

# The REALL News

The official newsletter of the Rational Examination Association of Lincoln Land

*"It's a very dangerous thing to believe in nonsense." — James Randi*

Volume 13, Number 1

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## Suppressing a Smile

by Martin S. Kottmeyer

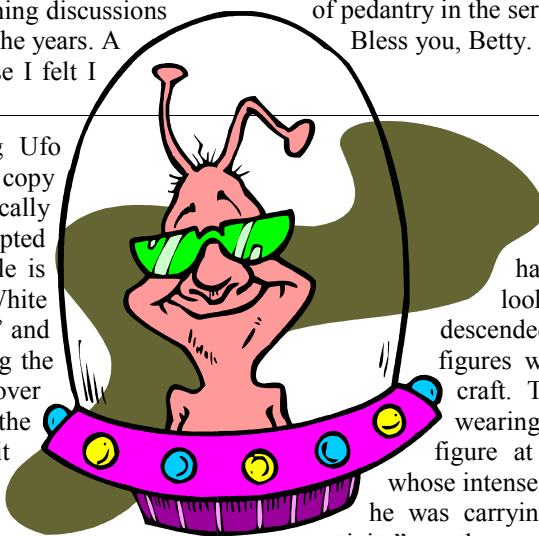
As most readers probably know already, Betty Hill recently left Earth permanently due to illness. For whatever it is worth, I give testimony that I felt she was a brave woman and entirely sincere in her beliefs. I was present at a lecture many years ago where she gave her talk along with a presentation of photographs she had taken of ufos she had observed in a period years after her alien abduction nightmares. The pictures basically showed only featureless lights stretched by camera motion, to which she added enthusiastic alien-centered interpretations. I disbelieve she was kidnapped by navel-piercing aliens, but I will always believe that **she** absolutely believed she had been.

I will also always believe that the Hill case is the most fascinating alien abduction experience ever put on the record. It has been the springboard of many entertaining discussions and led to my writing several papers over the years. A number of them I never published because I felt I

was dealing with matters that amounted to minutiae. Some deal with myths surrounding the case that have grown up over the years. Did the Hills see Grays or merely gray-skinned aliens? Did the experience involve a folie à deux psychosis or merely improper dream interpretation? Did the structure of the story change between the dream and the regressions? Did Barney have romantic longings for the Nazi captain alien as one overwrought believer suggested or was his panic pure and chaste? Can we make any sense of the Mongoloid aspects of the aliens in one version of the story? And what was with those beeping noises both Betty and Barney heard anyways? I've pulled this paper out of mothballs not necessarily because it was important – actually it's pretty trivial – but it has the charm of pedantry in the service of an amusing thought.

Bless you, Betty. We're still arguing about you!

Up front, let me start by thanking Ufo researcher Karl Pflock for providing me a copy of a document related to the historically seminal abduction case, the "interrupted journey" of Betty and Betty Hill. The title is "A Dramatic Encounter in the White Mountains, N.H.: September 19-20, 1962" and it is a 6-page summary of the case bearing the date 10/26/61. This was thus written just over one month after the ufo experience of the Hills. The author is Walter N. Webb and it is labeled as the work of NICAP Subcommittee Mass. Unit #1. Webb states this account was based on his 6-hour interview with both witnesses given on October 21. This version of the story is different in some fascinating ways from what appears in John Fuller's famous book on the Hill case. The parts of Webb's summary that interested me the most ran something like this:



At a certain point into their ufo experience, Barney guesses the disc-like object was a military chopper having fun with them. When he began looking at the craft with binoculars, it descended towards him. He could see 8 to 11 figures watching him through windows on the craft. They appeared to be human in form, wearing glossy black leather uniforms. One figure at the window seemed to be a leader whose intense concentration generated the impression he was carrying out a plan. There was a "burst of activity" on the craft as they turned their backs, scurried towards levers on the wall, and pulled on them. These guys moved efficiently with "the cold precision of German officers." They lacked emotion except for one fellow at a lever who, "looked over his shoulder and smiled." The red lights on the craft moved outwards and he could now discern they were on the tips of a pair of pointed fin-like structures sliding out from the sides of the ship. Betty hears Barney's disbelief: "This is ridiculous!" Barney knew this was no conventional aircraft and he sensed he was going to be captured. That was when he knew he was observing something alien and unearthly, "beings of a superior type, beings that were somehow not human."

Barney panicked, ran to the car, and gunned it. Betty no

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## Purpose

The Rational Examination Association of Lincoln Land is a non-profit, tax-exempt 501(c)(3) educational and scientific organization. It is dedicated to the development of rational thinking and the application of the scientific method toward claims of the paranormal and fringe-science phenomena.

REALL shall conduct research, convene meetings, publish a newsletter, and disseminate information to its members and the general public. Its primary geographic region of coverage is central Illinois.

REALL subscribes to the premise that the scientific method is the most reliable and self-correcting system for obtaining knowledge about the world and universe. REALL does not reject paranormal claims on *a priori* grounds, but rather is committed to objective, though critical, inquiry.

The REALL News is its official newsletter.

**Annual Membership Rates:** Regular, \$20; student, \$15; family, \$30; patron, \$50 or more; subscription only, \$12.

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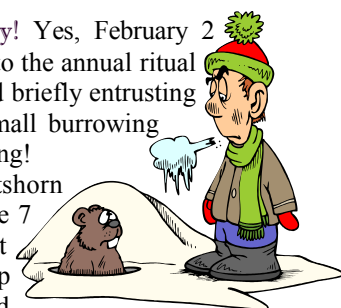
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## From the Chairman Wally Hartshorn

**H**appy Groundhog Day! Yes, February 2 brings us once again to the annual ritual of looking forward to spring and briefly entrusting our weather forecasting to a small burrowing mammal. Here's to an early spring!

Meanwhile, in the Hartshorn household, the new baby will be 7 weeks old by the time you get this. As expected, he's using up more of my time than expected. (How's that for a self-contradictory sentence?) But he's lots of fun to have around anyway!



## Anti-Evolutionist Speaks; We'll Listen

Springfield's most active anti-evolutionist, John Mark Henry, will be presenting "Intelligent Design: A Scientific Alternative to Evolution" at 7:00 on February 1 at Springfield's Lincoln Library. Since that's the day we normally hold our meeting, we'll instead take a "field trip" next door to listen to his speech — and (politely) correct it.

