *Archaeus*. volume 5, 1989.

Sturrock, Peter. The UFO Enigma. NY: Warner, 1999.

Thompson, Keith. Aliens and Angels: UFOs and the Mythic Imagination. Reading, MA: Addison-Wesley, 1991.

2 Kings 2:1-15.

Vallee, Jacques F. Passport to Magonia: From Folklore to Flying Saucers. Chicago: Henry Regnery, 1969.

Vallee, Jacques F. Messengers of Deception: UFO Contacts and Cults. New York: Bantam, 1979. Vallee, Jacques F. Confrontations: A Scientist's Search for Alien Contact. NY: Ballantine, 1990.

Vallee, Jacques F. Forbidden Science: Journals 1957-1969. Berkeley: North Atlantic Books, 1992.

Passport to the Cosmos: Human Transformation and Alien Encounters by John E. Mack. New York: Crown Publishers, 1999. 306 pp. \$24.00. ISBN 0-517-70568-0.

The jacket to *Passport to the Cosmos* informs us that with this book, Harvard psychiatry professor John Mack "further solidifies his reputation as a brave pioneer on the forefront of the science of human experience." Don't judge a book by its jacket. Although Mack's intellectual bravery is self-evident, *Passport to the Cosmos* can only solidify his reputation for taking a *nonscientific* approach to the abduction phenomenon. His first book on the subject (*Abduction*) was widely criticized for its lack of science, and the scientific perspective is no more evident in *Passport to the Cosmos*. It is not that Mack rejects the scientific method per se; nor does he assert that it can make no contribution to understanding alien abductions. Rather, as Mack's readers quickly learn, he champions the position that alien abduction experiences "will not yield their secrets to the methodologies of science" (p. 9).

Instead, Mack argues that "the most powerful evidence [regarding the alien abduction phenomenon] is subjective," that "we must make...a clinical...judgment" regarding the objectivity of abduction accounts, and that "findings" regarding the abduction phenomenon should be considered confirmed when "other observers discover the same or similar things" through their own subjective processes (p. 12). In lieu of hypothesis testing, scientific assessment, and experimental replication, *Passport to the Cosmos* focuses on "meditative, intuitive, contemplative, intersubjective, bodily, and non-sensory ways of knowing" (p. 38). Using these approaches, Mack develops a detailed explanation for the purpose and ontology of the abduction phenomenon.

As someone professionally attracted to the teachings of Freud, Mack may be inherently sympathetic to the development of complex and elaborate theoretical schema based on clinical, rather than scientific, observation. In any case, he attributes his investigative preferences not to any predisposition, but as a response to what he believes abduction experiences (as reported to him by well over 100 experiencers) demand. For example, it is his impression that "the agent or intelligence" behind the abduction phenomenon seems to be "parodying, mocking, tricking, and deceiving the investigators...inviting us to change our ways...of learning...of knowing and observing" (p. 10), that the phenomenon provides "incontrovertible experiential evidence of a transcendent reality" (p. 38), and that it is "so far outside of the laws of physics...that [it] may require a new paradigm of reality" (p. 9). Thus, he asks his readers to abandon their "tendency to form questions according to logic that is characteristic of the human mind as it applies itself to the human world." (p.xii). This plea seems especially directed at "how some academics may defend a strictly materialistic world view" (p. 35), a position he regards not as a reflection of their reasoned assessment of available data, but as a psychodynamic response which "above all...underscores a fear of the unknown and keeps at bay ...the knowledge of invisible realms" (p. 34).

The open-minded will allow for alternate "ways of knowing." Nonetheless, individuals attracted to an organization advocating *scientific* exploration (e.g., SSE) may be disappointed with *Passport to the Cosmos*. Others, especially those with a spiritual outlook on life, may appreciate this book for its focus on human development, and the positive perspective with which it views alien abduction reports. Indeed, its author sees the abduction phenomenon as "one of the most powerful agents of spiritual growth, personal transformation, and expanded awareness that is now affecting people on this planet" (p. 222), and sympathizes with experiencer reports of aliens "as emissaries or messengers from the creative principle...bridging the gulf ...between humans and 'the One'...[who] assist us with the transition on Earth...calling us to continue our evolution'" (p. 223).

In addition to concluding that the abduction phenomenon is aimed at increasing humankind's awareness of its own divinity, Mack also finds it "quite possible ...that the protection of the Earth's life is at the heart of the abduction phenomenon" (p. 88), a conviction stemming from the environmental messages experiencers frequently report receiving from their alien hosts. These messages, he believes, serve as "an opportunity or a gift, a kind of catalyst for the evolution of consciousness in the direction of an emerging sense of responsibility for our own and the planet's future" (p. 280). But none of this, he feels, can make "much sense... without positing an ultimate or overarching creative principle or intelligence in the cosmos that is doing its work through this and related phenomena" (p. 272). Accordingly, he postulates the following ontology:

From some primal beginning...the work of a God force...all matter/energy emerged.... Human beings, having been formed originally by the God force,

retained some experience of a relationship to it.... But sometime in [the eighteenth] century...many people in Western society...lost their sense of connection with the Divine, the sacred realms, the Source, God, the Creator.... The loss of our relationship to nature and the Creator instills in us a great longing.... So we turn to one or another form of addiction and to the increased consumption of material goods to fill the hole within us that this spiritual bankruptcy has brought about.... It is not surprising that ...the Earth's capacity to sustain human life will soon collapse if no fundamental change occurs.... Evidently, what we have been doing to the Earth has not gone 'unnoticed' at a higher cosmic...level. Some sort of odd intervention seems to be occurring here. We are not, apparently, being permitted to continue on our destructive ways (pp. 272–275).

The intervention to which Mack refers is not one of direct physical force. Rather, he believes that "when it comes to our responsibility for the fate of the Earth, the 'method' seems to be to bring about psycho-spiritual growth or the expansion of awareness" (p. 110). The central dynamic for this process is the abduction experience's "world or mind-shattering impact...bringing about a state of ontological shock" (p. 207), which, through the physical and psychological trauma it induces, "carries...the possibility of profound personal transformation and spiritual growth" (p. 208).

Whatever its purpose, this interaction between our own and normally "unseen" realities alters the debate about whether or not abduction experiences are "real." While making clear his "conviction that the phenomenon itself is in some way real, not simply the product of the imagination or subjective experience of the abductee" (p. 245), Mack repeatedly emphasizes that the events experienced by abductees "manifest in the material world but seem not to be of it" [original emphasis] (p. 9). For example, abductions themselves may not be "real purely in a literal, physical sense" (p. 8), i.e., abductees may not be "literally physically taken" (p. 15), the physical manifestations of abductions (nosebleeds, skin lesions, etc.) "should not necessarily lead to the conclusion that the phenomenon itself exists entirely in the material world" (p.15), reported hybrid creatures "might not exist in material reality as we know it" (p. 14). And despite the "intense...terrible, awkward, or sometimes poignant qualities that characterize [reported] human/alien relationships" (p.245), Mack remains "doubtful that [they] are occurring simply in our material world" (p. 266).

Rather, he views the alien abduction phenomenon "as one among a number of occurrences currently confronting human consciousness...which might be described as crossover phenomena.... These phenomena seem to violate that barrier...between the forces of the unseen world and the material realm, giving us glimpses...of other realities" (p. 9). This view is reinforced for Mack by the relationship he observes between abduction experiencers' "rich and meaningful world of symbols and archetypes that take them far beyond the level of everyday psychological or material reality" and the similar world "familiar to indigenous peoples, especially to shamans, native healers, or spiritual leaders"

(p. 135). In this regard, four chapters of *Passport to the Cosmos* are devoted to the experiences of a Brazilian shaman, a Native American healer, and a South African medicine man.

Along with abduction reports, these experiences convince Mack of a cosmos "filled with beings, creatures, spirits, intelligences, gods...that have through the millennia been intimately involved with human existence. In some instances, it would appear certain of these entities may even cross over the divide that we created in order to keep unseen realities and mysteries apart...from the material world" (p. 269). As he has explored the abduction experience with increasing depth, Mack has become "less certain...about when the abductees are speaking of something that happened to them literally in this material reality and when they are communicating events...that happened to their subtle, astral, or energetic bodies "(p. 272).

In summary, *Passport to the Cosmos* weaves abduction experiences into a grand and majestic tapestry depicting nature and evolution in a "multiverse" where entities from other realms and dimensions purposefully impact our reality, consciousness, and spiritual selves in order to bring about a greater awareness of their own "higher" consciousness and save humankind and its environment in the process. But is any of this true?

In a recent article in the MUFON Journal (May 2001), British ufologist Jenny Randles describes various approaches to investigating UFO phenomena. Mack's method would seem to fit her "way of the mystic," which "rejects as a total explanation the path of reduction and reason" and for which "the quest for answers becomes a personal crusade for spiritual enlightenment" (p. 18). Like him, Randles sees merit in this approach when other methods (including "the way of the scientist") "have all failed to progress" (p. 20) our understanding. But whatever value we may grant it, we must acknowledge problems with this approach as well, particularly its inability to verify hypotheses (beyond some personal sense of subjective validity), or to comparatively weigh hypotheses (other than intuitively) in regard to parsimony (the number of unverified assumptions they require).

The renowned physicist Richard Feynman once said "Science is a way of trying not to fool ourselves." In taking the "way of the mystic," rather than "the way of the scientist," has Mack fooled himself? More fundamentally, in recognizing the limitations of science should we, like Mack, ask less of it? Or in recognizing the limited extent to which science has been applied to the anomalies, should we, in the spirit of Feynman, ask more of science instead? Ultimately, *Passport to the Cosmos* must raise these questions in the minds of all who are interested in advancing the study of anomalistic phenomena.

Stuart Appelle
Professor of Psychology and Associate Dean,
School of Letters and Sciences
State University of New York, College at Brockport
sappelle@brockport.edu

Extraordinary Encounters: An Encyclopedia of Extraterrestrials and Otherworldly Beings by Jerome Clark. Santa Barbara, CA: ABC-CLEO, 2000. 290 pp. \$75.00(c). ISBN 1-57607-249-5; eBook version (February 2001). \$100.00. ISBN 1-57607-379-3.

The UFO Evidence, Volume II, a Thirty-Year Report by Richard H. Hall. Lanham, MD: Scarecrow Press, 2001. 681 pp. \$59.95 (special price to Mutual UFO Network members ordering directly from publisher, \$47.96). ISBN 0-8108-3881-8.

Here we have two important reference works by two well-known and respected ufologists. Both should be of interest and value not only to those specializing in the study of UFO phenomena and the psychology and sociology of the subcultures that have grown up in response to experiences of and reports about them, but also those more generally interested in anomalous phenomena.

