## **BOOK REVIEW**

**UFOs, ETs, and Alien Abductions: A Scientist Looks at the Evidence** by Don Donderi. Charlottesville, VA: Hampton Roads, 2013. 231 pp. \$22.95. ISBN 978-1571746955.

Many books about UFOs appear each year, yet few of these books are worth reading; *UFOs*, *ETs*, and Alien Abductions is one of those few.

The author, Don Donderi, holds a doctorate in psychology and spent most of his career at McGill University in Montreal as a professor, dean, and researcher. His specialties are human visual perception and memory, with several books and more than one hundred research papers and technical reports to his credit. He began to read about UFOs when he was ten years old. The interest has stayed with him throughout his life and motivated him to investigate several sightings as the opportunities arose. In 1968 he participated in a review of occupant cases as a consultant for the National Investigations Committee on Aerial Phenomena (NICAP), then the leading U.S. civilian UFO investigations organization. In the 1990s, when abductions dominated ufology, he consulted on how to interpret the results of a Roper Poll designed to uncover the prevalence of abductionlike experiences in the general public, and participated in major meetings such as the 1992 Abduction Study Conference held at MIT. He further lent his psychological expertise to a personality test for separating simulated abduction claims from honest experiential reports, and to an experiment that compared symbols reported by abductees with symbols imagined by non-abductees.

In short, Donderi writes about UFOs from a position of long familiarity with the subject and experience with hands-on UFO research, while also bringing the expertise of a seasoned academic psychologist to issues of who sees UFOs and how to distinguish truth from error in observation. This combination equips him with the rare perspective of scientific objectivity combined with an informed and sympathetic curiosity. He also states his general position with refreshing open-mindedness:

When our senses turn up something new in the world, there *is* something new in the world, and it is an obligation of a trained professional who understands the human senses to report on it.

Though he is aware of the pitfalls of human observation and memory, he does not dismiss the anecdotal evidence of eyewitnesses out of hand. The reader can look forward to a balance of critical rigor and fairness toward UFO evidence seldom found in scientific treatments.

The book can be divided into two general arguments: The first establishes UFOs as a distinctive phenomenon worthy of acceptance as an extraordinary reality and the second considers why government and scientific authorities have largely ignored, denied, or disparaged the subject. Donderi founds his case for the reality of UFOs on the striking observations that responsible people have continued to report from 1947 to the present. The original "flying saucer" sighting of Kenneth Arnold on June 24, 1947, introduced the mystery of seemingly metallic vehicles flying at impossibly high speeds, which no nation on earth possessed the technology to build. Consistently over time competent but startled witnesses would report further encounters with flying objects that defied conventional explanation yet suggested the presence of superior technology. One example is the case of the luminous saucers that flew twice over Washington, D.C. in the summer of 1952, where radar tracked them, witnesses on the ground watched them, and jets chased them to no avail. Another case occurred in 1957 when the crew of an RB-47 tracked an unknown, radar-emitting object over some 800 miles from the Gulf Coast of Mississippi across Texas and into Oklahoma. In 1973 an Army Reserve helicopter piloted by Lt. Lawrence Coyne nearly collided with a cigar-shaped object bearing several lights. The cockpit filled with green light and the helicopter climbed nearly three thousand feet even while Coyne held the control lever for descent.

Cases of this caliber recur throughout UFO history. With multiple high-quality witnesses, instrumental confirmation, consistent patterns, and no credible conventional explanation, such reports ought to demonstrate a significant UFO phenomenon beyond a reasonable doubt. In reality this has not been recognized. Government authorities and official science continue to treat the phenomenon as if no worthwhile evidence existed. No other motive for this behavior was implied in the 1950s than the narrow Cold War concern of governmental and military authorities' desire to prevent public alarm, while scientific rejection owed much to hubris and the unwillingness to pay close attention to the evidence. These habits of thought have carried over even as more and more "touchstone" cases have confirmed not only the existence of UFOs, but their probable extraterrestrial origin.