For those who aren't quite as well-versed in creationism and Intelligent Design as you would like to be, we've included a couple of articles from two web sites that focus on countering the anti-evolutionists.

In both cases, but especially in the case of the Talk.Origins Archive, much of the most useful and detailed information is contained in other articles linked from these two. Therefore, to get the most out of them, it would probably be best to visit the online version of these articles, where you can easily follow the links to read the detailed information.

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## A Nod to Our Patrons

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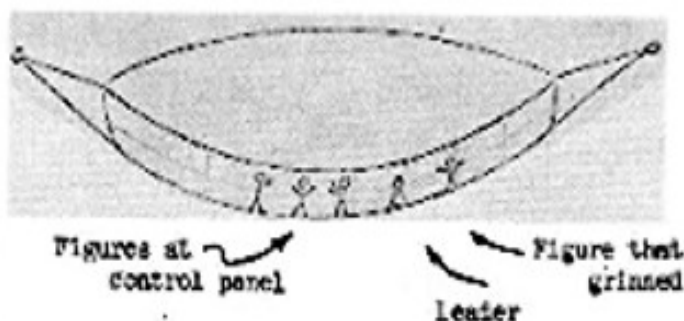
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(*"Suppressing a Smile"* continued from page 1)

longer saw any sign of the ufo at this point, but they heard beeping noises and felt vibrations which lasted a while and then quit. As they neared home, Betty asked Barney if he now believed in flying saucers and Barney replied, "Don't be ridiculous. That wasn't a flying saucer." Immediately they heard five or six more beeps. Webb felt this point was difficult to accept but included it anyway. The couple wasn't going to report their encounter to anyone, but a police chief was visiting Betty's sister the day of the encounter and he recommended they make a call to Pease AFB. Betty did and she indicated that the officer she spoke to seemed especially interested in the extending wing-like structures. This seemed to be a new feature compared to other ufo sightings.

*Barney's drawing of the craft as it appeared in The Interrupted Journey*



*The caption in the book adds emphasis to the ufo's "fins" and the red lights appearing at the far tips. Skeptics should also*

*observe the singular nature of this drawing. Very few saucer drawings have "fins" at the side. Fewer still have red lights at their fin tips. None have them in conjunction with a saucer having windows spanning the length of the side of the flying saucer. The absence of any identical craft drawings points to a problem either with this particular case or the consistency of the saucer phenomenon. Something is wrong.*

The narrative has been heavily compressed and paraphrased here to distill down the story to what are the essentials that I want to bring out. I don't claim to be pulling out every difference between Webb's version of the story and Fuller's. I am focusing on differences that lead to a significantly alternative insight of what Barney thought he was seeing on the night of the ufo encounter.

Many of the elements here can be found elsewhere. Betty Hill's September 26, 1961 letter to Keyhoe, reproduced in Fuller's book, mentions the wings protruding from the craft, the figure observing at the window, and figures in black shiny uniforms scurrying about. But the elements are scattered and do not create the impression of a single cohesive action. Betty indicates the figures were scurrying "as though they were making some hurried type of preparation," which is not exactly wrong, but allows the impression that it does not involve the extension of the fins. In her letter, the wings have already been extended in a prior paragraph. Webb's account has the extension of the wings coincide with the activity of the pulling of levers. Betty doesn't mention the levers. She also said nothing about the smile of that one guy pulling the lever. (*The Interrupted Journey*, Dell, 1966, pp. 46-7.)

In a preliminary reconstruction of the encounter at the start

(*"Suppressing a Smile"* continued on page 13)

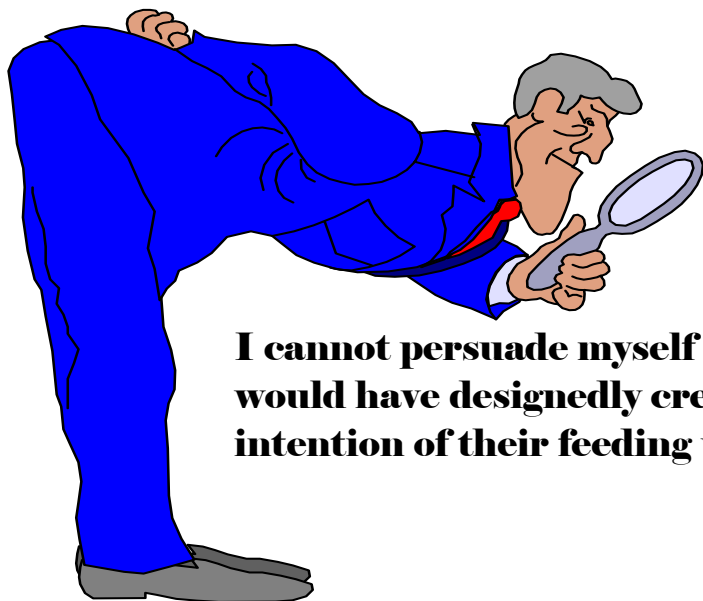
If you attend the February 1 talk, remember to be polite and keep your cool. None of us will persuade him to change his mind. Also, avoid the temptation to be an instant expert on topics that might be outside your realm of knowledge. As the saying goes, "It is better to remain silent and be thought a fool than to speak and remove all doubt." Lastly, please remember that

you cannot represent yourself as speaking for REALL as a whole.

## Anniversary & Darwin Day!

February 12 is Darwin Day, the birthday of Charles Darwin. February also marks the twelfth anniversary of the formation of REALL.

We'll be celebrating both events with a party on the afternoon of Saturday, February 12. As of this writing, the details have not been finalized. We're planning on a meal in a restaurant along with an evolution trivia/knowledge contest and other fun stuff. Watch your mailbox for a postcard with additional details! 🐛



**I cannot persuade myself that a beneficent and omnipotent God would have designedly created parasitic wasps with the express intention of their feeding within the living bodies of Caterpillars.**

**— Charles Darwin**

# Talk.Origins Archive Frequently Asked Questions

## Copyright the Talk.Origins Archive

*This article is from the Talk.Origins Archive, [www.talkorigins.org](http://www.talkorigins.org). This FAQ can be found at [www.talkorigins.org/origins/faqs-qa.html](http://www.talkorigins.org/origins/faqs-qa.html). The online version includes numerous links to other web pages. These are listed in the endnotes.*

The following is a list of questions that appear frequently in the Usenet newsgroup [talk.origins](http://talk.origins)<sup>1</sup>. Brief answers are given for each question along with a pointer to one or more relevant files.