Jerome Clark, an editor of the *International UFO Reporter* (the quarterly magazine of the J. Allen Hynek Center for UFO Studies), UFO encyclopedist, and all but official historian of ufology, has given the literature another useful and entertaining reference work. In about 350 superbly written entries and an excellent, context-setting introduction, Clark deftly covers the shadowy realm of reported human contact with beings from the unknown—or, rather, *unknowns*. The author casts a wide net, taking in space creatures, angels, fairyfolk, other-dimensional intelligences, and fantastic beings from such places as an idyllic Space Brother Venus, nightmarish subterranean domains, the future, and many other strange and fascinating elsewheres and elsewhens.

Clark tells us who the beings are or are believed to be, how they made themselves known to human beings, their influence on the lives of those who encountered them, and the movements and belief systems their visits have engendered. He includes entries in which he discusses otherworldly realms and the histories of human interactions with them. For example, "Hollow Earth" reviews the long tradition of superior races inhabiting earth's interior, and "Mars" covers alleged experiences on and observations of the Red Planet.

Clark's approach is unbiased and reportorial, but he leaves no doubt of his enthusiasm for his subject matter. As a result, he gives us an enjoyable and highly informative smorgasbord of folk religion, folk, pseudo- and proto-science, pop culture, and fantasy that will both delight and entertain casual readers and paranormal buffs and serve as a useful tool for the serious anomalies researcher. This is a difficult balance to strike, and Clark does a fine job of it.

In sum, *Extraordinary Encounters* is a highly useful and wonderfully entertaining reference work (with an excellent index, by the way). It should be on the bookshelves of everyone with a strong interest in the paranormal and proto- and para-sciences, and in every library having any substantial number of patrons with such interests.

Richard Hall is one of ufology's leading personalities. Involved in the field since the early 1950s, he is respected as one of the most thoughtful and knowledgeable students of UFO phenomena. Soon after graduating from Tulane with a degree in philosophy, Hall went to work as secretary of the National Investigations Committee on Aerial Phenomena (NICAP), then one of the two leading private UFO-interest organizations.

While with NICAP, Hall compiled the first volume of *The UFO Evidence*, published by NICAP in 1964 and reissued by Barnes and Noble in 1997. This is a classic and still extremely valuable compendium of UFO sighting and encounter data covering the years 1947–1963, and it significantly influenced public and congressional opinion on UFOs during the middle 1960s.

The present volume takes up where the first left off, adding 30-plus years to the evidentiary database and in the "Master Chronology," with discussions of UFO-crash claims actually dipping back into pre-1964 days. In essence, while there is no doubt in Hall's mind—or mine—that many UFOs were—Hall probably would say "are"—intelligently guided machines from a planet beyond our solar system, he lets the evidence speak for itself. In this manner, he makes the case that while there *may* not be any incontrovertible evidence that a single case involved a nuts-and-bolts device (or for that matter a fleeting, as yet unknown natural phenomenon), the weight of the carefully investigated and sifted evidence as a whole overwhelmingly establishes that UFOs defy conventional explanation and deserve serious and systematic scientific consideration.

Following the scheme of his first volume, Hall groups the evidence by categories of witnesses, patterns of UFO behavior, consistency of UFO forms and other features, special evidence (radar tracks, electromagnetic and environmental effects, and still and motion pictures), and sighting waves and concentrations. In keeping with the changing nature of reported UFO phenomena and ufology itself, the author includes such new categories as alien-human encounters, the abduction phenomenon, and Roswell and other alleged UFO crashes and government retrieval-coverups of alien technologies and the very aliens themselves. Some will feel this will seriously diminish any prospect of attracting favorable scientific attention to the book and ufology. Others will hail it as a courageous recognition that, for better or worse, all of this is part of the big ufological picture.

The UFO Evidence, Vol. II includes several important and fascinating essays and shorter features by leading ufologists in addition to Hall. Among these are Dr. Thomas Bullard (UFO abductions and sighting waves and flaps), Walter Webb (the Barney and Betty Hill and Buff Ledge abduction cases), Jennie Zeidman (a 1972 helicopter-UFO encounter and the 1975 North Carolina "miniflap"), Prof. Michael Swords (history of the University of Colorado UFO Project and U.S. Air Force investigations), Don Berliner (aviation history), Barry Greenwood (government secrecy), and Dr. Barry Downing (religious implications of UFOs). These contributions add greatly to the value of the book.

Unfortunately, while *The UFO Evidence*, *Vol. II* is cross-referenced extensively, the effectiveness of this is diminished by a lack of consistency. The

name but not the number of each section appears at the top of each page in a section, yet the cross references are by section number and lack page numbers. Also, the index is far too short and generic for a reference work of this size and complexity. Almost offsetting these failings are the footnotes, which are quite good, and the bibliography (actually, bibliographies, as some sections have reference lists of their own), which is outstanding.

Shortcomings aside, this is a significant and important work, a "must have" for anyone with a serious interest in UFOs and a valuable addition to the reference section of any good public or institutional library.

KARL T. PFLOCK
P.O. Box 93338
Albuquerque, NM 87199-3338
ktperehwon@aol.com

The UFO/FBI Connection: The Secret History of the Government's Cover-Up by Bruce Maccabee. St. Paul, MN: Llewellyn Publications, 2000. 311 pp. ISBN 1-567-184-936.

This volume, written by physicist and UFO researcher Dr. Bruce Maccabee, collects together for the first time in book form the highlights from the FBI's sizable UFO files. Summaries and discussions are presented of the wide variety of sighting reports, administrative decisions and meetings, field office submissions to FBI headquarters, and copies of clippings, publications, and letters that accumulated in the FBI's archives through many decades.

During the 1970s, an amended Freedom of Information Act (FOIA) allowed private citizens to request and receive copies of files from government agencies. The files were released with the provision that the information did not fall under any of nine exemptions. The exemptions were intended to protect agencies from, among other things, compromising intelligence sources, revealing private information about individuals, exposing internal decision making processes, and, more broadly, violating national security—reasonable restrictions given that some government activities must be performed without a spotlight on at all times.

Maccabee and other researchers recognized the potential for using the FOIA to request what was known to exist on unidentified flying objects not only within the Air Force's records but also within the records of many other government agencies. One of the earliest targets of FOIA requests was the FBI. This because of the FBI's reputation for detailed investigative and laboratory work, for having agents available to quickly respond to unusual situations, and for the FBI's name having surfaced in numerous Air Force investigative reports. The Air Force's Project Blue Book records had been made available in censored form to the public: first in storage at Maxwell Air Force Base, Alabama, then at the National Archives in Washington, D.C., at the time of the early

UFO FOIA requests. This provided researchers with enough leads to file detailed, specific requests for UFO records rather than "shotgun" requests that were broad to the point of being ill defined.

This reviewer had been one of the early requesters of UFO records from these agencies, and to the best of my knowledge Maccabee's was the earliest pursuit of FBI material in not only assembling the information, but in presenting the first detailed overview of these records. He published a series of reports on the FBI files in UFO journals (see *MUFON UFO Journal*, issues 119, 120–121, 123–124, 130, 132 from 1977–1978), some twenty-five years before this present book!

The book is arranged in 25 chapters, a glossary, a few document reproductions, and source and index listings. The information is generally chronological, no small task since a reading of the raw files shows them to be a tangled nightmare of detail. One quirk about the FBI files is that for the multi-decade timeframe covered, most of the interesting data lies between 1947 and 1952, the period when government agencies concerned with UFO reports were trying to get a grip on exactly what UFOs were all about. This time frame constitutes about three-quarters of Maccabee's book. It is ironic that while the publisher takes advantage of the popularity of the "X-Files" television show in promoting the book, the vast bulk of FBI records generating these particular "X-Files" happened well before most "X-Filers" were born. Such a realization tends to unchill one's spine if one is conspiracy minded!

However, that is not say that UFO information was never suppressed, or "covered up." Maccabee cites many instances, whether based upon deliberate intent or snafu, where the government had withheld information about UFOs to the public. Of this there is no doubt. The unfortunate consequence is that, whether or not there actually are explosive facts about the exotic nature of UFOs, one is given the impression that there are. Impressions without clear explanation go a long way toward forming public mindsets about the way things aren't instead of what they really are. By having the FBI records in hand, and by having them presented in an orderly fashion by Maccabee, we are helped in turning impressions into knowledge.

An example of the government contribution to the notion that flying saucers were a serious matter can be seen in chapter 17, "Immediate High Alert: For Flying Saucers." Maccabee cites a December 8, 1950, message sent to FBI headquarters by the Special Agent in Charge, Richmond, Virginia:

This office very confidentially advised by Army Intelligence, Richmond, that they have been put on immediate high alert for any data whatsoever concerning flying saucers. CIC here states background of instructions not available from Air Force Intelligence, who are not aware of reason for alert locally, but any information whatsoever must be telephoned by them immediately to Air Force Intelligence. CIC advises data strictly confidential and should not be disseminated (sic).

Maccabee speculates that the message alluded to either (1) a flying saucer crash on the Texas/Mexico border around December 6, or (2) a formation of unidentified objects heading toward Washington, D.C. While there is little to suggest the former, there is much more for the latter, though even this was a confusion of different explanations. Maccabee reported a great deal of uncertainty as to what caused the December 6th alert, but, nevertheless, suggested that based upon the message two days later, the objects tracked were "flying saucers." If that means to the author the same thing as what constitutes a crashed "flying saucer" in the modern understanding of the term, then he is concluding that the objects seen on December 6th were extraterrestrial vehicles. Is that what the message writer meant when the alert was reported in a time prior to popular usage of the acronym "UFO"? Was "flying saucers" a term to describe a spaceship? Or was it a generic term used to describe merely an unknown, like a "bogey" that appears on radar?

I must admit to being a bit confused by Maccabee's treatment of this story. But it does emphasize the ambiguity that often accompanies government UFO document releases and their contribution to the popular perception that "UFO" or "flying saucers" means extraterrestrial visitors.

Another example can be found in chapter 10. Maccabee cites the Rees catalog, a listing of southwest U.S. UFO incidents up to May 1950. Lt. Col. Doyle Rees, commander of the 17th District Office of Special Investigations, prepared the catalog for the Air Force at Kirtland Air Force Base, New Mexico. The purpose was to track strange aerial activity over the southwest, including the "Green Fireball" phenomena reported widely through the area. The catalog lists three possible explanations for sightings. One, "Disk or Variation," which is held as distinct from meteors and Green Fireballs as an explanation, is not quite clear in what is being suggested, but it infers an exotic phenomenon, or even an extraterrestrial one. How can the public, seeing these documents after their official release under FOIA, help but think that there are certain elements within the government suggesting that reports of odd aerial phenomena are more than garbage can lids, toilet seats, or pie plates thrown into the air for effect?

Maccabee notes in chapter 21 on CIA involvement with UFO reports that a recent study by CIA historian Gerald Haines makes a curious suggestion. Haines offered that half of all UFO reports from the late 1950s on were due to misidentified flights of U-2 spy aircraft. A remarkable claim because if the 50% figure of 2343 was not just plucked out of thin air as a "guesstimate," it suggests that the CIA had conducted its own survey of UFO sightings independently of the Air Force—and never told the Air Force of its results. Or if the Air Force was advised of the results, the claims of lies and cover-ups by the Air Force were legitimate inasmuch as the Air Force Project Blue Book files show no evidence of the CIA's conclusions.