Donderi characterizes the history of UFOs from 1947 until about 1980 as a "chronology of doubt," a time when UFO reports created shifting, often entangling currents of uncertainty among interested parties. During this period responses to UFO evidence missed the mark from nearly every

quarter. The public took a keen interest in the subject and civilians shouldered an investigative task that military and scientific authorities usually shirked, but UFOs also attracted charlatans, hoaxers, self-promoters, and religious seekers along with well-intentioned but inept amateurs. As a result, civilian ufology sewed together a crazy-quilt of studies, claims, and speculations that ranged from meritorious to loony and created an incoherent image of what UFOs encompassed. Official science approached the subject with doubt and too often issued condemnations based on the antics of its proponents rather than on the merits of the evidence. A new breed of professional skeptics emerged, beginning with Harvard astronomer Donald Menzel, who explained UFOs in conventional terms but seldom confronted the reported facts of the best cases. These seemingly authoritative but spurious "explanations" gave other scientists license to ignore the phenomenon out of hand but exasperated informed members of the public and shook their trust in scientific authority.

The military took an early and serious look at this new phenomenon. As early as 1948 one faction of Air Force Intelligence concluded flying saucers were most likely extraterrestrial vehicles; a second faction concluded that no evidence indicated the saucers threatened national security, manifested exceptional new technology, or came from outer space. By 1953, the CIA-sponsored Robertson Panel essentially transformed doubt into policy by declaring that UFOs were not real and needed to be stripped of the public interest they had "unfortunately" acquired. Before Robertson, when Edward J. Ruppelt headed the Air Force's Project Blue Book, he carried out serious investigations and amassed evidence for a genuine mystery. Afterward, in obedience to the Robertson conclusions, UFOs ceased to be a matter to investigate and became no more than a public relations headache for the Air Force. No meaningful effort was made to understand UFOs even as new cases fascinated the public and mocked the flimsy explanations concocted by low-ranking personnel with little thought and less evidence.

The climax arrived in the mid-1960s when prolonged waves of UFO activity attracted favorable media attention and provoked Congressional leaders to call for investigations. Long anxious to get out of the UFO business, the Air Force agreed to fund a scientific study led by physicist Edward Condon at the University of Colorado. This Condon Committee promised to satisfy military, scientific, and civilian interests in a rigorous but fair study, only to fall apart in a fiasco that ended in 1968 with Condon writing that there was nothing to UFOs even as he ignored the contrary evidence collected by project investigators. Outraged ufologists felt betrayed and gave up on the scientific establishment for any meaningful answers.

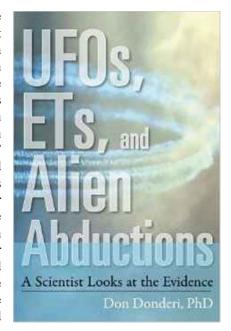
In the aftermath of this disappointment, a new ufology emerged. Some dissident scientists, most notably James McDonald and J. Allen Hynek, were already speaking out against the prevailing scientific verdict with evidence and argument that UFOs were both real and perhaps otherworldly. New organizations such as Hynek's Center for UFO Studies (CUFOS) set out to fill the vacuum left by official negligence. The UFO phenomenon itself was also acquiring a different complexion. In the 1950s most UFOs were described as distant flying disks or lights in the night. A gradual change toward close encounters grew throughout the 1960s and 1970s as the era of doubt transitioned into an era of certainty.

By the 1980s, two changes in the phenomenon helped to solidify the case in its favor: one was the growing prevalence of extremely large UFOs, some round and some V-shaped, flying low and slow over the landscape. For several years during the early 1980s, lighted "boomerang"-shaped objects "wide as a football field" appeared to hundreds of witnesses along the Taconic State Parkway in New York and Connecticut. In 1989 large triangular objects with lights invaded Belgium and jet fighters went in pursuit, while in 2008 another large UFO flew near Stephenville, Texas, and was tracked on radar and (perhaps) pursued by jets. Multiple motorists along a 200-mile stretch of highway in the Yukon saw a giant tub-shaped UFO in 1996. The object was lit up like a Christmas tree with multiple lights, and triangulation indicated a diameter as large as one mile. UFOs seemed to have traded their elusiveness for deliberate and even provocative display.

