

SOME UFOs ARE EXTRATERRESTRIAL

The Evidence, the Arguments and the Consequences

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I thank the McGill Chapter of Sigma Xi for inviting me to talk about extraterrestrial UFOs.

As a research psychologist I have been professionally interested in the UFO phenomenon since 1965, and tonight I am going to report some of what I have learned over that time.

Some of what people report as UFOs are extraterrestrial vehicles.

I think that this is established beyond reasonable doubt, the standard of proof required for a criminal conviction

I will not have time to talk in any detail about two other propositions, which I think are true on the preponderance of evidence, but I discuss them thoroughly in the book I wrote in 2013:

Some of those ET vehicles have ET crews.

Some of those ET crews “catch and release” humans to study us, just as we study many of the other animal species on this planet.



Albert Einstein

Pure logical thinking cannot yield us any knowledge of the empirical world; all knowledge of reality starts from experience and ends in it.

Quoted From Einstein's 1933 Herbert Spencer lecture and repeated in Abdus Salam's 1979 Nobel Prize address.

What is the nature of the evidence?

John Stuart Mill, the British philosopher, wrote about inductive science as follows:

When from the observation of a number of individual instances, we ascend to a general proposition, or when, by combining a number of general propositions, we conclude from them a proposition even more general, the process, which is substantially the same in both instances, is called Induction.

Alfred North Whitehead emphasized the most empirical aspect of science:

A law of nature is merely an observed persistence of pattern in the observed succession of natural things. ...The pre-occupation of science is then the search for simple statements which in their joint effect will express everything of interest concerning the observed recurrences.

And (see above): Einstein put it very simply.



J. Allen Hynek

UFO Classification System

NL	Nocturnal light
DD	Daylight disc
RV	Radar-visual
CE I	Close encounter of the first kind (close range)
CE II	Close encounter of the second kind (physical trace)
CE III	Close encounter of the third kind ("occupants")

Hynek, J. A. *The UFO Experience: A Scientific Inquiry*. Chicago: Regenery, 1972

J. Allen Hynek lived from 1910 to 1986. He received a BSc in science and PhD in astronomy from my undergraduate alma mater, the University of Chicago.

He was hired by the United States Air Force in 1948 as their astronomical expert for Project Sign, then project Blue Book – the Air Force groups investigating UFOs. His job was to find the “normal” explanation for each unknown. He worked at that from 1948 to 1970, along with his day job at various universities.

Analyzing the Air Force records – the official collection agency from 1948 to 1970 – he and other workers found that about 80 – 85 % of UFOs were identifiable with background knowledge about *witness reliability, astronomy, engineering, airline schedules, satellite passes, metrological information* and the like, but that 15 to 20 percent were not. Hynek developed the classical descriptive framework for UFOs: NL, DD, RV, CEI, CEII, CEIII (see above).

Hynek founded a UFO study group and wrote a classic book on the subject in 1972. He also pioneered the analysis and classification of anomalous UFO data. He hypothesized that some of what people report as UFOs were ET spaceships, so the idea – the extraterrestrial hypothesis (ETH) with a scientist speaking up for it – is not new. Hynek remained skeptical but open-minded and accepted the ETH as a possibility, although not a certainty.

Kenneth Arnold, Cascade Mountains, WA, June 1947: DD



The Evidence

Let us look briefly at some of the observed recurrences that establish the reality of ET UFOs. I gave four one-hour lectures about the evidence in 2010 and wrote a 230-page book about the evidence in 2013. Four talks, or a book, define two different lower limits of the number of words and pictures required to establish a strong case for individual observations and for a systematic and comprehensive description of the phenomena that are the subject of this talk. I review a total of 37 separate observational cases in my book and there are thousands of equally good observations in the accumulated literature.

Tonight you will have to take for granted that – given my knowledge and research background in the experimental psychology of visual perception and memory -- there are no spurious cases; no misperceptions of metrological or astronomical phenomena, misperceptions of other natural phenomena, misperceptions of airplanes, balloons or satellites, psychological delusions, mass hallucinations, or hoaxes, included among the brief expositions of a very few of the cases that contribute to my conclusion that beyond reasonable doubt some UFOs are ET vehicles.