FBI records became sparse after 1952, as Maccabee relates, but there were still notable UFO reports being given a look by FBI agents. Chapters 22 and 23

discuss observations by credible witnesses, one by Senator Richard Russell on October 4, 1955, and the other by policeman Lonnie Zamora of Socorro, New Mexico, on April 24, 1964. A reading of either story would give pause to any suggestion that study of the UFO phenomenon is a waste of time.

Maccabee wisely steers clear of the MJ-12 controversy—the claim concerning the existence of an official government panel allegedly convened to study the supposed Roswell flying saucer crash and other rumored saucer crashes elsewhere. MJ-12 has permeated discussions of government UFO interest for over a decade, despite the fact that all of the evidence for it is dubious. The FBI had begun an investigation of MJ-12 but dropped it after examining the questionable documents. While Maccabee suggests that a source for the MJ-12 documents had not been precisely identified, there are several good candidates for having faked the material.

Maccabee examines another sensational document, which we no longer have but which was certainly authentic, in chapter 5. He recounts the "Estimate of the Situation," a draft of an Air Force document written in 1948 by personnel of "Project Sign," a predecessor to Project Blue Book. It was said to have concluded that flying saucers were interplanetary vehicles! Remarkable indeed in that this was the first time such a conclusion was officially considered by Air Force personnel. The document was said to have been rejected by the Air Force Chief of Staff, General Hoyt Vandenberg, for lack of proof. Maccabee goes on to consider that Vandenberg might have known about hard evidence for saucers but rejected the report to protect the crashed saucers' coverup, or at least to have kept the Air Force from admitting that they lied about flying saucers.

Maccabee adds, "...although the publicly known history of the 'Air Force-UFO connection' does not prove there was a crashed extraterrestrial saucer and an orchestrated effort to withhold that information, the publicly known history is not necessarily incompatible with that possibility."

Maccabee seems to bend over backward to accommodate the existence of crashed saucers in trying to rationalize Vandenberg's rejection. But there is some relevant commentary from one who was familiar with the Estimate. Major Dewey Fournet, now deceased, was an eyewitness to the contents of the document. He served as the Air Force's UFO project monitor at the Pentagon in 1952. He said in a letter to a UFO researcher that he stumbled across the document in files he had inherited when he took the Pentagon job. It was twenty to thirty pages long. It reviewed all of the apparently unexplained reports received by the Air Force up to the time of the Estimate. Different explanations were explored but in the end the extraterrestrial explanation was regarded as the answer. Fournet said there was no confirmation of artifacts from flying saucers, a crucial omission from the Top Secret document if crashed saucers were true and a case were being made for the existence of extraterrestrials.

To Fournet, there was deplorably little UFO sighting data available when the report was written and the extraterrestrial conclusion was the result of "extreme extrapolation." He felt that the Estimate's purpose was to create enough interest within Air Force Intelligence by using a premature conclusion to motivate a more organized and complete investigation than had been done to that time. Fournet added, "I've never given that Estimate much weight in the overall USAF UFO program simply because it occurred too early in the investigation."

The UFO/FBI Connection effectively organizes the FBI material and hits all of the highlights. It constitutes a rare insight into a government agency's UFO investigation and collection procedures. It is also one of the better reads of the current crop of books on UFOs. One might quibble with Maccabee's conclusion that FBI and Air Force files have evidence that "proves" flying saucers to be real and that the Air Force officials knew it but withheld that information from the public. I can agree that information has been withheld, but if flying saucers were proven from what we know they have, there would no longer be a debate and the saucers would be as much of an everyday, factual part of life as McDonald's burgers, PCs, and lawn mowers!

BARRY GREENWOOD Box 80176 Stoneham, MA 02180 bgreenwood@mediaone.net

UFOs and the National Security State by Richard M. Dolan. Rochester, NY: Keyhole Publishing. 555 pp. ISBN 0-967-799-503.

For about a year, several friends of mine, knowing my research and writing interests in UFO history and its relationships with military, intelligence, and academic institutions in America, have urged me to read this book. "A good book," or "worth a look," have been typical incentives tagged on. Now that I've spent time with it, this review is very difficult. Let me begin by saying that, although I can imagine many readers enjoying this book and admiring all the Herculean labor the author put into its creation, this is not my kind of book. For that, I apologize to Mr. Dolan for having been chosen as the reviewer.

Let's begin at the beginning: *UFOs and the National Security State*. Great title. Reading that, one expects to be presented with a powerful, rather "academic," heavily documented history of the inside information as to the misbehavior of the military and intelligence communities toward the UFO subject. This *may* be, in fact, what many readers think that they have gotten, and may be what the author honestly feels that he has written. I just can't read it that way. To me, the content of the book would be better characterized by the title *UFO Conspiracy Theory*. I am not trying to be flippant. The latter title would give the impression that what one was about to read was derived from popular culture sources much more than true historical scholarship or primary docu-

ments, and contained many highly controversial (often, even rejected) elements of ufological lore and poorly supported deductions or allusions. Other major characteristics of the book might be legitimately conveyed by a subtitle: Within Which is Laid Selected UFO Case Descriptions and Pieces of Information about Intelligence Community Activities Having Nothing to Do with UFOs, but in a Chronological Order. The author knows that he is doing this and tells us clearly and honestly upfront. The book "weaves together three strands of narrative." Except that it doesn't. The text is a very neat, orderly chronicle of intelligence news, UFO case news, and directly related (or at least surmised) intelligence activity related to UFOs, but the two first-mentioned classes of items are not interwoven. They are merely laid into chronological place with no firm connectivity to the thesis of the book. In my opinion it would be a better book by dropping out all the elements which do not strongly relate to the thesis.

Moving on: the author has spent a terrific effort in the creation of this book. I admire his intensity and his enthusiasm for spreading a needed message (because the bottom line of much of this is: there really has been a lengthy, call it as it is, conspiracy of manipulation of the UFO subject, and there are plenty of documents to prove it). But how sure a guide to this subject is this book? It is not an "academic" book. This, of course, is not necessarily a bad thing. Many academic books are hazardous to one's alert state, if not one's mental health. Still, the "non-academicness" of this book causes some real problems. Let's take references and referencing: the number of endnote references is colossal. At surface glance, one would suspect a depth of research and knowledge unparalleled by anyone short of David Jacobs and Jerry Clark. The author says that he has "researched this topic thoroughly, almost exhaustively." I believe him. I believe him in the sense that he is an honest man who actually believes that he has exhausted this field. But no way.

There is no reference anywhere in the notes to publications like *The Journal of Scientific Exploration* or *The Journal of UFO Studies*. In fact, there are almost no indications of reading journals at all (*Flying Saucer Review, International UFO Reporter*, et al.). There are also almost no references to things which could be called primary documents. So what *are* all the literally thousands of citations? They are books. Books, in the vast majority of cases, written for the UFO reading audience. So why is this important? As members of SSE already have realized, the "data" or raw information for this volume all comes at least secondhand, if not third- or fourth-hand. This can cause lots of slippage in fact and ambiance, as "truth" passes through the lenses.

One "personal" example, if I may: a major element in the thesis flow of this book revolves around the University of Colorado, USAF-sponsored, study of UFOs in the late 1960s, the so-called Condon Study. The documents of the Condon Study are held in the American Philosophical Library archives in Philadelphia. They, plus two tainted "memoirs" on the project (one, a pop book by David Saunders, and the other, a set of later reflections by Roy Craig)

could be considered primary, or close, sources. Other "primaries" are in files at the Center for UFO Studies. The author did read Saunders and Craig, and bases his discussion largely on Saunders. Saunders' view, written in practically the most emotional, heated moment possible, is surely not the best guide to this event (even though I am generally sympathetic to him). But Saunders' view fits conspiratorial ideas well, so he's selected to dominate, rather than Craig. A point to be made is that there is an article published which is based entirely on the reading of the APL primary documents which tries to be more objective than personally biased "histories" of Saunders or Craig. It was published in JUFOS, by me, well prior to Nolan's book (he read pop books which mentioned it). The point is only this: this book isn't exhaustively researched. By choosing to get almost all its information from popular UFO literature, almost everything which could be called UFO scholarship is missed. Many references in the Colorado section are to things like Donald Keyhoe's Aliens from Space, largely regarded as his worst book, rather than, say, Paul McCarthy's thesis on Jim McDonald, based on primary sources.

There is so much else to say about this volume, but I must be brief. The book heavily leans on certain authors. Keyhoe is referenced over 250 times; Richard Hall and Jacques Vallee over 200. Well, maybe one could get away with most of that. But highly questionable (as to accuracy and solidity of sources) authors such as Frank Edwards, Timothy Good, and Harold Wilkins are cited in the 50 to 100 citations range. Plus, all citations for a given topic tend to be clumped into a single endnote. The reader has to be driven and empowered with a major UFO library to tease out where particular claims or allusions come from. To make this concrete: I'd be a heck of a lot more relaxed with a "fact" cited to David Jacobs or Jerry Clark, than one to Frank Edwards.

Stuff is thrown into the chronology just because it's there. CIA Mind Control, LSD, et al., show up in the middle of UFOs with no discernible link; so do grassy knolls and Cuban missiles. Surely it would be a better book without this. UFO folklore about Jim McDonald's and Morris Jessup's and Ed Ruppelt's deaths is paraded out to the distress of UFO veterans, who know, as surely as we can know, that none of this was "enemy action." NICAP's demise at the hands of the CIA, an utterly false idea that Richard Hall utterly rejects, shows up for its wink and curtain call. And this goes on and on. But my review can't.

This volume seems to me to be a heroic and honest effort aimed at a good cause, but by a writer who doesn't realize how deep and complicated the UFO history is. And he seems to have had little help in cutting through some of the chaff and locating certain vital elements of the literature. Due to this, the book seems to have been written upside-down: starting with a gut feeling (perhaps drawn from Internet-style sources, which he admits are where the best UFO work is being done) about the conspiracies, forming a firm attitude about their reality and ubiquity, and then searching the popular literature somewhat indiscriminately for support for his thesis. As I said, I can imagine many people en-

joying this book a great deal and there are aspects of it which are on the right track, but it is not my kind of book. My apologies, again, to the author.

MICHAEL D. SWORDS

Professor Emeritus

Western Michigan University

The Missing Times: News Media Complicity in the UFO Cover-up by Terry Hansen. Philadelphia: Xlibris Corp, 2001. 376 pp. \$25 (c). ISBN 0-7388-3611-7. www.xlibris.com/themissingtimes.html

A couple of months ago there were some new findings in science that repealed a physical law that I had been taught was universal in engineering school. It was the way reality always worked. That event was a reminder that all of the things that we take for granted in science are only temporary assumptions about how physical reality works—always subject to new discoveries and theories that will surely come in the future. That is, unless we think that in some area we have struck immutable truth and there is nothing more possible to learn about a particular subject. (Some scientists act that way, but I don't think humanity has yet "arrived.")