### What is the purpose of the talk.origins Usenet newsgroup?

The purpose of the talk.origins newsgroup is to provide a forum for discussion of issues related to biological and physical origins. See the [talk.origins](http://talk.origins) Newsgroup Welcome FAQ<sup>2</sup>.

### What is the purpose of the Talk.Origins Archive?

The purpose of the TO Archive is to provide easy access to the many FAQ (frequently asked question) files and essays have been posted to the Usenet newsgroup talk.origins. The Archive exists expressly to provide mainstream scientific responses to the many issues that appear in the talk.origins newsgroup. See the Talk.Origins Archive's [Welcome Page](http://www.talkorigins.org/origins/welcome.html)<sup>3</sup> and the Talk.Origins Archive's [Must-Read FAQs](http://www.talkorigins.org/origins/must-read.html)<sup>4</sup>.

### I thought evolution was just a theory. Why do you call it a fact?

Biological evolution is a change in the genetic characteristics of a population over time. That this happens is a fact. Biological evolution also refers to the common descent of living organisms from shared ancestors. The evidence for historical evolution — genetic, fossil, anatomical, etc. — is so overwhelming that it is also considered a fact. The theory of evolution describes the mechanisms that cause evolution. So evolution is both a fact and a theory. See the [Evolution is a Fact and a Theory FAQ](http://www.talkorigins.org/origins/evolution-is-a-fact-and-a-theory.html)<sup>5</sup>, the [Introduction to Evolutionary Biology FAQ](http://www.talkorigins.org/origins/introduction-to-evolutionary-biology.html)<sup>6</sup> and the [Five Major Misconceptions about Evolution FAQ: Evolution is Only a theory](http://www.talkorigins.org/origins/five-major-misconceptions-about-evolution.html)<sup>7</sup>.

### Don't you have to be an atheist to accept evolution?

No. Many people of Christian and other faiths accept evolution as the scientific explanation for biodiversity. See the [God](http://www.talkorigins.org/origins/god-and-evolution.html)

and [Evolution FAQ](http://www.talkorigins.org/origins/evolution-faq.html)<sup>8</sup> and the [Interpretations of Genesis FAQ](http://www.talkorigins.org/origins/interpretations-of-genesis.html)<sup>9</sup>.

### Isn't evolution just an unfalsifiable tautology?

No. Evolutionary theory is in exactly the same condition as any other valid scientific theory, and many criticisms of it that rely on philosophy are misguided. See the [Evolution and Philosophy FAQ](http://www.talkorigins.org/origins/evolution-and-philosophy.html)<sup>10</sup>.

### If evolution is true, then why are there so many gaps in the fossil record? Shouldn't there be more transitional fossils?



Due to the rarity of preservation and the likelihood that speciation occurs in small populations during geologically short periods of time, transitions between species are uncommon in the fossil record. Transitions at higher taxonomic levels, however, are abundant. See the [Transitional Vertebrate Fossils FAQ](http://www.talkorigins.org/origins/transitional-vertebrate-fossils.html)<sup>11</sup>, the [Fossil Hominids FAQ](http://www.talkorigins.org/origins/fossil-hominids.html)<sup>12</sup>, [29 Evidences for Macroevolution: Intermediate and Transitional Forms](http://www.talkorigins.org/origins/29-evidences-for-macroevolution.html)<sup>13</sup>, the [Punctuated Equilibria FAQ](http://www.talkorigins.org/origins/punctuated-equilibria.html)<sup>14</sup>, and the February 1998 Post of the Month [Missing links still missing!](http://www.talkorigins.org/origins/missing-links-still-missing.html)<sup>15</sup>.

### No one has ever directly observed evolution happening, so how do you know it's true?

Evolution has been observed, both directly and indirectly. It is true. See the [Five Major Misconceptions about Evolution FAQ: Evolution Has Never Been Observed](http://www.talkorigins.org/origins/five-major-misconceptions-about-evolution.html)<sup>16</sup> and [29 Evidences for Macroevolution](http://www.talkorigins.org/origins/29-evidences-for-macroevolution.html)<sup>17</sup>.

### Then why has no one ever seen a new species appear?

Speciation has been observed, both in the laboratory and in nature. See the [Observed Instances of Speciation FAQ](http://www.talkorigins.org/origins/observed-instances-of-speciation.html)<sup>18</sup> and another FAQ listing [some more observed speciation events](http://www.talkorigins.org/origins/some-more-observed-speciation-events.html)<sup>19</sup>.

### Doesn't the perfection of the human body prove Creation?

No. In fact, humans (and other animals) have many suboptimal characteristics. See the [Evidence for Jury-Rigged Design](http://www.talkorigins.org/origins/evidence-for-jury-rigged-design.html)



in [Nature FAQ](#)<sup>20</sup>.

## **According to evolution, the diversity of life is a result of chance occurrence. Doesn't that make evolution wildly improbable?**

Evolution is not simply a result of random chance. It is also a result of non-random selection. See the [Evolution and Chance FAQ](#)<sup>21</sup> and the [Five Major Misconceptions about Evolution FAQ: Evolution Proceeds by Random Chance](#)<sup>22</sup>.

## **Doesn't evolution violate the second law of thermodynamics? After all, order cannot come from disorder.**

Evolution does not violate the second law of thermodynamics. Order emerges from disorder all the time. Snowflakes form, trees grow, and embryos develop, etc. See the [Second Law of Thermodynamics, Evolution, and Probability FAQs](#)<sup>23</sup> and the [Five Major Misconceptions about Evolution FAQ: Evolution Violates the 2nd Law of Thermodynamics](#)<sup>24</sup>.

## **Didn't Darwin renounce evolution on his deathbed?**

The Darwin deathbed story is false. And in any case, it is irrelevant. A scientific theory stands or falls according to how well it is supported by the facts, not according to who believes it. See the [Lady Hope Story FAQ](#)<sup>25</sup>.