Kenneth Arnold, 1947 (the “index case”) DD, other witnesses. Arnold was a private pilot who saw the first widely reported “flying saucers” while flying over the Cascade mountains in Washington state in June of 1947.

Kenneth Arnold, Cascade Mountains, WA, June 1947: DD



RB-47, Gulf of Mexico, July 1957: R-V



In 1957 a US Air Force RB 47 reconnaissance plane was paced by a UFO for hours as it flew a practice mission over the Gulf of Mexico and then returned to its base in Arkansas. It was tracked on the aircraft's radar, on ground radar, and it was seen by the members of the aircrew. The aircraft was given permission to chase the UFO which it did: and the UFO stopped in midair below the aircraft, leading the aircraft to overshoot the UFO until the UFO caught up and paced it again until close to the end of the aircraft's flight. Transcriptions of all of the communications, and reports on the incident, were discovered afterwards by Dr. James E. McDonald, an atmospheric physicist, who wrote an extensive report on the case.

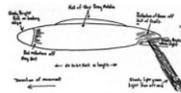
Kenneth Arnold, Cascade Mountains, WA, June 1947: DD



RB-47, Gulf of Mexico, July 1957: R-V



Coyne Helicopter Incident, Central Ohio, 1973: CE II



A four-person Army medevac helicopter crew was intercepted by a UFO over central Ohio in 1973. The UFO pulled the helicopter thousands of feet above its normal flight altitude before flying off. The encounter was witnessed by passengers in a car below. The encounter permanently damaged the helicopter's magnetic compass. The case was described in flight reports filed after the incident; UFO researchers found and interviewed the ground witnesses.

Hudson Valley, 1982– 1986: CE I, CE II

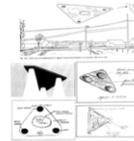


Observations of low-flying boomerang-shaped or triangular objects, some as large as football fields, were made over a period of several years in the area of New York State and Connecticut east of the Hudson River between New York City to the south and Albany to the north. Many of the observations were reported from the Taconic Parkway, a major commuter artery from the suburbs to New York City. Many of the reports are described in *Night Siege 2nd ed*, by J. Allen Hynek, Philip Imbrogno and Bob Pratt: St. Paul, MN: Llewellyn Publications, 1998.

Hudson Valley, 1982– 1986: CE I, CE II

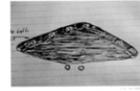


Belgium, 1989: R-V, CE I

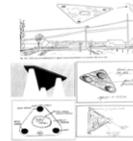


Observations similar to those near the Taconic Parkway were made in Belgium in 1989. They were investigated by the Belgian government. Jet fighters were sent up to intercept the low-flying UFOs on two occasions, and on one occasion a jet obtained a camera-recorded track of the UFO target. The entire episode is documented in *UFOs: Generals, Pilots and Public Officials go On the Record*, by Leslie Kean (Harmony Books, 2010)

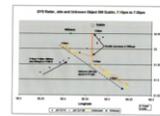
Hudson Valley, 1982– 1986: CE I, CE II



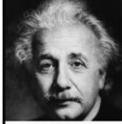
Belgium, 1989: R-V, CE I



Stephenville, TX, 2008: R-V



The radar plot of a low-flying UFO intercepted by USAF jets and an air reconnaissance plane was obtained from FAA radar records following visual observation of the large craft near Stephenville, TX in 2008. Complete documentation is available from the Mutual UFO Network, a US-based civilian UFO research organization (www.MUFON.com)



Albert Einstein

**These people have seen something.
What it is I do not know and
am not curious to know.**

Letter to Louis A. Gardner, July 23, 1952 cited in Jacobs, D. M. *The UFO Controversy in America*, Indiana University Press, 1975 [Signet Edition, p. 71.]