Our understanding of reality may be conditional in science, but we bet on it in the short run, assuming that what we believe is true. It's great to believe we know what we think we know. It provides stability, sanity, authority, employment and even uninterrupted sleep at night. If everything (or even a significant portion) of what we are told by others is suspect, well, then it starts to be like the *Matrix*, or the Soviet Union in the early 80s, where nobody believed the media, rumors carried the day, and everyone had so lost faith in the government that they became expert at reading between the lines, three levels deep, to try to figure out what really was happening at any distance greater than one's personal line-of-sight. Very socially corrosive.

Fortunately, that isn't the case in the U.S. Here, an independent press balances the government's penchant for secrecy and, on balance, Americans have a pretty good idea of what is going on. Right?

Well, if you believe Terry Hansen, the answer is: it depends. It depends on whether the government really wants you to know about something or not. If not, there is a longstanding sweetheart relationship with the media in this country that conspires to only report the government story.

Farfetched? Another crazy conspiracy theory? You should read this book.

Hansen, a freelance journalist who has studied both the UFO subject and the press/government relationship for a couple of decades has produced perhaps one of the most important books about the UFO subject in decades.

This is an important book because of the substantial, big-picture perspective it provides and because of the fundamental questions that it precipitates. Most

treatises on this subject expound upon a particular aspect of the overall topic—sightings, abductions, propulsion, etc.—loaded with "cases" of what reportedly happened, and then try to convince you that there's a "there" there. Many are convincing ... after which one usually says to oneself: "So now what?" It may be interesting, even disconcerting, but how does it all fit together? There is no integrated picture, no clear, new understanding of the overall phenomenon that provides a broad-based framework for making sense of the whole thing. The Missing Times takes a giant step outside of the UFO box, and then looks back at the whole thing. Like standing at the edge of the Grand Canyon, the view is very powerful.

What would it take to convince you that the press and the government are in cahoots in feeding the populace the government line on things deemed to involve "national security"? How about a systematic construction of how, since WWI, the British and then American governments have increasingly put into place the perception management mechanisms to do just that. Designed at the same time to feed propaganda and disinformation to the enemy during war times and a contrived picture of conflict for domestic consumption, the intelligence services always reached out to the pros in communication—journalists—to head up the operations. After the war, the news executives went back to running the networks and newspapers, supposedly, now, committed to objectively questioning government and providing an independent oversight function.

It's one thing to make these assertions, but Hansen, brick upon brick, builds the foundation for the argument that once back in the news business, these executives, particularly at places like CBS and *The New York Times* continued to be responsive to, if not take directions from, the intelligence and military leadership on sensitive subjects. Hansen shows how this relationship worked during the war years and then provides tangible proof of how the manipulation process has worked in the UFO area.

The big picture is not drawn directly from one or two events, but is a finely constructed mosaic that develops a distinct pattern from many, many "independent" events. The pieces include a careful outline of the objectives, the approaches to achieving the objectives, the institutional functions that were put in place, examples of how it worked in wartime, and concrete examples of how it has worked around the UFO subject. Hansen briefly but substantively touches on most, if not all, of the major aspects of the UFO issue, making a broadbased case that this is a very real phenomenon.

After watching this powerful, convincing picture being carefully put together, a big question starts naggingly small in the back of your mind and then builds to drown out everything you are reading: What is going on that is so big that it has merited this level of sustained, half-century long formal obfuscation of the facts? What is this that parts of the military and the intelligence services don't want the American people to know so badly?

Hansen shows that all of the UFO activity of the early fifties was thought to be potentially socially unstabilizing—hence the need to manipulate the per-

ceptions of the populace. Maybe it still is. Some insiders suggest that more recently it has just been the remnants of the Cold War gotten out of hand. We started out trying to convince the Soviets that we had some "extraterrestrial capabilities," or at least an ongoing relationship with "other sources" that provided us with advanced means to defend ourselves. Some folks in the system just "didn't get the word" and continue to pump out sometimes absurd explanations of events observed by hundreds or thousands. "It's hard to disengage gracefully, and after all, how does the government tell the American people that it has been lying to them for so long?"

One can't help coming to the conclusion that whatever is happening here is a big deal.

The Missing Times is not a tract—it is a study. It is a carefully researched revisionist view of history that never steps over the line. Every time that one thinks that Hansen has dealt a little unjustified speculation into the mix, he pulls out a study, interview, example or document that substantiates what he has said. In the end, he too wonders if the big secret just might really be too threatening to broadcast.

This book makes it clear that history, like science, is a moving target and that what we think we know about the past (or the present, for that matter) is subject to what we have been told ... and the humans who do the telling always have an agenda. Sometimes they also have the tools, the processes, the funding and the relationships to very effectively mask the truth.

So what's real?

John L. Petersen
President and founder, The Arlington Institute
Arlington, VA
johnp@arlingtoninstitute.org

The Roswell Encyclopedia by Kevin D. Randle. New York: HarperCollins, 2000. 402 pp. \$15.00. ISBN 0-380-79853-0.

My research interests tend to focus on parapsychology, but all anomalous phenomena fascinate me. For instance, ufology and especially the Roswell Incident of 1947 have intrigued me so much that I have conducted limited studies on these topics. The Roswell case is particularly interesting on two levels: the *evidential* (this case could ultimately be a "smoking gun") and the *psychological* (this case could ultimately be an illusory "smoking gun"). There are a multitude of general books, popular magazine articles, and media documentaries on the Roswell case. A few peer-reviewed scientific and scholarly papers have also appeared in such sources as the *Journal of Scientific Exploration* and the *Journal of UFO Studies*. The authors responsible for this body

of literature vary in their credibility, expertise, and point of view. It is no wonder, therefore, that no firm resolution has come to the Roswell case.

Given this state of affairs, one could legitimately question whether the field really needs another book on Roswell. My first reaction is "no," but I amend that thought by stating that the field does not need a book that is more of the same. *The Roswell Encyclopedia* is clearly and admittedly skewed toward the "pro-UFO" side of the Roswell debate, but it is not more of the same. Instead, this reference book takes a decidedly lucid and journalistic look at the case and acknowledges data from both proponents and critics. This is what a newcomer to the case demands, and it is what the field could stand more of. Kevin Randle does not provide the reader with a comprehensive history of the case, but rather the purpose of the book is to do the following:

Begin at a point that is beyond the basics and provide the latest, and the best, of the Roswell information. Look at it from the point of view of the best information available, whether pro or con. Attempt to give that information without a 'spin' put on it. Ask the right questions so that the case can be understood by those who have not devoted months, or years, to its study (pp. VI–VII).

Randle succeeds admirably in his goal, although he does give a "spin" to some of the evidence. I was expecting nothing less, however, because Randle gives the reader the benefit of his expertise and impressions with respect to some of the more controversial material. For example, a particularly hot research issue in the Roswell case involves the analysis of a "memo" held by General Ramey during the famous press conference in which Ramey debunked the previously described crashed saucer debris as a weather balloon. Some researchers using high-tech software and equipment claim to be able to decipher some of the content on that memo. Not surprisingly, such advocates of the case state that the memo describes a scenario that is consistent with a UFO coverup. Drawing on his background in psychology (Randle holds a Ph.D. in psychology), Randle is quick to point out the shortcomings and potential biases in these studies. Therefore, the "spins" that Randle does impart on some of the material are welcome additions. In some places readers might get the mistaken impression that Randle is skeptical that Roswell was anything but a weather balloon. In other places, the reader will feel that he is a hardened believer that Roswell was a UFO cover-up.

Make no mistake—Randle believes that Roswell involved a crashed extraterrestrial craft. Yet, he is not willing to accept blindly any piece of evidence that seems to support his belief. He is critical of any claim until it is proved, and this attitude comes through nicely in the book. Furthermore, Randle's quick and sometimes forceful rebuttals or defenses of some data actually bring to light the real cover-up surrounding the Roswell case, namely the investigators and the internal politics of the UFO field. Many proponents of the Roswell case need not worry that the government is hiding information from

them (undoubtedly it is and you do not need to be paranoid to understand this). Neither does the government need to worry that information will be discovered and disseminated by UFO researchers. Why? In general, it seems that researchers of the Roswell case do not work together and share information. When they do share information, they often cannot come to a consensus about its merit or meaning. The subsequent debates (i.e., fights) among the investigators keep the book publishing market alive and well, but it kills a legitimate and responsible search for the truth of what happened near Roswell.

As you read the entries in *The Roswell Encyclopedia*, the politics of the field become painfully apparent. These politics have significantly tainted how some investigators interpret data—a phenomenon not unfamiliar to the larger scientific community. Yet, here it significantly clouds what could be one of the most important cases in ufology. To a newcomer, a glimpse of the politics in this case is quite valuable in understanding many entries in the encyclopedia. These entries span key historical figures in the case, backgrounds of the current researchers, the testimony of the main eyewitnesses, and alternative explanations for the case. What is missing are a reference section and a general bibliography that newcomers like myself should consult in order to gain a working knowledge of the basics of the case. Since this is an encyclopedia, these omissions are understandable. Nevertheless, I have taken an unorthodox approach and requested such a bibliography from Randle himself explicitly for this book review. He was happy to serve the *JSE* readership, even without seeing the contents of my report.

In the first few pages of Randle's introduction we are told that both proponents and skeptics agree that something crashed in the New Mexico desert in the summer of 1947. This fact is indisputable, but the explanations of what crashed have reached mythical proportions. Regardless of any evidential value, aspects of this case have become modern folklore—urban myths in the making. Randle makes the astute point that these myths are perpetrated by both proponents and debunkers of this case. The book therefore attempts to separate fact from fiction, but it is not intended to solve the case. However, the book hopefully will motivate the appearance of new researchers who are up to the challenge, and who are not be blinded or obligated to the politics of previous investigators. Even if your primary research interests are not related to ufology, this book is a sobering and dare I say entertaining look at the status of the Roswell case. And if you read between the lines (in some instances you do not have to), the reader will understand how one of the most possibly important events in human history has been "victimized" by some of the very people that advocate for its investigation. In both its content and attitude, Randle's encyclopedia is thankfully not more of the same.