The second major change was the emergence of abductions. Reports of humanoid beings associated with UFOs date back to the 1950s, but a definite pattern and purpose took shape only with the "interrupted journey" of Barney and Betty Hill in 1961. A UFO followed them through a remote mountain valley in New Hampshire as they drove at night, finally drawing near, then abruptly disappearing. The Hills continued their drive home but arrived some two hours later than expected. Betty soon experienced nightmares and Barney suffered from anxiety that worsened over the following months until he sought medical attention. Hypnosis then uncovered memories from both the Hills that a party of humanoid beings had stopped them, escorted them aboard the landed UFO, and subjected them to a medical examination. Some communication followed with one of the beings, then the Hills continued their journey and lost conscious memory of their onboard experiences. As strange as the story sounded, the Hills held excellent reputations and their doctor was a distinguished psychiatrist; physical evidence lent further support.

By itself the Hill case stood as an isolated curiosity, but it did not remain

in isolation for long. Other people experienced intense fears without apparent cause and associated in some way with a light or object in the sky. Two camp counselors one afternoon in 1968, four campers in Maine in 1976, and two women driving across Kansas one night in 1989 underwent "missing time" experiences like the Hills's, and these people recovered memories of capture and examination similar to the Hills's. Many more creditable reports confirm a recurrent pattern of complex events and similar descriptions of the entities and the interior of the UFO. The standard arguments against the abduction evidence cannot stand up: Hypnosis does not "cause" the



memories because many abductees recall part or all of their experiences without resort to it; an investigator with an agenda does not instill false memories because other investigators with different agendas uncover the same story. Psychological tests of abductees reveal that they represent a normal cross-section of society without any tendency to psychopathology or characteristics such as fantasy-proneness. They act more like people who have had unnerving experiences than people susceptible to imagining strange things. The consistency of the abduction story, its compatibility with what else we know about UFOs, the normalcy of the abductees, and the availability of supporting evidence such as independent recollections of unpublicized symbols all converge in pointing toward the abduction phenomenon being a reality.

Donderi has guided the reader through the clutter of UFO data to the truly informative pieces, then fits those pieces together into a meaningful whole: Countless, often high-quality witnesses around the world have observed UFOs for decades. Instrumental evidence affirms that UFOs are physical objects with solidity and weight. UFOs are unlike any known aircraft. They are capable of great speed and maneuverability and they also can cause physical effects on human bodies and interfere with electronic devices. UFOs are strange but limited in their strangeness; they manifest recurrent patterns of appearance and action. The occupants that sometimes

accompany UFOs suggest that these objects are crafts flown by unearthly beings. The activities of these beings show that they take an interest in humans, perhaps as scientific specimens or for some other program, but in any case the numerous reports of abductions indicate purposeful interaction of these visitors with humans.

Science as we learn about it in schoolbooks starts with the observation of an anomalous phenomenon. A process of repeated observations that leads to generalizations about the phenomenon is induction, and similar observations from diverse witnesses provide evidence for objectivity. Discovery proceeds to understanding from recognition of consistent patterns and elimination of competing explanations to establish a firm hypothesis or theory for further testing. UFOs have fulfilled these requirements and convinced many people. Scientists are not among them, and, in what seems almost as strange as the phenomenon itself, they show no interest despite the cumulative evidence. In one short but enlightening chapter Donderi offers pointed explanations for this baffling oversight.

In reality, science does not work according to the straightforward popular ideal. As Thomas S. Kuhn pointed out in his study of scientific revolutions, most science is "normal" science, a process that operates within a theory or system of theories that comprises a prevailing paradigm of understanding. This paradigm has proven so successful that it stands as "truth as we know it," and most scientific activity serves to apply this paradigm to more and more of the natural world. However, along the way, some parts don't seem to fit in. These anomalies present puzzles that scientific effort solves by finding a place for them within the paradigm, or in rare instances, the anomalies accumulate and present a serious conceptual challenge to accepted understanding. Such a crisis may lead to the growth of a competing paradigm that embraces not only the explanations of its predecessor, but also the anomalous evidence. The new and better paradigm then overthrows the old, like the Copernican system replaced the Ptolemaic view of the universe in a famous scientific revolution.