The previous accounts are straightforward, well documented and well attested (often with secondary evidence). The intersection of converging factual accounts defines the evidence in each case as well as the overall phenomenon. From these accounts I draw these general conclusions:

Some UFOs –

Are technologically superior artifacts under intelligent control because

- They take an interest in humans and human artifacts (airplanes, nuclear bunkers, etc.)
- They are solid radar reflectors, visible at close and long range
- They react to human actions: attack, approach, etc.
- They outfly jets that chase them
- The acceleration, speed, and hovering ability exceed ability of terrestrial vehicles

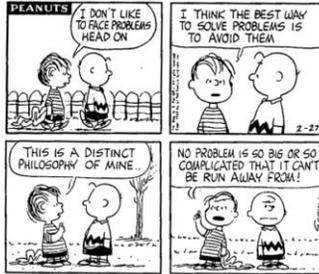
Knowing what we know about humans and human science, they far exceed our technological capabilities. Therefore they are non-human artifacts and so by elimination, extraterrestrial.

What did Albert Einstein say about UFOs? See above.



Linus van Pelt

No problem is so big or so complicated that it can't be run away from.



Linus van Pelt spoke for Albert Einstein when he said essentially the same thing:

“No problem is so big or so complicated that it can't be run away from.”



Thomas S. Kuhn

There is no such thing as research in the absence of any paradigm. To reject one paradigm without simultaneously substituting another is to reject science....

.... rejection of science in favor of another occupation is, I think, the only sort of paradigm rejection to which *counter-instances* themselves can lead.

Thomas S. Kuhn : *The Structure of Scientific Revolutions*, 2nd ed.
U. of Chicago Press, 1962

Thomas Kuhn, a twentieth-century philosopher of science, explained in *The Structure of Scientific Revolutions* that modern science is theory (paradigm) driven. Science moves from one paradigm to another and it is not “naturalistic” in the seventeenth, eighteenth or nineteenth-century sense. Establishment scientists have no time for anomalous observations unless they can be explained as resulting from an existing theory or supporting an opposing one.

Most of the efforts of what is called establishment science over the past 65 years have been devoted to pigeonholing UFO observations in one or the other of the categories I have already eliminated as explanations for the evidence discussed at the beginning of the talk: misidentified human artifacts, metrological phenomena, astronomical phenomena or psychological aberrations or abnormalities.

All of the UFO evidence cited so far is in Kuhn’s sense a collection of “counter-instances” without a theory. They all have to be ‘explained away’ by adapting (or stretching) theories of “normal science” to explain them. I have already said that none of the counter-instances I presented can be explained by stretching “normal science.”

We are left with the fact that “normal science” just won’t explain away all of the counter-instances.



Leon Festinger

Cognitive Dissonance

Two cognitive elements are in a dissonant relation if, considering these two alone, the obverse of one element follows from the other.

The presence of dissonance gives rise to [mental] pressures to reduce that dissonance.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA., Stanford University press, pp 260 – 266

But how do we (psychologically) deal with the UFO counter-instances?

Leon Festinger, a social psychologist, explained that we have mechanisms for dealing with disturbing counter-instances – things that are “dissonant” with each other.

It is “dissonant” with our sense of scientific superiority and physical safety to believe that there are intelligent beings who use a technology we cannot duplicate and who can come and go at will in our atmosphere without us being able to do anything about it. This is an upsetting idea. How do we make it less upsetting: Festinger suggested three ways to do that:



Leon Festinger

There are three major ways in which [reducing dissonance] may be done:

- 1. By changing one or more of the elements.. (the messenger is a “wacko”)**
- 2. By adding new cognitive elements that are consonant.. (it’s all cults and pop culture)**
- 3. By decreasing the importance of the elements involved in the dissonant relations.. (the signal-to-noise ratio is low)**

- Change an element of the message: The person who is telling me these things is unreliable; he or she is a “wacko” and therefore I don’t have to take the message (or the messenger) seriously
- It’s all just pop culture and cultists: “Contactees,” mentally unstable people, “enthusiasts”, “UFO buffs”: people whose opinion doesn’t matter.
- There really isn’t enough information; what I see is useless junk on the internet.

If I tell myself these things, I can counteract the anxiety-provoking message that some UFOs are extraterrestrial, with all that implies.