> James Houran Southern Illinois University School of Medicine Department of Psychiatry Jhouran@siumed.edu

Randle's Bibliography

- Air Defense Command Briefing, Jan 1953, Project Blue Book Files.
- ALBERTS, Don E., and PUTNAM, Allan E. A History of Kirtland Air Force Base 1928–1982. Albuquerque: 1606th Air Base Wing, 1985.
- ANDERSON, Ted. Alleged diary for July 1947.
- BARKER, Gray. "America's Captured Flying Saucers—The Cover-up of the Century," UFO Report (May 1977).
- ———. "Archives Reveal More Crashed Saucers." Gray Barker's Newsletter (14 March 1982).
- ——. "Von Poppen Update." Gray Barker's Newsletter (December 1982): 8.
- BARNETT, Ruth. Personal Diary, 1947.
- BECKLEY, Timothy Green. MJ-12 and the Riddle of Hangar 18. New Brunswick, NJ: Inner Light, 1989.
- BERLITZ, Charles, and MOORE, William L. The Roswell Incident. New York: Berkley, 1988.
- BINDER, Otto. "The Secret Warehouse of UFO Proof." UFO Report.
- BLOECHER, Ted. Report on the UFO Wave of 1947. Washington, D.C.: Author, 1967.
- BLUM, Howard. Out There: The Government's Secret Quest for Extraterrestrials. New York: Simon and Schuster, 1991.
- BREW, John Otis, and DANSON, Edward B. "The 1947 Reconnaissance and the Proposed Upper Gila Expedition of the Peabody Museum of Harvard University." El Palacio (July 1948): 211–222.
- Briefing Document: Operation Majestic 12, November 18, 1952.
- BRITTON, Jack, and WASHINGTON, George, Jr. Military Shoulder Patches of the United States Armed Forces. Tulsa: MCN Press, 1985.
- BROWN, Eunice H. White Sands History. White Sands, NM: Public Affairs Office, 1959.
- CAHN, J.P. "Flying Saucer Swindlers." True. (August 1956).
- ——. "The Flying Saucers and the Mysterious Little Men," True (September 1952).
- CAREY, Thomas J. "The Search for the Archaeologists." International UFO Reporter (November/December 1991): 4–9, 21.
- CARPENTER, John S. "Gerald Anderson: Truth vs. Fiction." The MUFON UFO Journal no. 281 (September 1991): 3–7, 12.
- ——. "Gerald Anderson: Disturbing Revelations." The MUFON UFO Journal no. 299 (March 1993): 6–9.
- CAMERON, Grant, and CRAIN, T. Scott, Jr. UFOs, MJ-12 and the Government. Seguin, TX: MUFON, 1991.
- CATOE, Lynn E. UFOs and Related Subjects: An Annotated Bibliography. Washington, D.C.: Government Printing Office, 1969.
- CITIZENS AGAINST UFO SECRECY. "MJ-12: Myth or Reality?" Just Cause (December 1985).
- ———. "Confirmation of MJ-12?" Just Cause (June 1987).
- ——. "The MJ-12 Fiasco." Just Cause (September 1987).
- ——. "More On MJ-12." Just Cause (March 1989).
- ----. "MJ-12 Update." Just Cause (June 1989).
- ——. "Conversation with Dr. Sarbacher." Just Cause (September 1985).
- CLARK, Jerome. "The Great Crashed Saucer Debate." UFO Report (October 1980): 16-19, 74, 76.
- ——. "Crashed Saucers—Another View." Saga's UFO Annual 1981 (1981).
- ——. "Crash Landings." Omni (December 1990): 91-92.
- ——. "UFO Reporters. (MJ-12)". Fate (December 1990).
- COOPER, Milton William. Behold a Pale Horse. Sedona, AZ: Light Technology, 1991.
- COOPER, Vicki. "Crashed Saucer Stories." UFO 6, no. 1 (1991): 15.
- ——... "The Roswell Case Revived: Was It An Alien Saucer." UFO (January/February 1991): 25–29.
- CRARY, Dr. Albert, Personal Diary, June-July 1947.
- CREIGHTON, Gordon. "Close Encounters of an Unthinkable and Inadmissible Kind." Flying Saucer Review. (July/August 1979).
- ——. "Further Evidence of 'Retrievals'." Flying Saucer Review.(Jan 1980).
- ——. "Continuing Evidence of Retrievals of the Third Kind." Flying Saucer Review. January/February 1982).
- ——. "Top U.S. Scientist Admits Crashed UFOs." Flying Saucer Review. (October 1985).

- DAVIS, Richard. "Results of a Search for Records Concerning the 1947 Crash Near Roswell, New Mexico." Washington, D.C.: GAO, 1995.
- DENNETT, Preston. "Project Redlight: Are We Flying The Saucers Too?" UFO Universe (May 1990): 39.
- DOBBS, D.L. "Crashed Saucers—The Mystery Continues." UFO Report (September 1979).
- EBERHART, George, The Roswell Report: A Historical Perspective. Chicago: CUFOS, 1991.
- ECKER, Don. "MJ-12 'Suspected Forgery,' Air Force Says." UFO 8, no. 3 (1993): 5.
- EDITORS OF LOOK. "Flying Saucers." Look (1966).
- EDWARDS, Frank. Flying Saucers—Here and Now! New York: Bantam, 1968.
- ———. Flying Saucers—Serious Business. New York: Bantam, 1966.
- Eighth Air Force Staff Directory, Texas: June 1947.
- ENDRES, Terry, and PACKARD, Pat. "The Pflock Report in Perspective." UFO Update Newsletter. Vol. 1 No. 5 (Fall 1994), 1–6.
- Flint (Michigan) City Directories 1945-1950.
- FOWLER, Raymond E. "What about Crashed UFOs?" Official UFO (April 1976): 55-57.
- Genesce County (Michigan) telephone directories 1945-1950.
- GILLMOR, Daniel S., ed. Scientific Study of Unidentified Flying Objects. New York: Bantam Books, 1969.
- GOOD, Timothy. Above Top Secret. New York: Morrow, 1988.
- ——. The UFO Report. New York: Avon Books, 1989.
 - ----. Alien Contact. New York: Morrow, 1993.
- HALL, Richard. "Crashed Discs—Maybe," International UFO Reporter, 10, no. 4, (July/August 1985).
- ——— (ed). The UFO Evidence. Washington, D.C.: NICAP, 1964.
- HAUGLAND, Vern. "AF Denies Recovering Portions of 'Saucers." Albuquerque New Mexican March 23, 1954.
- HAZARD, Catherine. "Did the Air Force Hush Up a Flying Saucer Crash?" Woman's World (February 27, 1990): 10.
- "History of the Eighth Air Force, Fort Worth, Texas," (Microfilm) Air Force Archives, Maxwell Air Force Base, AL.
- "History of the 509th Bomb Group, Roswell, New Mexico," (Microfilm) Air Force Archives, Maxwell Air Force Base, AL.
- HOGG, Ivan U., and KING, J.B. German and Allied Secret Weapons of World War II. London: Chartwell, 1974.
- HUNEEUS, J. Antonio. "Roswell UFO Crash Update." UFO Universe (Winter 1991): 8-13, 52, 57.
- HURT, Wesley R., and MCKNIGHT, Daniel. "Archaeology of the San Augustine Plains: A Preliminary Report." American Antiquity (January 1949): 172–194.
- JOHNSON, J. Bond. "'Disk-overy' Near Roswell Identified As Weather Balloon by FWAAF Officer." Fort Worth Star-Telegram, July 9, 1947.
- KEEL, John. "Now It's No Secret: The Japanese 'Fugo Balloon." UFO (January/February 1991): 33–35.
- KENNEDY, George P. "Mercury Primates," American Institute of Aeronautics and Astronautics (1989).
- KLASS, Philip J. "Crash of the Crashed Saucer Claim," Skeptical Inquirer, 10, no. 3 (Spring 1986).
- -----. "Roswell UFO: Coverups and Credulity." Skeptical Inquirer 16 no. 1 (Fall 1991).
- KNAACK, Marcelle. Encyclopedia of U.S. Air Force Aircraft and Missile Systems. Washington, D.C.: Office of Air Force History, 1988.
- LAPAZ, Lincoln, and ROSENFELD, Albert. "Japan's Balloon Invasion of America," Collier's, January 17, 1953, p. 9.
- Library of Congress Legislative Reference Service, "Facts about UFOs," May 1966.
- MACCABEE, Bruce. "Hiding the Hardware." International UFO Reporter. (September/October 1991): 4.
- ——. "What the Admiral Knew." Internation UFO Reporter. (November/December 1986).
- MCCLELLAN, Mike. "The Flying Saucer Crash of 1948 is a Hoax," Official UFO (October 1975): 36–37, 60, 62–64.
- MCDONALD, Bill. "Comparing Descriptions, An Illustrated Roswell." UFO 8, no. 3 (1993): 31–36.

- MOORE, Charles B. "The New York University Balloon Flights During Early June, 1947," The Author, 1995.
- MOORE, William L., and SHANDERA, Jaime H. The MJ-12 Documents: An Analytical Report. Burbank, CA: Fair Witness Project, 1991.
- MUELLER, Robert. Air Force Bases: Volume 1, Active Air Force Bases within the United States of American on 17 September 1982. Washington, D.C.: Office of Air Force History, 1989.
- National Security Agency. Presidential Documents. Washington, D.C.: Executive Order 12356, 1982.
- NEILSON, James. "Secret U.S./UFO Structure." UFO, 4, no. 1, (1989): 4-6.
- "New explanation for 1908 Siberian blast." Cedar Rapids Gazette. January 25, 1993.
- NICKELL, Joe. "The Hangar 18 Tales" Common Ground (June 1984).
- NICKELL, Joe, and FISCHER, John F. "The Crashed-Saucer Forgeries," International UFO Reporter 15 no. 2 (March/April 1990): 4–12.
- ——. "Further Deception: Moore and Shandera," Unpublished paper, The authors (1993).
- "No Reputable Dope On Disks," Midland (Texas) Reporter Telegram (July 1, 1947).
- NORTHROP, Stuart A. Minerals of New Mexico. Albuquerque: University of New Mexico, 1959.
- O'BRIEN, Mike. "New Witness to San Agustin Crash." MUFON Journal no. 275 (March 1991): 3-9.
- PACKARD, Pat, and ENDRES, Terry. "Riding the Roswell-go-round." A.S.K. UFO Report Vol. 2, No. 1, 1–8.
- PFLOCK, Karl. Roswell in Perspective. Mt. Rainier, MD: FUFOR, 1994.
- ——. "In Defense of Roswell Reality." HUFON Report (Feb. 1995) 5–7.
- ——. "Roswell, A Cautionary Tale: Facts and Fantasies, Lessons and Legacies." In Walter H. Andrus, Jr., ed. MUFON 1995 International UFO Symposium Proceedings Seguin, TX: MUFON, 1990: 154–68.
- ——. "Roswell, The Air Force, and Us." International UFO Reporter (November/December 1994): 3–5, 24.
- "Press Release—Monkeynaut Baker is Memorialized," Space and Rocket Center, Huntsville, AL (December 4, 1984).
- "Project Blue Book" (microfilm). National Archives, Washington, D.C.
- PRYTZ, John M. "UFO Crashes" Flying Saucers (October 1969): 24-25.
- RAAF Base Phone Book, Roswell, NM: August 1947.
- RAAF Yearbook, Roswell, NM; 1947.
- RANDLE, Kevin D. The UFO Casebook. New York: Warner, 1989.
- ——. A History of UFO Crashes. New York: Avon, 1995.
- RANDLE, Kevin D., and CORNETT, Robert Charles. "Project Blue Book Cover-up: Pentagon Suppressed UFO Data," UFO Report 2 no. 5 (Fall 1975).
- RANDLE, Kevin D., and SCHMITT, Donald R. UFO Crash at Roswell. New York, NY: Avon, 1991
- RANDLES, Jenny. The UFO Conspiracy. New York: Javelin, 1987.
- "Report of Air Force Research Regarding the 'Roswell Incident'," July 1994.
- "Rocket and Missile Firings," White Sands Proving Grounds, Jan-Jul 1947.
- RODEGHIER, Mark. "Roswell, 1989." International UFO Reporter. (September/October 1989): 4.
- RODEGHIER, Mark and CHESNEY, Mark. "The Air Force Report on Roswell: An Absence of Evidence." International UFO Reporter (September/October 1994).
- ROSIGNOLI, Guido. The Illustrated Encyclopedia of Military Insignia of the 20th Century. Secaucus, N.J.: Chartwell, 1986.
- RUPPELT, Edward J. The Report on Unidentified Flying Objects. New York: Ace, 1956.
- SCHAFFNER, Ron. "Roswell: A Federal Case?" UFO Brigantia (Summer 1989).
- SCHMITT, Donald R. "New Revelations from Roswell." In Walter H. Andrus, Jr., ed. MUFON 1990 International UFO Symposium Proceedings Seguin, TX: MUFON, 1990: 154–68.
- SCHMITT, Donald R., and RANDLE, Kevin D. "Second Thoughts on the Barney Barnett Story." International UFO Reporter (May/June 1992): 4–5, 22.
- SHANDERA, Jaime. "New Revelation about the Roswell Wreckage: A General Speaks Up." MUFON Journal (January 1991): 4–8.
- SHEAFFER, Robert. The UFO Verdict. Buffalo, NY: Prometheus, 1981.
- SMITH, Scott. "Q & A: Len Stringfield." UFO 6, no. 1, (1991): 20-24.
- "The Space Men at Wright-Patterson." UFO Update.