UFOs seem like just the sort of anomalies to revolutionize current understanding, but no one should expect scientists to welcome them. The psychologist and philosopher William James pointed out that science is extremely conservative. Scientists do not like evidence that doesn't fit, and they are much more likely to ignore it than to expend time and effort on it, much less risk the loss of a paradigm that has served them so well throughout their careers. Scientists are human, prone to reject UFOs because of a vested individual interest in preserving the current paradigm, and because of social pressure not to buck a congenial status quo. Real or not, UFOs have an uphill fight of the most serious kind to attract scientific favor. In one of

his most significant insights, Donderi characterizes modern science as not interested in asking *does* something exist, but rather asks *can* it exist, and, if so, how does it work? Such an approach makes scientists sound like the priesthood that once denied the earth moved around the sun, but this attitude is a direct result of the outstanding success of scientific practice based on paradigms that place understanding first and observation second. UFOs clearly land on the wrong side of the question because they are strong in observation and experience but run afoul of accepted expectations for what is and what can be.

The place of the U. S. government necessarily returns to mind before a survey of the UFO mystery can draw to a close. Surely the government has to stay on top of the situation and know more about it than anyone else, yet the only statements given to the public say UFOs are not real and pose no threat, and no investigations continued after Project Blue Book closed in 1970. The clearest evidence that official words and deeds do not add up is the Roswell crash. Investigators have interviewed hundreds of people who witnessed or knew something significant about the incident, and a compelling picture emerges that something remarkable and probably extraterrestrial crashed, while military authorities strove with considerable success to plug all leaks of information in the aftermath of the event. One blatant example of coverup was the replacement of genuine wreckage with balloon debris for newspaper photographers so that they could spread the word that only a balloon had crashed.

With the Roswell incident following Kenneth Arnold's "flying saucer" sighting by less than two weeks in 1947, the government must have known all about UFOs almost from the start. The subject must also have been a matter of highest concern, not just a public relations problem or a burden on personnel and communication systems. From this perspective, the history of UFOs stands in a very different light. Those years of doubt, denial, and low-level Air Force investigations amounted to efforts on the periphery by people largely in the dark about what was really going on, or diversions intended to hide the real answers. The truth was already in hand and the real official investigations occurred—and continue to occur—out of sight as "black ops." When significant sightings happen, mainstream media take too close an interest, or anyone gets too close to sensitive information, the documented responses include the disappearance of vital information or the spread of disinformation. Such practices can result only from government policy, and the effort to maintain secrecy implies a secret important enough to keep. The UFO puzzle comes together if a governmental elite with little trust in the wisdom of the masses conceals the knowledge of ongoing extraterrestrial visitation, controlling public perceptions out of patriotic but

undemocratic motives to preserve order and a sense that "all's well."

Donderi wraps up the multitudinous parts of the UFO mystery into a meaningful whole. He emphasizes the importance of the phenomenon as the foundation for all else, the primacy of those raw experiences of objects that appear out of nowhere and disappear back into it, to leave no trace in the air but a profound sense of surprise and amazement on the witnesses. Too often in ufological writing the emphasis shifts from this root cause to government responses and efforts to divine what the authorities are hiding, or to aliens and their mission, but here the spotlight rightly stays centerstage on the phenomenon itself. Without this substantive mystery of the actual sightings, all the rest has no purpose. With the phenomenon and its extraordinary implications in mind, the rest falls together and makes well-defined sense.

In this book, as in his public lectures, Donderi maintains a lucid and well-crafted argument. The reader never loses sight of what matters, why it matters, and where the parts belong in the overall scheme. For these reasons the book could serve as a valuable introduction to the subject of UFOs for newcomers, but equally well as a reminder to veterans of where the basic evidence lies and how all the rest provides auxiliary support. Anyone familiar with the literature will read of events and controversies already familiar to them, but they stand to benefit from seeing them ordered according to their proper proportions in a cohesive overview. The result is a convincing statement of the rational case for UFOs.

Donderi's discussion of the psychology of science brings a new perspective to most ufologists. They have long regarded ufology as a scientific enterprise and aspired to scientific acceptance, then resented mainstream scientists for withholding it. Donderi replaces the image of stubborn and arrogant scientists with valuable understanding of the practices and mindset behind their rejection of UFOs, and such understanding provides a starting point from which to heal frustrating attitudes on both sides. The reader may notice that Donderi's ufology does not readily embrace conspiracy theories. He prefers psychological and social explanations for the actions of scientific and governmental authorities and pragmatic motives for hiding evidence and the human weakness of rejecting the challenge of revolutionary new knowledge. He builds his history of growing UFO evidence without factoring in the implications of Roswell, introducing the crash and what it must have meant to official policies and behavior only late in the book. To accept Roswell is to obligate a radical rewriting of history, and not just UFO history. Donderi acknowledges the extraordinary importance that ufologists attribute to this event, but he does not seem to have fully reckoned with its consequences. The result is a book that is at odds with itself, with the

first and larger part telling a story of UFO events and a human struggle to understand the unknown, while a short final section reveals that some authorities knew the secret of UFOs from the beginning and the rest of the history unfolded in full awareness of what the events were all about.