## **How do you know the earth is really old? Lots of evidence says it's young.**

According to numerous, independent dating methods, the earth is known to be approximately 4.5 billion years old. Most young-earth arguments rely on inappropriate extrapolations from a few carefully selected and often erroneous data points. See the [Age of the Earth FAQ](#)<sup>26</sup> and the [Talk.Origins Archive's Young Earth FAQs](#)<sup>27</sup>.

## **But radiometric dating methods rely on the assumptions of non-contamination and constant rates of decay. What if these assumptions are wrong?**

Radiometric isochron dating techniques reveal whether contamination has occurred, while numerous theoretical calculations, experiments, and astronomical observations support the notion that decay rates are constant. See the [Isochron Dating FAQ](#)<sup>28</sup> and the [Age of the Earth FAQ](#)<sup>29</sup>.

## **I heard that the speed of light has changed a lot. This means that light from galaxies billions of light years away might not really be billions of**

## **years old. Is this true?**

Barry Setterfield's hypothesis of a decay in the speed of light was based on flawed extrapolations from inaccurate measurements, many of which were taken hundreds of years ago. See the [C-Decay FAQ](#)<sup>30</sup>.

## **If Earth is so old, doesn't that mean Earth's decaying magnetic field would have been unacceptably high at one time?**

No. The Earth's magnetic field is known to have varied in intensity and reversed in polarity numerous times throughout the planet's history. See the [Alleged Decay of the Earth's Magnetic Field FAQ](#)<sup>31</sup>.

## **Isn't the fossil record a result of the global flood described in the Book of Genesis?**

No. A global flood cannot explain the sorting of fossils observed in the geological record. This was recognized even prior to the proposal of evolutionary theory. See the [Problems with a Global Flood FAQ](#)<sup>32</sup>, the [April 2002 Post of the Month A Flood Geologist Recants](#)<sup>33</sup> and the [Talk.Origins Archive's Flood Geology FAQs](#)<sup>34</sup>.

## **What about those fossils that cut through multiple layers?**

They have natural explanations: tree-roots that grew into soft, underlying layers of clay, and fossils found in inclined strata. They can also be observed forming in modern environments. See the ["Polystrate" Fossils FAQ](#)<sup>35</sup>.

## **What about those human footprints that appear next to dinosaur footprints?**

The "man-tracks" of the Paluxy Riverbed in Glen Rose, Texas were not man tracks at all. Some were eroded dinosaur tracks, and others were human carvings. See the [The Texas Dinosaur/"Man Track" Controversy FAQ](#)<sup>36</sup>.

## **Didn't they find Noah's Ark? I saw something on TV about this.**

The producers of America's 1993 CBS television show, "The Incredible Discovery of Noah's Ark," were hoaxed. Other ark discovery claims have not been substantiated. See the [Sun Pictures and the Noah's Ark Hoax FAQ](#)<sup>37</sup>.

## **The odds against a simple cell coming into being without divine intervention are staggering.**

And irrelevant. Scientists don't claim that cells came into being through random processes. They are thought to have

evolved from more primitive precursors. See the [Probability of Abiogenesis FAQs](#)<sup>38</sup>.

## Creationists are qualified and honest scientists. How can they be wrong?

The quality of an argument is not determined by the credentials of its author. Even if it was, a number of well-known creationists have questionable credentials. Furthermore, many creationists have engaged in dishonest tactics like quoting out of context or making up references. See the [Suspicious Creationist Credentials FAQ](#)<sup>39</sup>, the Talk.Origins Archive's [Creationism FAQs](#)<sup>40</sup>, [Quotations and Misquotations](#)<sup>41</sup> and [Creationist Arguments: Misquotes](#)<sup>42</sup>.

## What about Immanuel Velikovsky? Didn't he show that Earth has experienced a lot of major catastrophes?

No, he simply claimed that certain written legends must have described real events. See the Talk.Origins Archive's [Catastrophism FAQs](#)<sup>43</sup> and the [Velikovsky FAQ](#)<sup>44</sup>.

## Where can I find more material on the Creation/Evolution debate?

Contact the [National Center for Science Education](#)<sup>45</sup> [off site], or see the [Talk.Origins Archive](#)<sup>46</sup> and its "Other links" page<sup>47</sup>. Also see the [talk.origins Book Recommendations FAQ](#)<sup>48</sup> and the [Creation/Evolution Organizations FAQ](#)<sup>49</sup>.



## What about "intelligent design"?

"Intelligent design" (ID) advocates often use the very same arguments that the young-earth creationists have used in the past. The Archive does have some FAQs on Behe's "irreducible complexity", Jonathan Wells's "icons of evolution", and Dembski's "specified complexity" (see questions below). Further essays on "intelligent design" can be found on our sister site, [TalkDesign](#)<sup>50</sup> [off site], and at [TalkReason](#)<sup>51</sup> [off site]. "The Quixotic Message," or "No Free Hunch"<sup>52</sup> [off site] deals with ID claims in a humorous manner.

## Doesn't irreducible complexity (as described in Behe's *Darwin's Black Box*) shown that some biomechanical systems could not evolve gradually, but must have all their parts created at once?

Behe's "irreducible complexity" considers only an unrealistically simplistic model of evolution. Evolutionary mechanisms that Behe doesn't consider, such as functional change

and coevolution, make irreducible complexity not only possible, but expected. See [Irreducible Complexity and Michael Behe FAQs](#)<sup>53</sup> and [Irreducible Complexity Demystified](#)<sup>54</sup> [off site].

## Hasn't Jonathan Wells shown that Darwinist claims about such "icons of evolution" as the peppered moth, Haeckel's embryos, and Darwin's finches have been disproven? If so, why are these claims still found in biology textbooks?

Scientists *have* been complaining for decades about the poor quality of science instruction in school and about the content of science textbooks. However, Dr. Wells's arguments include many false statements, many misunderstandings of the science involved, and many misunderstandings of the significance of the subjects that he pontificates on. See the [Icons of Evolution FAQs](#)<sup>55</sup> and [The Talented Mr. Wells](#)<sup>56</sup> [PDF format, off site].