Edward U. Condon

- ... further extensive study of UFOs cannot be justified in the expectation that science will be advanced thereby.
- ... whatever effect there has been has been bad.
- ... fantastic propositions that are being supported by appeals to fallacious reasoning or false data.

Edward U. Condon, (Scientific Director). *Scientific study of unidentified flying objects*. New York: Bantam Books, 1968, pps. 1 - 6

The US government's policy makes cognitive dissonance an easy "way out." Ever since 1969, the official position has been that UFOs are all misperceptions or psychological aberrations.

The scientist Edward U. Condon headed a government-appointed committee of scientists to look into the UFO problem in 1966. He was a fierce critic of people who took the phenomenon seriously (see his comments above)

Michael Swords, a student of the UFO phenomenon, wrote

"There is something about this subject, some barrier to its believability, some challenge of an emotional kind, which produces the most inexplicable responses by otherwise reasonable, highly functional people." (UFOs and Government: A historical inquiry, p. 115)



The US Department of Defense

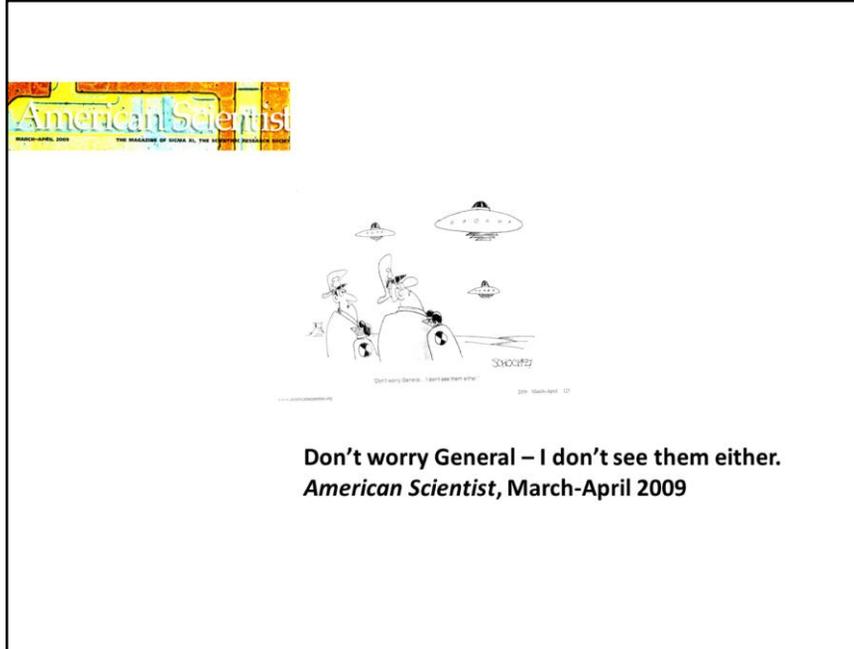
<http://www.defense.gov/faq/pis/16.html>

- No UFO reported, investigated and evaluated by the Air Force was ever an indication of threat to our national security;
- There has been no evidence submitted to or discovered by the Air Force that sightings categorized as "unidentified" represented technological developments or principles beyond the range of modern scientific knowledge; and
- There was no evidence indicating that sightings categorized as "unidentified" were extraterrestrial vehicles.

Since Condon published his report in 1969 the US government position has been: consistent denial that any UFOs are extraterrestrial. The statement quoted above has been the official position for decades. It is available on the US Department of Defense website.

Denial works. I once asked a professor who commuted to work along the Taconic Parkway and who told me that he had seen one of the Taconic Parkway UFOs what he thought he had seen. His answer was: "The government explained them so I didn't think about it."

That man is a scientist distinguished for research work in his field. It proves Thomas Kuhn's point that counter-instances count for nothing in modern science.



Don't worry General – I don't see them either.
***American Scientist*, March-April 2009**

American Scientist is the scientific magazine published by Sigma Xi, the host organization for this talk. Even Sigma Xi thinks that the government's denials are ridiculous.



Alexander Wendt and Raymond Duvall

Wendt and Duvall: the distinction between elite culture (the governing meritocracies in science, politics and media) and popular culture (everybody else).