Donderi's exposition presents ufological history as advancing from uncertainty through adversity toward the triumph of truth. This positivistic course lays out a thrilling plot line and suggests a happy ending to the story, but in fact the plot has not reached its resolution. After the new hope in the wake of the Condon fiasco and the emphasis on abductions and Roswell during the 1980s and early 1990s, the ufological bandwagon seems to have lost its way and run out of steam. The book pays little attention to the past 25 years or so, and maybe that is just as well, because the story becomes one of ufological organizations closing and trustworthy information being supplanted by rampant nonsense and misinformation on the Internet, of charlatans and "personalities" replacing experienced and trustworthy ufologists as spokesmen for the field. Little research goes on, few bright lights of integrity remain, and the chance for UFOs to gain respectability seems farther away than ever. A desire not to end the book on this low note is understandable, but for the sake of accuracy he probably should not have overlooked this disappointing state of affairs.

Even an argument of the finest crystalline structure is no stronger than the evidence that supports it. If the evidence proves false then the argument fails as well, and for this reason the choice of cases is of utmost importance when arguing in favor of UFO reality. Anyone familiar with ufology knows that most reports are mistaken identities, with Venus or earthly aircrafts as common culprits. The evidence for a significant UFO phenomenon lies in the high-quality reports that do not resolve easily into conventional phenomena. Donderi rightly wastes no time on readily soluble reports and concentrates on the strongest examples, well-known and provocative cases with proven staying power against criticism. Yet even these select exemplars are far from infallible.

For example, the Yukon giant "mother ship" of 1996 received an excellent investigation and one TV series ranked the case as one of the ten best UFOs of all time. The composite illustration looks impressive and leaves a casual viewer to wonder how anyone could doubt that such an object came from another world. Yet skeptics have also investigated this case and explained it as the reentry of Russian space debris. The ufologist who investigated the Yukon sightings was aware of the reentry on the same night as the sightings but dismissed this solution on the grounds that the reentry should not have been visible to the witnesses, but the skeptics sought out a leading expert on reentries, who declared that the sight should

have appeared low in the north, just where the witnesses reported it. Further confirmation comes from the fact that witnesses who actually checked a clock during the sighting reported a time that coincided with the reentry, and from the reports of witnesses all along the north-to-south highway that the UFO flew west to east. Other known reentry cases have misled witnesses into thinking that burning fragments high in the atmosphere were lights on a solid body close to the ground, and much evidence points to the Yukon "UFO" being another example of the same illusion.

The skeptics argue that if some high-quality cases resolve sooner or later into conventional phenomena, all UFO reports will eventually go the same way and we may as well conclude that no genuine UFOs exist. This skeptical faith may stretch too far. Strong cases still support the presence of a remarkable phenomenon in the skies, as Donderi has ably outlined. What the failure of significant cases should teach us is that the evidence is more confusing than ufologists like to admit, and the search for truth calls for all the expertise available. In other words, ufologists could benefit from a cooperative relationship even with skeptics, rather than ad hominim attacks on the intelligence and integrity of anyone who expresses doubts about UFOs. In Donderi's effort to explain the thought processes of scientists when they reject UFOs, he might have admitted that ufologists have seldom presented a satisfactory case. They too often accept questionable reports, or fail to give proper credit to negative evidence. As long as too little certainty and too much advocacy surrounds UFO evidence, doubting critics find good cause to consider their rejection a rational choice, and ufologists to regard themselves as their own worst enemies.

These quibbles aside, Donderi has authored a book with a clear and succinct argument to take UFOs seriously. It will not convince the skeptic, but it is worthy of reading by everyone interested in the subject or even curious about it, if for no other reason than it provides a fine statement of why many ufologists maintain a commitment to their subject. They know their reasons or at least feel them, but only a few have stated their case half as well as Donderi has done here.

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