## Doesn't William Dembski's "specified complexity" mean that an intelligent designer had to be responsible for the observed complexity and diversity of living things?

The sophistication of Dembski's arguments is superficial. One of the most thorough examinations of Dembski's ideas is available on the Archive. See: [Not a Free Lunch But a Box of Chocolates](#)<sup>57</sup>, [A Presentation Without Arguments](#)<sup>58</sup> [off site], [Mr. Dembski's Compass](#)<sup>59</sup> [off site] and [The Anti-Evolutionists: William A. Dembski](#)<sup>60</sup> [off site].

## Isn't it true that scientists are abandoning evolution?

That is not even remotely true. See: [The Imminent Demise of Evolution: The Longest Running Falsehood in Creationism](#)<sup>61</sup> [off site], [Project Steve: Humorous Testing of the Scientific Attitudes Toward "Intelligent Design"](#)<sup>62</sup> and [Amicus Curiae Brief of 72 Nobel Laureates](#)<sup>63</sup>.

## If evolution is true, why don't you take Dr. Kent Hovind's \$250,000 challenge and make yourself rich?

Kent Hovind's \$250,000 challenge is a propaganda ploy and nothing more, rather like the "doctorate" Hovind claims from Patriot University. See: [Kent Hovind FAQs: Examining "Dr. Dino."](#)<sup>64</sup>

## Don't you know that the earth is round?

Yes, we do. We keep a copy of the "International Flat Earth Society" flyer here to document that real people in modern times do assert that the earth is flat, not because we think the earth is flat See: Documenting the Existence of "The International Flat Earth Society."<sup>65</sup>

## Where can I learn more about evolution?

You might start with the talk.origins FAQs. If, however, you want a thorough understanding of evolution, a library would be a more appropriate place to look. The following FAQs provide some good references: the Creation/Evolution Reading List<sup>66</sup>, the Introduction to Evolutionary Biology FAQ<sup>67</sup>, the "What is Evolution?" FAQ<sup>68</sup>, and the Talk.Origins Archive's Evolution FAQs<sup>69</sup>.

## Isn't the Talk.Origins Archive just some website that has no particular credibility? Those FAQs and essays aren't peer-reviewed, and many are written by interested laymen rather than specialists, so they can be ignored, right?

We encourage readers not to take our word on the issues, but rather to look at the primary literature and evaluate the evidence. While materials on the Archive have not necessarily been subjected to formal peer-review, many have been subjected to several cycles of commentary in the newsgroup prior to being added to the Archive. Most of our materials provide links and/or bibliographic references to enable the reader to evaluate the evidence for themselves. While anyone can decide to ignore our materials, the Archive has been recognized as a valuable online resource by many well-known groups, magazines, and individuals. Further, a number of college courses have chosen to use materials from the Archive in their coursework. See: Awards, Honors, and Favorable Notices for The Talk.Origins Archive<sup>70</sup>.

## Endnotes

1. news:talk.origins
2. www.talkorigins.org/faqs/faq-welcome.html
3. www.talkorigins.org/origins/welcome.html
4. www.talkorigins.org/origins/faqs-mustread.html
5. www.talkorigins.org/faqs/evolution-fact.html
6. www.talkorigins.org/faqs/faq-intro-to-biology.html
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15. www.talkorigins.org/origins/postmonth/feb98.html
16. www.talkorigins.org/faqs/faq-misconceptions.html#observe
17. www.talkorigins.org/faqs/comdesc/
18. www.talkorigins.org/faqs/faq-speciation.html
19. www.talkorigins.org/faqs/speciation.html
20. www.talkorigins.org/faqs/jury-rigged.html
21. www.talkorigins.org/faqs/chance.html
22. www.talkorigins.org/faqs/faq-misconceptions.html#chance
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24. www.talkorigins.org/faqs/faq-misconceptions.html#thermo
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# Introduction to TalkDesign.org

## Copyright TalkDesign.org

*This article is from TalkDesign.org. This introduction and FAQ can be found at [www.talkdesign.org/design/introfaq.html](http://www.talkdesign.org/design/introfaq.html). The online version includes numerous links to other web pages. These are listed in the endnotes.*

### What is the purpose of Talkdesign.org?

Talkdesign.org was created to provide a one-stop location for responses to the arguments of the Intelligent Design (ID) movement. Many articles critical of ID are scattered around the Web. Talkdesign.org provides links to the best and most up-to-date of these articles, as well as a collection of articles written specifically for this site. It also provides other material relevant to ID, including links to the web sites of ID advocates.

### Who runs Talkdesign.org?

Talkdesign.org is run by several volunteers<sup>1</sup>, of a variety of religious and philosophical persuasions, who are all critics of ID and supporters of mainstream evolutionary biology. Talkdesign.org is hosted by the Talk.Origins Archive<sup>2</sup>, a longstanding web site devoted to the wider creation/evolution controversy. Neither Talkdesign.org nor the Talk.Origins Archive receives any outside financial support.

### What is Intelligent Design?

The beliefs of ID advocates vary greatly. But the core beliefs which they all appear to share are the following:

- (a) The action of an intelligent (presumably conscious) being was involved in the evolution of living organisms.
- (b) There already exists empirical evidence of this action, sufficient to justify a scientific inference that such action occurred.

The term "Intelligent Design" usually refers to these beliefs together with the arguments which are made in support of them.

It is important to note that people who hold belief (a) but not belief (b) do not generally consider themselves to be advocates of ID, and this web site has no quarrel with such people. It is the claim that there is *empirical evidence* of design in biology which has provoked a controversy, and which we consider to be false. We argue that this claim is based on pseudoscience, and enjoys the support it does only because it appeals to the religious and/or ideological beliefs of its adherents.

### What is the Intelligent Design movement?

The ID movement has grown out of a creationist tradition which argues against evolutionary theory from a religious (usually Christian) standpoint. Although ID advocates often claim that they are only arguing for the existence of a "designer", who may or may not be God, all the leading advocates do believe that the designer is God, and frequently accompany their allegedly scientific arguments with discussion of religious issues, especially when addressing religious audiences. In front of other audiences, they downplay the religious aspects of their agenda.