- STEIGER, Brad, and STEIGER, Sherry Hanson. The Rainbow Conspiracy. New York: Pinnacle, 1994.
- STEINMAN, William S., and STEVENS, Wendelle C. UFO Crash at Aztec. Boulder, CO.: Author, 1986.
- STONE, Clifford E. UFO's: Let the Evidence Speak for Itself. Calif: The Author, 1991.
- ——. "The U.S. Air Force's Real, Official Investigation of UFO's," private report: The Author, 1993.
- STORY, Ronald D. The Encyclopedia of UFOs. Garden City, New York: Doubleday, 1980.
- STRINGFIELD, Leonard H. Situation Red: The UFO Siege! Garden City, New York: Doubleday, 1977.
- -----. UFO Crash/Retrieval Syndrome: Status Report II. Seguin, TX: MUFON, 1980.
- UFO Crash/Retrieval: Amassing the Evidence: Status Report III Cincinnati, OH: The Author, 1982.
- UFO Crash/Retrievals: The Inner Sanctum Status Report VI, Cincinnati, OH: The Author, 1991.
- -----. "Roswell & the X-15: UFO Basics," MUFON UFO Journal No. 259 (November 1989): 3-7.
- TODD, Robert G. "MJ-12 Rebuttal," MUFON Journal (January 1990): 17.
- TODD, Robert G., RODEGHIER, Mark, GREENWOOD, Barry, and MACCABEE, Bruce. "A Forum on MJ-12," International UFO Reporter, (May/June 1990): 15.
- VALLEE, Jacques. Dimensions. New York: Ballantine, 1989.
- ——. Revelations. New York: Ballantine, 1991.
- "Visitors From Venus," Time (January 9, 1950): 49.
- WHITING, Fred. The Roswell Events. Mt. Rainier, MD: FUFOR, 1993.
- WILCOX, Inez. personal writings 1947-1952.
- ZEIDMAN, Jennie. "I Remember Blue Book." International UFO Reporter (March/April 1991): 7.

Roswell: Inconvenient Facts and the Will to Believe by Karl T. Pflock. Amherst, New York: Prometheus Books, 2001. 331 pp. \$25.00.

No other single UFO case has generated so much heat and ultimately as little light as the alleged crash and retrieval of a UFO near Roswell, New Mexico, in the summer of 1947. Some see it as one of the sacred pillars of ufology, following just weeks on the heels of the field's very first sacred pillar—pilot Kenneth Arnold's June 24, 1947, report of nine, silvery, high-speed objects in the Pacific Northwest. Others see it as the classic example of a UFO investigation gone horribly amiss, plagued by shoddy research, unreliable witnesses, and an unwillingness to countenance any data that indicated a non-extraterrestrial explanation.

Or at least that's the way Karl T. Pflock views Roswell. A former Deputy Assistant Secretary of Defense and intelligence officer for the Central Intelligence Agency, Pflock is no stranger to the subject. He is a New Mexico State Section Director for MUFON—the Mutual UFO Network—and author of a previous monograph, *Roswell in Perspective*, along with numerous other UFO and related articles.

This much is known with absolute certainty. On Tuesday, July 8, 1947, the following press release was issued to the local media, picked up by the wire services, and then reprinted around the world:

The many rumors regarding the flying disc became a reality yesterday when the intelligence office of the 509th Bomb Group of the Eighth Air Force, Roswell Army Air

Field, was fortunate enough to gain possession of a disc through the cooperation of one of the local ranchers and the sheriff's office of Chaves county.

The flying object landed on a ranch near Roswell sometime last week. Not having phone facilities, the rancher stored the disc until such time as he was able to contact the Sheriff's office, who in turn notified Major Jesse A. Marcel of the 509th Bomb Group Intelligence Office.

Action was immediately taken and the disc was picked up at the rancher's home. It was inspected at the Roswell Army Air Field and subsequently loaned by Major Marcel to higher headquarters.

Later that afternoon, Brigadier General Roger Ramey of the Eighth Air Force held a press conference in Fort Worth, Texas, in which he was pictured (along with Marcel) with pieces of the Roswell debris. The flying disc, he said, had been identified as the remnants of a weather balloon and reflective radar target. By the following day, Roswell's famous saucer was essentially history, a non-issue. It wouldn't be resurrected and seriously investigated until 1979, when ufologist Stanton Friedman serendipitously came across a tip directing him to Jesse Marcel, who was still alive and living in Houma, Louisiana, at the time.

Friedman's research eventually wound its way into the first book wholly devoted to the case, *The Roswell Incident* by Charles Berlitz and William Moore, New York, 1988. In its wake waded a veritable flood of articles, books (this is the third book on Roswell that Prometheus Books alone has published), and video treatments, including at least one made-for-TV movie, a popular cable TV series based on same, and the literal transformation of the town itself from an anonymous rural ranching and farming community into a state tourist attraction, replete with at least three competing crash sites, and home to the Roswell International UFO Museum and Research Center, host now to an annual conference celebrating the half-century-old incident.

Along the way, the original story took on an ever-expanding life of its own. More and more witnesses came, or were wooed, forward, with ever more and more sensational addenda. There was a second (and even third) crash site, it was said, where bodies were supposedly found. Autopsies were conducted on base before the alien cadavers were flown to Wright-Patterson, Ohio, for further analysis and storage. Witnesses were threatened with deadly consequences. A massive government cover up was put into place and a shadowy Majestic-12 organization established by presidential decree, not only to maintain the cover up, but to reap any technological advantages we could from this unexpected windfall. The reported debris itself grew in its singularity and uniqueness. It wasn't just flimsy and lightweight in appearance, it was indestructible and alien in nature: it couldn't be burned or dented, and some parts were etched or marked with indecipherable "hieroglyphics."

Not even the legendary Hydra had this many multifaceted heads. Pflock labors manfully at what is both a Sisyphean and thankless task: convincing Roswell's most ardent supporters that what transpired in the New Mexico

desert, lo, those many years ago, was a mundane, terrestrial event, colored by the time in which it occurred and the personalities involved, compounded by slipshod investigation, outright fabrication on the part of some alleged "eyewitnesses," and a will to believe on the part of individual investigators. (To his personal credit, and the book's overall credibility, Pflock admits that he once belonged to the latter group himself.)

The picture that Pflock paints is not a pretty one and is hardly likely to endear him to the UFO community at large, where to criticize or cast doubt on a fundamental underpinning like Roswell is not uncommonly to invite allegations of despised debunker, traitor, or government disinformation agent, if not all of the above.

In a nutshell, Pflock comes to the conclusion that the stimulus for the Roswell phenomenon was the "crash" of a highly classified balloon train, with radar reflectors, known as Project Mogul, originally designed to detect Soviet nuclear tests, and hence its high security classification. It was this project, Pflock contends, that was covered up at the Ramey press conference (pictures of which are reproduced), not the recovery of exotic, alien spaceship debris, never mind extraterrestrial beings, alive or dead (and both have been claimed by various Roswell parties).

Pflock's deconstruction of several witness accounts previously considered pivotal to Roswell lore is both instructive and convincing. (It should be pointed out that Pflock isn't alone here, nor does he claim to be: credit to other researchers is given where credit is due.) Suffice it to say that accounts of recovered bodies as alleged by certain principal Roswell participants remain hugely suspect, if not discredited altogether. Pflock is not hesitant to name names and damn deeds. The book is as much exposé as exposition, after all. When frank terms are needed, frank terms are used. More typical, however, is his characterization of one Roswell "witness" as someone "who I have already shown...has a rather fertile imagination and a tendency to 'enrich' his recollections as time goes by." Some readers will be surprised to learn that this enrichment tendency wasn't confined to the so-called witnesses—but afflicted at least one primary investigator as well. In the end, about the only charges missing from *Roswell* are ones of plagiarism, and they seem absent only because so many were so capable of making things up on the fly.

But what of the more seemingly reliable witnesses, the military men who were there on the ground when Roswell came down? After all, this was the 509th Bomb Group, the same flyers who had unleashed two atomic bombs on Nagasaki and Hiroshima, and who then constituted the world's only active atomic bomb wing. Could they have been so excitable as to mistake weather balloons and tin-foil radar-reflectors for something from outer space?

Critics of Pflock will find his most easily assailable interpretations here (which doesn't necessarily mean that they are wrong, just open to question and counter-interpretation). For Pflock contends that the original Roswell press release was the result of then Roswell commander Col. Thomas Blanchard's

propensity for self-promotion and a tendency to shoot from the hip. One also has to remember the frenzy of the times, which included cash rewards of up to \$3000 for evidence of the "flying discs." Obviously, Blanchard wouldn't have had his eye on the money—although rancher Brazel may have—but on any acclaim that might have followed.

What about Marcel, the base's intelligence officer? How could he have conceivably misconstrued balloon material and tin-foil radar reflectors for space-ship debris? Pflock's assertion that Marcel wouldn't have been familiar with Mogul arrays and Rawin targets won't turn all heads. As it turns out, though, thanks to the indefatigable research of the largely unrecognized UFO document researcher Robert Todd, Marcel appears to be yet another of those Roswell witnesses possessed of a fertile imagination and a tendency to enrich his own experiences, or his recollections of same. The lure of a page in the book of history is apparently a powerful attractor. Or at least that seems to have been the case with Lt. Col. Philip J. Corso—Roswell's Johnny-come-lately—who claimed to have seeded alien technology into terrestrial science and industry.