Elite culture ignores the UFO evidence because, really, we just don't want to know. *Cognitive dissonance* keeps the "two cultures" (elite and popular) separate.

Alexander Wendt and Raymond Duvall: *Militant agnosticism and the UFO taboo*, In Kean, Leslie: *UFOs: Generals, pilots and government officials go on the record*. New York: Harmony Books, 2010.

Alexander Wendt and Raymond Duvall are American political scientists. They have taken an interest in what has happened to the UFO evidence. They suggest that "elite culture" explains UFOs as an example of the "popular culture" of the great unwashed, and buys the "normal science" explanation that it can all be explained as anomalous.

What they add – and this is relevant in the "cognitive dissonance" context – is the note that the evidence is particularly disturbing to people who are in some sense responsible for finding a response to it, because there is no well-articulated response and our society has not even begun to discuss such a response.

There is plenty of popular culture to associate with UFOs: remember that Leon Festinger's cognitive dissonance mental dynamic biases the interpretation and explanation of the evidence in favor of assuming the reporters are unreliable and the phenomenon is all the result of credulous people believing charlatans.

HOWEVER

- **Some of what people report as UFOs are extraterrestrial vehicles (ETVs).**
- **Some of those ETVs have extraterrestrial crews.**
- **Some of those ET crews “catch and release” humans to study us.**

I have now reviewed the escapes. But the counter-examples have not disappeared

Let's go back to where I started, and I will restate the three propositions (see above).

What do these three propositions give us to think about? I Have reviewed the evidence for ET UFOs, but I have not reviewed the evidence for ET “catch and release” of humans because it is too complicated and there is too much of it.

I have explained the limitations of modern science in dealing with counter-examples, and I have explained the strong emotional resistance to tolerating or accepting the ET hypothesis.

But I am persuaded that the ET hypotheses: all three of them, are established on strong evidence: for the hypothesis that some UFOs are extraterrestrial, beyond reasonable doubt, in the other two, on the balance of probability. These are expressed as probability statements, so they fall into the discourse of knowledge, not religious belief or disbelief, or of politics.

And as I said earlier, it took me four lectures in 2010, and a book in 2013, to lay out the evidence in greater detail; you have had a brief and necessarily incomplete

summary over the last 45 minutes or so.

CONSEQUENCES

Some things to think about:

- **Who is visiting?**
- **Where are they from?**
- **How do they get here?**
- **What do they want from us or from our planet?**

If you tentatively accept the evidence as I have presented it – and then if you promise yourself to follow up with some more serious reading to understand the evidence better (the reading is provided at the end of the lecture), and if you have understood and discounted the defenses against that evidence: its incompatibility with modern science, the effects of cognitive dissonance, government denial and dismissals, then you have got to face the questions that the evidence raises but does not answer: Who is visiting? Where are they from? How do they get here? What do they want?



Fowler, R. E.

Who is visiting?

"Gray" alien remembered after "catch and release" in 1976

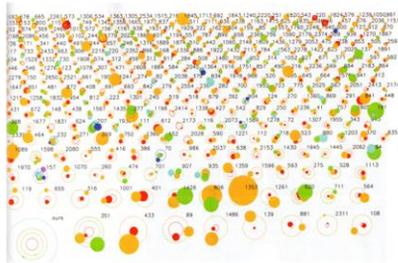


Fowler, R. E. (1993) *The Allagash Abductions*. Columbus, NC: Wild Flower Press

There is evidence that some Ets look like the "grey alien" with the big black eyes that is a standard feature of ET fiction. There are many sources for this idea. One of them is shown above: a drawing by an artistically talented abductee whose experiences, along with three other abductees, was reported in a book by Ray Fowler published in 1993.

Where are they from?

There are thousands of potentially habitable planets in the Milky Way



Kevin Hong, *American Scientist*, May – June 2013, 184 -- 187

The Kepler orbiting telescope has opened our eyes to the literally thousands of planets in our own Milky Way Galaxy on which creatures like ourselves could, in theory, survive, because, given their distance from their stars and their size, they are warm enough for us and have comparable gravity. That doesn't mean we know where the visitors are from. What we know now – and didn't know five or ten years ago – is that there are plenty of places from which they *might* be visiting.