Lawyer and creationist Phillip Johnson is usually credited with having founded the Intelligent Design movement, with the avowed intention of overthrowing "materialist science", and replacing it with "theistic science". This agenda is now being

actively pursued by a well-funded body, the Center for Science and Culture (CSC), part of the Discovery Institute, a right-wing think tank funded by conservative Christians<sup>3</sup>. (Until recently, the CSC was known as the Center for the Renewal of Science and Culture; the name change is most likely an attempt to render their ideological agenda less overt.) The CSC

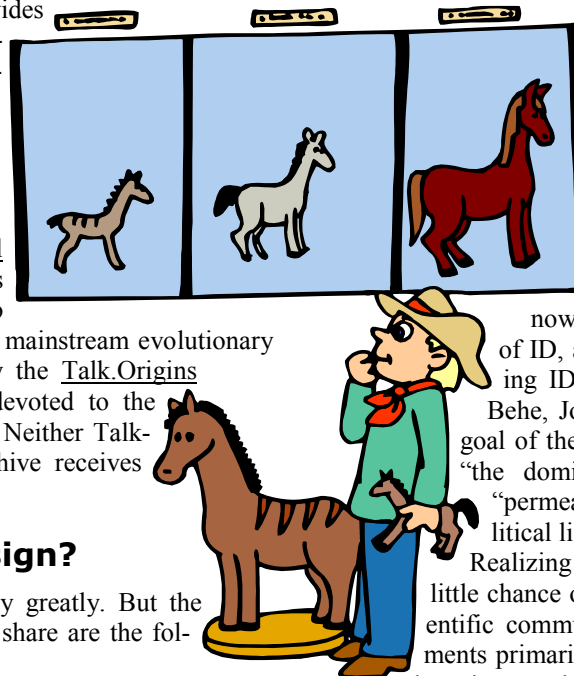
now plays the leading role in the promotion of ID, and its fellows include most of the leading ID advocates: William Dembski, Michael Behe, Jonathan Wells, Stephen Meyer, etc. The goal of their Wedge Strategy<sup>4</sup> is for ID to become "the dominant perspective in science" and to "permeate our religious, cultural, moral and political life".

Realizing that their "scientific" arguments have little chance of acceptance within the mainstream scientific community, ID advocates address their arguments primarily to the general public, politicians, philosophers, and other non-scientists. The allegedly scientific material which they produce is full of misleading rhetoric, equivocal terminology, and misrepresentations of the facts. They also produce much material which does not even aspire to be scientific, and which can frankly be best described as propaganda.

### Do scientists support Intelligent Design?

ID advocates are very keen to give the impression that they have the support of scientists. It is true that a number of scientists support ID, as indeed there are scientists who support Young Earth Creationism and many other pseudosciences. But they are a tiny number in relation to the total number of scientists, the vast majority of whom support evolutionary theory.

In 2001, the Discovery Institute took out advertisements in national newspapers to announce that 100 scientists had signed a statement<sup>5</sup> saying that they were "skeptical of claims for the ability of random mutation and natural selection to account for





the complexity of life.” The signatories did not say that they supported ID, though some of them certainly do. Compare this with a [letter](#)<sup>6</sup> sent to Congress in support of the current teaching of evolution in schools, signed by the presidents of 80 scientific organizations. To put things into perspective, the National Center for Science Education (NCSE), a group which supports the teaching of evolution in public schools, released [Project Steve](#)<sup>7</sup>, a spoof on anti-evolutionist lists such as the one by the Discovery Institute mentioned above. Signatories to the list agreed to a statement supporting evolution and rejecting ID, but there’s one catch: all of the signatories are named “Steve” or a version thereof. Given that Steves make up approximately 1% of the population, the 300+ signatories (at the time of this writing) indicate that for every scientist agreeing with the Discovery Institute, perhaps as many as a few hundred disagree.

## Is opposition to Intelligent Design based on naturalism?

Intelligent Design is rejected by the vast majority of scientists, particularly those in the relevant fields. The proportion of scientists who accept ID is insignificant. To explain away this overwhelming rejection of their arguments by those who are experts in the subject, ID advocates employ an ad hominem argument. They accuse the vast mass of scientists of being too biased by a commitment to “materialism” or “naturalism” to be able to judge the arguments fairly. This is despite the fact that many of these scientists are themselves theists.

It is true that many (though not all) mainstream scientists and philosophers of science argue that science must be committed to a principle of “methodological naturalism”, which states that only “natural” explanations can be allowed in science. Unfortunately, the meaning of the term “natural” is unclear. It is often assumed that this would rule out any explanations involving divine action, but it may be that a hypothesis involving divine action could be considered “natural” if it was empirically testable. These are murky philosophical waters, and it seems that most scientists simply adopt the principle of methodological naturalism as rule of thumb, based on the more general principle that extraordinary claims require extraordinary evidence. More importantly, good scientific theories contain virtues like testability, parsimony, and explanatory power. ID tends to be lacking these virtues and many others; the “naturalism” claim is often a cover for the fact that ID has a difficult time meeting basic scientific criteria.

In any case, ID advocates assure us that their arguments do not imply a divine designer. The designer could have been an extraterrestrial alien. Methodological naturalism certainly does not rule out such a designer. Confusion over this issue has been caused by the ambiguity of the word “natural”, which can mean either “not artificial” or “not supernatural” (in addition to other possible meanings). ID advocates frequently conflate these definitions for rhetorical purposes. This issue is explored in greater detail in Mark Issak’s essay, [A Philosophical Premise of ‘Naturalism’?](#)<sup>8</sup>

## Is Intelligent Design a form of creationism?

The answer to this question depends partly on what one

means by “creationism”. At one end of the spectrum, creationism can be simply the belief that the Universe was created by God, a belief which is probably shared by all monotheists. At the other end, it can be Young Earth Creationism, the belief that the Genesis account of creation is literally true and that the scientific evidence supports this belief. A reasonable intermediate definition is the belief that individual species or “kinds” of animals were divinely created.

The core ID belief does not strictly entail divine involvement in the origin of species, but all the leading ID advocates believe in such involvement. Many (perhaps most) also deny common descent, the continuity of descent from parent to offspring from the earliest organisms down to the present day. Much of the CSC’s material attacks common descent. Deniers of common descent include Phillip Johnson and Jonathan Wells. Dembski is ambivalent on the subject, attempting to cast doubt on common descent without actually denying it. At least one fellow of the CSC, Paul Nelson, is a Young Earth Creationist.