As to what may or may not have transpired at Roswell in 1947, events that demonstrably *didn't* happen as a consequence (assuming the actual recovery of extraterrestrial artifacts) play an equally significant role as indicators of a mundane event. As Pflock notes, "there were at least three programs underway [in July of 1947] that might have figured in any planned antisaucer defense, two intended to develop supersonic air-to-air missiles and one to develop a ground-to-air hypersonic ballistic-missile interceptor. All were canceled within a year after the Roswell incident."

This is a densely packed and well produced book, consisting of some 135,000 words of basic text and argument, a photographic insert, index, and nearly 100 pages of appendices. Regardless of whether one agrees in the end or not with the author's interpretation of events and the personalities involved, one won't find a fuller treatment anywhere of the simultaneous circus and morass that is Roswell. It belongs on the shelf of every serious student of the UFO subject, both to be digested and learned from.

Dennis Stacy
co-editor and publisher, The Anomalist
San Antonio

Roswell: Inconvenient Facts and the Will To Believe by Karl T. Pflock.

Probably the first thing that should be mentioned here is that I do have a rooting interest in the Roswell UFO case. I have written several books about it, the last being a compendium of much of the Roswell history and the personalities that surround it. If I have a bias, then it is in favor of the extraterrestrial explanation, which is, of course, in opposition with Karl Pflock's conclusions.

I might point out that Pflock and I have clashed on a number of occasions, that we have publicly debated the explanation for what fell at Roswell, and that we disagree on the importance of several of the "critical" witnesses. I am mentioned throughout the book, not always in a favorable light, though I fare much better than some of my colleagues. That said, I must also point out that there is not much in *Roswell: Inconvenient Facts and the Will to Believe*, with which I can sharply disagree.

Pflock does tell the story from the perspective of one who believes he has found a mundane answer for what fell outside of Roswell, New Mexico, in July, 1947. He marshals his evidence well and there seems to be no end to those who have come forward with questionable tales about Roswell. One of the first was Glenn Dennis, the "Roswell mortician" who knew a nurse, Naomi Self, who saw the bodies briefly at the Roswell Army Air Field. Pflock reports, accurately, what Dennis has said to various researchers about his "missing" nurse, and her tale of alien bodies. Dennis told many of us her name, that she had described preliminary autopsies at Roswell, and then that she was transferred, suddenly, to England. She was later killed in an aircraft accident, or so Dennis claims to have been told.

Pflock tells us that none of that seems to be true, and with documentation, proves it. The Glenn Dennis tale, which many consider to be so important to the Roswell case, fails. The final straw is when Dennis changes the name of the nurse, only after being told that no record of Naomi Self exists anywhere, under any circumstances, under that name, or any of the logical derivations of it. Suddenly, Dennis no longer trusts any of the Roswell researchers, and claims he never provided them with Self's real name.

Pflock is able to do the same thing with the tales told by former Army Lieutenant Colonel Philip J. Corso. Although Pflock takes him to task for many of his allegations, the most devastating, because of what it says about Corso's integrity, is the description of the Introduction written by Senator Strom Thurmond for Corso's *Day After Roswell*.

Almost the instant that book was published, Thurmond's office was protesting the inclusion of that Introduction. Thurmond claimed that he had been provided a book proposal about Corso's brush with the great and near great of the 20th century. The proposal Thurmond had seen said nothing about UFOs, let alone the story of the Roswell UFO crash. Thurmond demanded that the Introduction be pulled and the publisher complied. The real point was that Corso had told Thurmond one thing and did another, as Pflock proves. Any credibility that Corso might have maintained was now gone.

But these were fairly easy targets. Pflock fares less well on some of the minor players who dot the Roswell landscape. I spoke with Dr. George Agogino on a number of occasions about an archaeologist who had called me but refused to identify himself just after *Unsolved Mysteries* broadcast their report on Roswell. Agogino told me that he had talked to the same archaeologist

about the UFO crash a long time ago. Agogino even gave me the name, confirming that he had told Agogino what he had told me.

In August, 2000, Pflock attempted to verify this information. Unfortunately, Agogino was too ill to talk to him, so Pflock did the next best thing. He interviewed Agogino's wife, who said that they had, in fact, talked to someone, a long time ago who said he was there, meaning on the UFO crash site, but she wasn't sure who it was. Every time they asked someone about it, he said that it hadn't been him. The tale, for Pflock, remained unconfirmed.

The point is, however, that I talked to Agogino, and those conversations were recorded, some of them on video tape. He gave me the name early on, and repeated, in subsequent interviews, the same name. Talking to the man's wife, when he is unavailable, certainly provides information, but the best source is the direct source, something that Pflock knows. His take on the Agogino information is slightly flawed, though certainly not fatally so.

As another example, Pflock does complain that Frank Kaufmann, who claimed an intimate knowledge of the case, was identified under three different names early on. But that isn't Kaufmann's fault. It is mine and Stan Friedman's. During a small conference held in Chicago in 1992, to discuss the Plains of San Agustin end of the UFO crash, I had mentioned a source that suggested that the Barney Barnett story, of seeing the downed UFO, might not be true. In the conference papers I identified him as Joseph Osborne. Friedman, responding to some of the criticism of the Plains scenario, called him "Mister X" because I wouldn't give him, Friedman, the name. Finally, as my second book was being published, and after Kaufmann had spoken to Pflock, Kaufmann asked me not to use his real name. I knew that the Osborne name had been compromised, so I changed it to Steve MacKenzie. My attempts to protect Kaufmann as a source were somewhat amateurish, but none of this should reflect on Kaufmann's veracity. Pflock knows this.

Following in a similar vein, Pflock points out, correctly, that I did not record the interview I had conducted with Roswell Provost Marshal Edwin Easley in which Easley confirms that Mack Brazel had been held for several days on the air base. Pflock writes, "Randle did not record his interview with Easley and has no independent verification of what he recalls the now-deceased officer told him" (p. 170).

Yet the same can be said about Pflock's interview with Kaufmann. Though he had a tape recorder sitting on the table, Pflock failed to turn it on. Instead, we are treated, according to his footnote 13 (p. 82), to Pflock's reasoning. He wrote, "Except as otherwise noted, everything in this section, 'Frank 3' is derived from my written notes taken at this meeting and my audio taped notes dictated from my meeting." Pflock noted that he didn't ask for permission to tape because he was afraid it would inhibit the free flow of information.

I suppose I could say that "Pflock did not record his interview with Kaufmann and has no independent verification of what he recalls the now-deceased noncommissioned officer told him."

Kaufmann did tell me, after having read Pflock's version of the meeting in his preliminary study, *Roswell in Perspective*, that he, Kaufmann, disagreed with Pflock's memories of the interview. This is a point where it comes down to which account of that interview do you want to believe.

In other chapters, Pflock is careful to provide all the information about some aspects of a specific event but sometimes fails to tell the whole story. In discussing Project Mogul, the weather balloon project that has been blamed for scattering debris on the Mack Brazel (Foster) ranch in 1947, he doesn't report that while the project itself was highly classified, the balloon launches were not. Charles B. Moore, one of the engineers on the project told me during an interview on September 6, 1994, that he, along with others had gone to Roswell to enlist the aid of the military weather station there. According to Moore, the "people there were pretty self-important..." He had explained to some of them that they would need help tracking their balloons. The officers at Roswell, according to Moore, didn't have time to deal with a bunch of college boys.

The CAA (forerunner to the FAA) required that the Mogul balloon launches be announced in NOTAMS, that is, Notices to Airman, because the high flying balloons could pose a hazard to aerial navigation. What this means, simply, is that there were announcements out there that should have helped the officers at Roswell identify the balloons and radar reflectors for what they were. Given that the mission of the 509th Bomb Group was aviation oriented, these NOTAMS would have been checked frequently, and that would have helped in the identification of the Mogul debris, if that is what it was.

And while Pflock accepts the word, and memories, of those who help corroborate the balloon theory, he is quick to condemn the memories of those who suggest something more unusual. Frankie Rowe comes under scrutiny because she "has since told various versions of her remarkable tale to Roswell researchers" (p. 46).

Well, that's not quite accurate. She certainly has expanded her tale, adding details, but the basic story, of seeing the debris at the fire department, and of a visit from military officers who told her to remain quiet, threatening her, has not changed.

Pflock and others have suggested that one reason her story be rejected is because, according to a "former councilman[,]... it was standing department policy not to respond to calls outside the city limits" (p. 63). When I questioned the current fire department about this, I was told that they had to make such runs because there was no one else. What were they supposed to do, let the fire burn?

As Pflock points out, there is no record of a run to the crash site, but there are, according to the records at the fire department, runs outside the city limits. So, this is sort of a wash. Rowe was right that the fire department did respond to calls outside the city, but there is no evidence of one on any of the dates for the crash.

Pflock also suggests that we of the "pro-Roswell" camp accept some testimony without proper corroboration and documentation. Even when a witness seems to have changed his or her story, we pro-Roswellers have a hard time letting it go. Yet, he does the same thing.

Take the witness that he had originally identified as Reluctant, but who was known to most of us as Walt Whitmore Jr. In the late 1970s, Whitmore was interviewed by Bill Moore. He told Moore that he hadn't gone out to the crash site until after the Army had cleaned the pasture, and that he had only seen some of the small bits and pieces of debris that Mack Brazel had taken in to the Sheriff's office. He said nothing about having found samples out on the debris field.

I met Whitmore in 1994 and he told me about picking up a few bits of the debris before the Army had arrived. This debris was so important to him that, for several years, he kept it in his safe deposit box. Later, when he contemplated a trip to Europe, he removed the debris and replaced it with his stamp collection. He took the debris home and had casually placed it, tossed might be too strong, in his "junk" room.

We have now moved from Whitmore's original story of meeting Mack Brazel and finding the field after it was cleaned, to getting there before the Army and picking up material that was, according to what Whitmore told me, and told to Pflock, bits of a balloon. Important material that was locked up for years, and then later lost in a junk room.

Pflock notes that after Whitmore died, Max Littell, of Roswell's International UFO Museum and Research Center, and Whitmore's widow, tried to find the debris, but were unable to do so. Pflock then noted, "...if the Whitmore 'stash' has been located, I would be surprised if it was also not immediately 'lost' again, this time permanently" (p. 153). This is, of course, speculation.

But the real point is that Pflock has now done what he is quick to accuse the rest of us of doing. The memories of Whitmore are not supported by documentation, they are in conflict with themselves, and the final point, that he had debris, has not been proved. The tale is an interesting anecdote, but it is not evidence, as Pflock defined it elsewhere.

But all this does is show that the Roswell story is not just black and white. There are shadings of gray, and no matter who writes about the case, or what their orientation about the case might be, there are areas where the facts diverge. We are all reduced to spin doctoring.