Paul R. Hill
How do they get here? UFOs use an antigravity force field

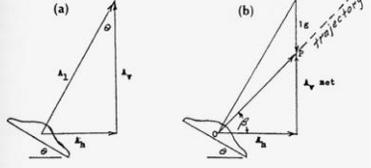



Figure XI-6. Takeoff Dynamics.

Paul R. Hill, *Unconventional Flying Objects: A Scientific Analysis*: Hampton Roads Press, 1997

How do they get here?

Paul R. Hill was a NASA aeronautical engineer who died in 1991. He was not permitted to publish his observations on the UFO phenomenon while he worked for NASA, so his book: *Unconventional Flying Objects: A Scientific Analysis* was only published posthumously in 1997. He observed UFOs himself near Hampton Roads, Virginia where he worked in a NASA lab, and he read extensively on the subject. Using his knowledge of physics and aerodynamics, he explained in principle how UFOs *might* work: he suggested that they used an anti-gravity drive.

Hill did not claim to know how to build an anti-gravity drive; just that an anti-gravity drive explained best what was known about UFO observed appearance, traces and performance.

The book is written both for the lay reader and the technically educated reader: it contains mathematical appendices as well as chapters that are devoted to explaining the appearance and performance of UFOs in plain language. I strongly recommend it.

What do they want?

I don't claim to know. All I do know is that UFO occupants have taken and are taking a very thorough look at our planet, ourselves, and, most likely, other species on this planet as well.

An extraterrestrial cultural revolution
Possible US Government positions on UFOs, and the consequences

US Position	Consequences				
	Suppose no UFOs are extra-terrestrial				
Has no UFO knowledge	No cover-up	No compromised investigations	Over-excitabile public and bad judgment	Status quo	
Suppose some UFOs are extra-terrestrial					
Has no UFO knowledge	Contradicts the evidence	Demonstrates total incompetence; unlikely			Status quo
Has but does not admit to UFO knowledge	Does not admit to contact	Does not admit to secret programs or development	Evidence dismissed as weak or psychological	Executive branch maintains secrecy	Status quo
Admits to ET UFOs	Admits cover-up	Admits inability to protect	Initiative to Congress, loss of confidence	International consequences	Cultural revolution

Current position

When will things change?

The public discussion has been largely influenced by the US government’s position on UFOs. That position hasn’t changed in over fifty years. The US government’s position matters because the US government is opinionated. Other governments have begun to unbend on the evidence and have basically shrugged their shoulders and said “it’s not my problem.’ But the US government might change. Here is an analysis of what are, and what might be, the effects of changes in the US government’s public position on UFOs (see above).

A cultural revolution is a significant change in the collective expectation and understanding about some aspect of our lives and the environment in which those lives are lived. Obvious examples in recent history have been the *civil rights movement*, the *collapse of the Soviet Union*, the *Quiet Revolution* in Quebec, and the *gay rights movement*.

Something, sooner or later, is going to trigger a cultural revolution when a sizeable minority, and eventually a majority, of humans finally realize that we are under surveillance by extraterrestrials. The effects of that revolution are unpredictable, as are the effects of any cultural revolution.

Consequences of the Extraterrestrial Cultural Revolution

- **Our science is demonstrably incomplete.**
- **Our security is threatened by ETs who control forces that we do not understand and cannot use.**
- **Our place in the universe is irrevocably changed.**
- **Our effort to govern ourselves better is superseded by our efforts to understand and come to terms with ETs who might want to govern us – for good or for ill.**

If my interpretation of the evidence is correct, and if the evidence continues to accumulate, then, cognitive dissonance and government denials notwithstanding, we have to collectively face the facts.

The goal of this lecture was to present the ET UFO evidence to one elite scientific group with the hope that I can persuade you to take the evidence seriously, and to begin thinking – in public – about what we can and should do about it.