Part of the strategy of ID is to create a “big tent”, in which all opponents of evolutionary theory can join forces, from the most extreme Young Earth Creationists to those, such as Michael Behe, who accept virtually all of evolutionary theory except the proposition that evolution was fully natural. In order to maintain the unity of this big tent, those towards the latter end of the spectrum are careful to avoid criticizing even the most egregious arguments of the Young Earth Creationists.

Furthermore, many of the ID arguments and tactics are very similar to those of Young Earth or Old Earth Creationists. Irrelevant appeals to information theory and thermodynamics; bogus probability calculations based on purely random combinations of proteins; gaps in the fossil record; use of out-of-context quotations; all of these and others are staples of the creationist menu.

A major distinguishing feature of ID is the attempt to shift the focus of the debate away from the details of Earth history and towards more abstract concepts such as “design” or “teleology”, terms which are rarely used in a non-question-begging manner. Unlike Young Earth Creationism, which is very easy to falsify, ID is difficult or impossible to test according to standard scientific practice. This gives the ID movement a tactical advantage by allowing its adherents to argue from a position that holds no testable affirmative beliefs, yet allows them to attack almost any aspect of evolutionary theory they think might be vulnerable. Note that this does not make ID a better theory than creationism; many argue that this renders ID even less scientific.

It is also clear that much of the motivation for creating an ID movement distinct (to some degree) from the existing creationist movement was to evade the legal restriction (in the U.S. A.) on teaching creationism in public schools. The U.S. Supreme Court has ruled that “scientific” creationism is a religious position, and therefore violates the First Amendment’s constitutional separation of Church and State. One of the more telling commonalities between the creationist and ID movements is the primary focus on getting their views taught in public schools despite the lack of endorsement from the scientific community.

Whether these many connections between ID and creation-

ism justify considering ID to be a form of creationism is ultimately a matter of individual judgment. Many have concluded that they do, and one will sometimes see ID referred to as IDC, or Intelligent Design Creationism. While sometimes frank about the religious and political aspirations of ID, advocates at other times will try to create the impression that ID is a purely scientific issue. Use of the term Intelligent Design Creationism helps to draw attention to the true nature of the movement.

## Is Intelligent Design a pseudo-science?

We argue that Intelligent Design is a pseudoscience, like Young Earth Creationism, astrology, Atlantis, and the many other belief systems parading as science which fill the mass media. By pseudoscience, we mean a belief system which is claimed to be based on science, but which is actually based on arguments that are not only flawed, but are so egregiously bad that they do not stand up to any serious open-minded examination. Advocates of pseudoscience are motivated by a dogmatic commitment to their position which renders their minds closed to contrary arguments. Common (though not universal) additional symptoms of pseudoscience include the following: arguments are directed towards an audience of non-scientists; grandiose claims are made, often in fields where the claimant has little expertise (*viz* Dembski's claims to new laws of information and thermodynamics); the overwhelming mass of scientists are claimed to be too biased to judge the arguments fairly; arguments are couched in superfluous technical jargon; arguments use poorly defined new technical terms (or old terms given new meanings); technical arguments are outnumbered by rhetoric; excessive use is made of quotations, often from popular books and often out of context.

## What are the "scientific" arguments used to support Intelligent Design?

The arguments for Intelligent Design are primarily arguments from ignorance, also known as god-of-the-gaps arguments. ID advocates also claim to have positive evidence of ID, in the form of "specified complexity" and "irreducible complexity", but these arguments turn out to be disguised arguments from ignorance. In addition, ID advocates sometimes make an argument from analogy. A lot of their effort is also devoted to attacking specific aspects of evolutionary theory, rather than giving support to their own ID hypothesis.

## What is the argument from ignorance, or god-of-the-gaps argument?

ID advocates point out that the evolution of certain biological structures has not been fully explained by biologists. This is true, and will continue to be true for the foreseeable future, since our knowledge of such structures is highly limited at present. From this, they conclude that those biological structures

cannot have an evolutionary explanation, and so must have been designed by an intelligent agent. Although this line of argument can sometimes be seen clearly in their work, more often they disguise the argument with a lot of superfluous and misleading terminology, such as "irreducible complexity", "specified complexity" and "information".

## What is the argument from analogy?

The argument from analogy typically runs as follows. Biological systems have some quality in common with man-made machines, e.g. they consist of multiple coordinated parts. Whenever we have directly observed the origin of such a machine, an intelligent being was responsible for designing it. Therefore an intelligent being must have designed biological systems. Here is an example of such an argument:

"In order to reach a conclusion based on an analogy, it is

only necessary that the induction flow out of the shared properties:

The irreducibly complex Rube Goldberg machine required an intelligent designer to produce it; therefore the irreducibly complex blood-clotting system required a designer also." (Michael Behe, "Darwin's Black Box", p. 218)

Arguments from analogy, a type of inductive argument, are notoriously unreliable. The onus is on the advocate of the argument to make a compelling case for the

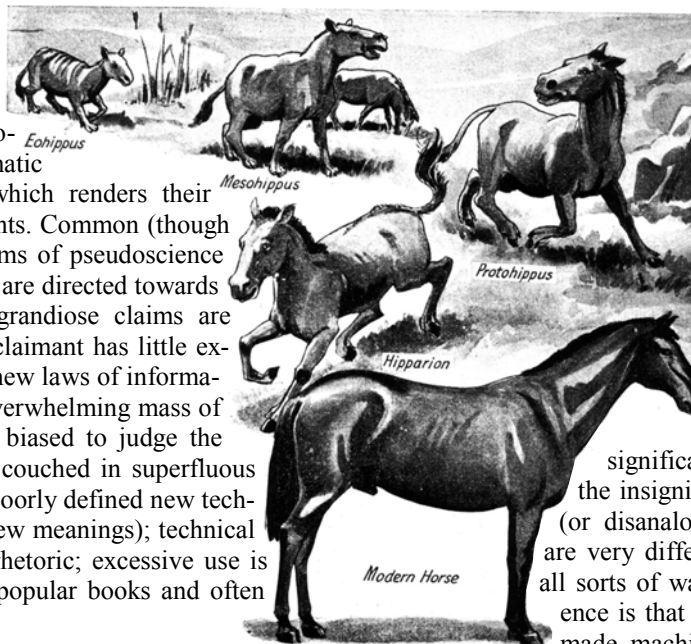
significance of the shared properties and the insignificance of the divergent properties (or disanalogies). In fact, biological systems are very different from man-made machines in all sorts of ways. The most fundamental difference is that biological organisms, unlike man-made machines, have reproduced themselves

over millions of generations with random variation and natural selection. This process is known to result in adaptation, and some degree of adaptation by natural evolution is accepted even by ID advocates. To make an argument from analogy in the face of such a fundamental disanalogy is unreasonable.