The real value of this book is that it is a comprehensive look at the case, filled with facts and information and if I disagree with some of them, I agree with far more of them. Pflock's book has done a real service in understanding the Roswell case. Without it, some of the problems would still exist. With it, we move a little closer to the truth. We learn things that have been obscured by clouds of misrepresentation, distortion and outright fabrication. Once we move beyond all that, and Pflock is very good at documenting many of those problems, we begin to see a clearer picture.

There is a great deal about this book to recommend it highly. If Pflock has allowed his enthusiasm for his point of view to bias his take on the case, it is just a minor annoyance and certainly understandable. He has provided one of the few books that is necessary in understanding Roswell, regardless of the point of view of the reader. Read with an objective eye, Pflock's work helps us all understand Roswell and that is the real value here.

KEVIN D. RANDLE PO Box 1564 Cedar Rapids, IA 5240

The Anomalist No. 8, "Special UFO Issue," Spring 2000, 190 pages. (Edited and published by Patrick Huyghe and Dennis Stacy. \$9.95 plus \$2.00 postage for U.S. and Canada or \$5.00 for overseas air mail. Patrick Huyghe, P.O. Box 577, Jefferson Valley, NY 10535.)

The Anomalist is an attractively packaged, literate, biannual journal that "explores the mysteries of science, history, and nature" somewhat in the tradition of Charles Fort, but perhaps with a slightly more "psychosocial" slant. Judging by this special issue on UFOs it is not doctrinaire, embracing as it does some thought-provoking and eccentric viewpoints from people who are not exactly "household names" in UFO research.

Although containing some conventional material about UFO sightings, the main thrust of the issue seems to be philosophical interpretations of what it all might mean. What is "reality" and how do we determine "truth"? Thus, epistemology is a main focus. The gist of each contributor's presentation will be presented in order of appearance.

Charles Miller opens with a somewhat derogatory portrayal of "UFO enthusiasts," who in his view leap from observing a UFO to concluding an ET origin. He, on the other hand, expresses the view that truly unexplainable UFO reports may be "ultra-mundane apparitions" that probably originate here on earth (which seems somewhat oxymoronic to this reviewer but still an interesting perspective). Miller advocates having more psychologists and philosophers, and fewer "hard scientists," involved in UFO studies. His take is that UFOs represent some Earth-bound beings who evolved here and co-exist with us, and he raises some interesting philosophical questions in the process.

Next is Jerome Clark, who is a household name in ufology, and a prodigious researcher with an encyclopedic knowledge of all aspects of the subject, be they reported facts, strange personalities, folklore, or anything else. He begins by discussing 18th and 19th century reports of mermaids in comparison to modern accounts of allegedly alien beings. Contemporary scientists and reporters, he notes, were willing to discuss the mermaid reports seriously even though they appeared to be on the face of it "zoological absurdities."

He argues that the mermaid reports are very puzzling and appear to be based on something more than mere "superstition," while not actually claiming that mermaids exist in conventional "reality." Instead, he uses the mermaid reports to illustrate that previous eras have grappled with their own intractable mysteries, and strongly advocates a more agnostic position whereby more people would be willing to say about such things, "I don't know," rather than feeling obliged to take one or another extreme position.

As a bonus, Clark goes into the historical origins of reports of "little grey aliens" as alleged abductors of human beings, recounting some early history of UFO sightings. He finds several cases suggestive of abductions and a few with some strong similarities to modern reports. Overall, he reports, there is only sparse contemporary evidence of abductions prior to the 1960s. His concluding philosophical ruminations alone are worth the price of admission.

Next comes Peter Brooksmith whose interests tend strongly toward myth and folklore. He analyzes the 1991 Roper Poll that sought to determine how many Americans, judging by their perceptions, may have been "abducted by aliens." Brooksmith charges that the primary people involved in constructing and interpreting the poll (Hopkins, Jacobs, Westrum) changed the ground rules in midstream when the poll showed only 18 people who answered all five of the discriminating questions positively. He then attributes interpretations of the poll showing that very large numbers of Americans may have experienced abduction to "the ufological rumor mill and general folklore..."

A repeat of the survey in 1998, he says, yielded very different statistics that cast doubt on the validity of the entire process. At the same time, he notably fails to specifically cite (only briefly alluding to it) the highly critical analysis of the Roper Poll by three PhD behavioral scientists, Robert L. Hall, Mark Rodeghier, and Don Johnson, "mainline ufologists" all.

Novelist Colin Bennett contributes a long analysis of George Adamski (1950s "contactee") as a sociocultural phenomenon, based primarily on the high-level attention Adamski received during his 1959 world tour at the height of his fame (or notoriety). Bennett seems oddly ambivalent about his subject. His depiction of the tour is humorous, contains many interesting tidbits of information, and is occasionally insightful.

"Adamski's space-folk," he says (p. 41), "are pure Disney-schlock, and their conversations have the mental content of a wrecked supermarket trolley." Yet he argues that Adamski represents something other than a standard comman, something that he seems to feel has profound significance concerning the fundamental nature of reality.

At one point (p. 43) he makes the startling assertion that, "Much of Adamski's filmed work has survived stringent authenticity tests to this day..." That will come as a great surprise to any serious researcher who knows Adamski's history. Yet, the author cites only one hearsay reference to justify his statement.

Occasionally Bennett goes into flights of hyperbole that are rather mystifying. For example, he describes in interesting detail Adamski's reception by Queen Juliana of the Netherlands and her court, including prominent scientists and public figures. Then he says that he sees the dynamics of the reception "as a rich semiotic nutrient ... the kind of culture dish in which many things were later to form.... [The session] became that microcosm from which our present society was formed."

My reaction to this is a resounding "Huh?" I suspect that he had some such thing in mind as was expounded by the next contributor, suggesting that "reality" is somehow not what it seems to be. But having experienced Adamski firsthand, I find no requirement for obscure metaphysical constructs to explain him, and Bennett's notions would not pass the cut of Ockham's razor.

Historian and librarian T. Peter Park describes various "coincidences" (of names and sequences) that have been involved in anomalous occurrences, strange similarities in otherwise disparate events. One main illustration is of three people named Watson whose independent activities paralleled each other in an oddly coincidental way. Park feels that when we are faced with anomalies, we tend to practice a form of scientific fundamentalism which he characterizes as "cozily familiarizing the strange." By this he means force-fitting anomalies into a scientific mold. Might there be some epistemological problem here, he wonders.

His alternative: Our physical world may be "penetrated and manipulated by agencies mindful of historical, cultural, and psychological symbolisms and symmetries" (p. 86). In other words, we may find the meaning of anomalous events to be stranger than mere odds and ends of previously unknown physical objects and forces, as the "scientific fundamentalists" would have it. Instead, something "linked in obscure ways to our own psyches, hopes, fears, and conflicts, playing odd but perhaps not wholly irrational symbolic games with us" (p. 87).

Cases from the UFO literature are cited as examples, and the discussion goes into "synchronicity," Vallee's postulated "control system," and notions of a "collective unconscious" generating images or "thought-forms." His point is that cases such as those described are not only strange in themselves, but also "curiously symbolic or coincidental in their location, timing, or protagonists." This, he suggests, undermines a basic premise of mainstream Western science and philosophy, which he characterizes as nature "blindly following mechanized physical laws..." (p. 98). To him, this approach fails to account for the type of information he is reporting.

Co-editor Patrick Huyghe reprises the April 24, 1964, Socorro, New Mexico, landing case in a thorough account, and compares it to the Gary Wilcox case in New York State earlier the same day. Both had a shiny metallic craft and two small occupants. Many interesting tidbits of information are included, and he includes an apt portrayal of Ray Stanford's book on the case which alleged a government cover-up of significant data from an analysis of a metallic appearing substance found at the Soccoro landing site.

Karl Pflock provides a detailed report on the 1949 Aztec, New Mexico, "crashed saucer" hoax, reconstructing the circumstances and personalities involved. He includes some new information provided by a confidential source taken from a journal allegedly kept by the hoaxter, Silas Newton.

The anchor man is Martin S. Kottmeyer, who contributes an interesting article on apocalyptic visions of the future among UFO researchers. He examines the attitudes and beliefs of David Jacobs, whose pessimistic view of the future is grounded in his abduction research, in comparison to the more life-affirming outlooks of prominent skeptics such as Arthur C. Clarke, Isaac Asimov, James Oberg, and Donald Menzel. Kottmeyer contends that many prominent UFO proponents have conveyed "world destruction fantasies" in their writings. He presents an admiring view of the skeptics.

This eclectic collection provides both useful factual information and food for thought. And is it "coincidence" that several contributors allude to "forces" behind UFOs that would appear to be far more mysterious than mere extraterrestrial visitors?

RICHARD HALL Brentwood, Maryland

Thanks to Mike Epstein, previous Book Review Editor, who arranged some of these reviews, to those persons who were consulted for suggestions and advice, and to the reviewers for their time and effort.

ARTICLES OF INTEREST

Schilling, G. (2001). Radical Theory Takes a Test. *Science*, 291, 579. (Part of a report of the 197th Meeting of the American Astronomical Society).

Margaret Burbidge of UC San Diego and past president of American Association for the Advancement of Science "presented evidence supporting a theory that, if correct, would turn cosmology inside out." The redshift on a pair of quasars flanking Galaxy Arp 220 (250 million light years away) indicates a distance of 6 billion light years. "The evidence is accumulating," she says, "that redshift is a shaky measuring rod." James Moran of the Harvard-Smithsonian Center for Astrophysics plans a test, with results expected in late 2001.

Arp, H.C., Burbidge, E.M., Chu, Y., & Zhu, X. (2001). X-Ray-emitting QSOs Ejected from Arp 220. *Astrophysical Journal Letters*, 553, L11–L13.

This is the paper given at the AAS Meeting above. It is proposed that the intrinsic redshift may be characteristic of newly created matter. Arp thinks the quasars originated inside the galaxy and that matter is being created in the cores of active galaxies. If

the quasars are really ejected from the galaxy, their separation on the sky will be measurably increasing.

both submitted by Tom Van Flandern

Martindale, D. (2001). Opinion Interview. New Scientist, 5 May, pp. 40–43.

"Why don't planes fall out of the sky? If you believe...just about every textbook... it's because air travels faster over the 'hump' of a wing."

Certainly that's what I learned in school or college. But Fermilab physicist David Anderson argues that's wrong. This short interview-article gives the main points. The full argument is in Anderson's book, *Understanding Flight* (McGraw-Hill, ISBN 0-071-363-777).

To needed amendments of mainstream paradigms there seems to be no end!

submitted by Henry Bauer, cr. Dieter Britz

Readers are encouraged to submit for possible inclusion here titles of articles in peer reviewed journals (which do not focus on topics about anomalies) that are relevant to issues addressed in the JSE. A short, succinct commentary should accompany. The articles may be in any language, but the title should be translated into English and the commentary should be in English.