They may go away and never come back

Another possibility that must be acknowledged is that our ET visitors might fly away and not come back – perhaps never, perhaps for a very long time. We don't control the ET agenda. The skeptics who thought it was all nonsense, and the people who know better but pretend that it's all nonsense will be relieved, and the public will forget about it and historians will call it the "flying saucer craze" and that will be the end of it – until the next time.



Samuel
Johnson

**Human experience, which is constantly
contradicting theory, is the great test of truth.**

Boswell's life of Johnson, Modern Library Edition, p. 274

Frances Parkman, the author of a long series of books on the history of England and France in North America, contradicted many previously held beliefs about that history in the course of his writing. He wrote a preface to *Count Frontenac and New France under Louis XIV* which expresses clearly my own feeling about the message I have brought to you tonight.

He wrote:

Some of the results here reached are of a character I regret, because they cannot be agreeable to persons for whom I have a very cordial regard. The conclusions drawn from the facts may be matter of opinion; but it will be remembered that the facts themselves can be overthrown only by overthrowing the evidence on which they rest, or bringing forward counter-evidence of equal and greater strength, and neither task will be found an easy one.

Samuel Johnson, the great English man of letters, said a very similar thing in a very few words (see above).



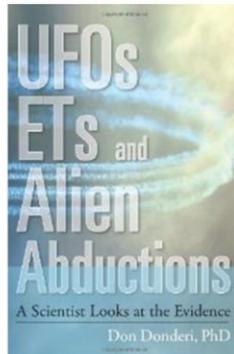
Winston
Churchill

**Men occasionally stumble over the truth,
but most of them pick themselves up and
hurry off as if nothing had happened.**

..various sources, reprinted in the Sigma Xi smartbrief for March 25, 2014

I have told a brief story about evidence that our planet is being visited by extraterrestrials. I think it is an important truth, and I don't think it is a good idea to hurry off as if nothing had happened.

If I am right we should begin to change a lot of our working assumptions. I believe that we should begin to think about how to adapt to a larger universe of experience, some of which has been imaginatively envisioned in fiction, but which is likely to become increasingly real, whether or not it matches the world that we may have imagined.



Hampton Roads Press, June 2013.
Also available as an e-book (Kindle or Nook).

If you would like to read my assessment of the reality of ET surveillance in greater detail, here is where you can find it. This is a story that I have contributed to, assessed and reported but did not originate. There are 48 acknowledgements to individual researchers and scholars who I know or have known, and five acknowledgements to research groups, most of which continue to actively study and report on the UFO evidence. And there are many other sources.

Authoritative books about extraterrestrial UFOs

Hynek, J. Allen. *The UFO experience: A scientific inquiry*. Chicago: Regenery, 1972

Sagan, Carl and Thornton Page, eds. *UFOs: A scientific debate*. New York: Barnes and Noble, 1972 *

Jacobs, D. M. *The UFO controversy in America*. Bloomington, IN: Indiana University Press, 1975 *

Sturrock, P. A. (ed). *The UFO enigma: A new review of the physical evidence*. New York: Warner Books, 1999 *

Jacobs, D. M. (ed). *UFOs and Abductions: Challenging the Borders of Science*. Lawrence, KS: University Press of Kansas, 2000 *

Hall, Richard. *The UFO Evidence, Volume II: A thirty-year report*. Oxford, UK: Scarecrow Press, 2001 *

Kean, Leslie. *UFOs: Generals, pilots and government officials go on the record*. New York: Harmony Books, 2010 *

Swords, Michael & Powell, R. (eds.) *UFOs and government: A historical inquiry*. San Antonio, TX: Anomalist Books, 2012

Donderi, D. C. *UFOs, ETs and Alien Abductions: A scientist looks at the evidence*. Charlottesville, VA: Hampton Roads Press, 2013 *

* Available in or through Schulich Library of Science and Engineering

This reading list provides, in my opinion, an authoritative, scholarly and comprehensive introduction to the UFO phenomenon as we know it in the twentieth and twenty-first centuries. It is very much like the reading list I would assign for a course on the topic, if I happened to be teaching such a course.

Thank you very much for your attention.