If we ignore significant disanalogies, as ID advocates do, then it is easy to arrive at absurd conclusions. For example, since it was *humans* who were responsible for designing the machines of which we have directly observed the origin, should we not infer that biological "machines" were designed by humans? Before the first balloon flight of the Montgolfier brothers, we might have inferred that, because all wingless creatures were then unable to fly, human beings would not be able to fly. (At some time in the past scientists might have had good reasons to think that human flight would be impossible, but those reasons would have been based on their current knowledge of physics, not on an absurd argument from analogy.)

## What is "irreducible complexity"?

The term "irreducibility complexity" was introduced by



biochemist Michael Behe. ID advocates claim that an irreducibly complex biochemical system cannot (with any reasonable degree of probability) have evolved by natural evolution. Irreducible complexity was originally defined in such a way that it could be detected simply by observing the current state of a system, without any consideration of how it might have evolved (rather like the second sense of specified complexity above): if the removal of any part of a biochemical system would render that system non-functional, then it was considered to be irreducibly complex. Acknowledged problems with this definition have forced Behe and Dembski to propose new definitions, which increasingly require the observer to consider the possibility of evolutionary predecessors in determining whether a system is irreducibly complex. This makes it increasingly difficult to judge whether a system is irreducibly complex or not.

However, even if a system is judged irreducibly complex by any of the available definitions, this does not rule out the possibility of an evolutionary origin. The arguments of Behe and Dembski are based on the assumption that a system retains the same function as it evolves. But biological systems often become adapted to new functions as they evolve. Behe divided possible evolutionary pathways into two categories: “direct” pathways, which do not involve a change of function, and “indirect” pathways” which do. He then gave an argument against the viability of “direct” evolutionary pathways to an irreducibly complex system. He also claimed that the probability of evolution by an indirect pathway was too low for this to be an acceptable explanation. However, this claim was based on nothing more than his own intuition and an argument from ignorance: biologists have not yet provided a detailed account of any such pathway.

In fact, biologists have now proposed evolutionary explanations for several of the systems introduced as examples by Behe, such as the immune system<sup>9</sup>, but these will probably not be detailed enough to satisfy Behe or Dembski, who demand a precise account of every step of the pathway. Nevertheless, as these explanations gradually become more detailed, ID advocates increasingly choose to concentrate on just one of Behe's examples, the bacterial flagellum, which is perhaps the least well explained at present.

Detailed critiques of Behe's arguments can be found [here](#)<sup>10</sup>. See also Irreducible Complexity Demystified<sup>11</sup>.

## What is "specified complexity"?

ID advocates claim that “specified complexity” is a reliable marker of intelligent design. However, they use the term in two quite different senses, which they tend to conflate.

The term “specified complexity” was coined by biologist Leslie Orgel, as a way of characterizing what it is that distinguishes living organisms from non-living objects. The term was later adopted and used in a similar way by physicist Paul Davies. For these writers, an object is complex if it cannot be compressed to a shorter description. For example, a sequence of 100 identical digits, “1111111111...”, can be compressed to the description “100 1s”, and is therefore not complex at all. On the

other hand, a sequence of 100 random binary digits is complex because it cannot be compressed in this way. This corresponds to a widely-used concept in information theory, known as “algorithmic information” or “Kolmogorov complexity”. Since random sequences are highly complex in this sense, it is clear that complexity alone is not enough to characterize life. So Orgel and Davies add the criterion of “specification” or “specificity”. Specificity can broadly be thought of here as indicating the presence of some special property. Davies gives the example of a DNA sequence, which is “specified” because it is a member of that special set of sequences which code for a living organism. Orgel summarizes as follows:

In brief, living organisms are distinguished by their *specified* complexity. Crystals are usually taken as the prototypes of simple well-specified structures, because they consist of a very large number of identical molecules packed together in a uniform way. Lumps of granite or random mixtures of polymers are examples of structures which are complex but not specified. The crystals fail to qualify as living because they lack complexity; the mixtures of polymers fail to qualify because they lack specificity. [Leslie Orgel, "The Origins of Life", Chapman & Hall, 1973.]

The term “specified complexity” has now been recycled by Intelligent Design advocate William Dembski, a mathematician and philosopher. He, however, uses the word “complexity” in a

very different sense. For Dembski, “complexity” is merely a rescaled measure of improbability. If an object has only a small probability of occurring, he labels it “complex”, regardless of whether it is simple or complex in the usual sense of the

words. If the origin of an object can be shown to have sufficiently small probability under a particular hypothesis, Dembski tells us to reject that hypothesis as an explanation for the origin of the object. (In calculating the probability, we must consider not only the particular form of the object that we observed, but any other forms which would match the same “specification”, e.g. other objects which perform the same function; hence the word “specified”.) If all the natural (non-design) hypotheses we can think of to explain the object can be rejected, and we have “compelling reasons to think” that there can be no other natural explanation, then Dembski tells us the object exhibits specified complexity and we should infer that it was designed.

For example, Dembski describes a case in which a Democrat politician, Nicholas Caputo, was responsible for drawing the ballot order in elections. In 40 out of 41 elections, Caputo gave a Democrat candidate first position on the ballot, a position which was known to be advantageous. Dembski represents this event by the following sequence of 40 Ds and one R:

DDDDDDDDDDDDDDDDDDDDDDDRDDDDDDDDDDDDDDDDDDDDDDDD

Caputo claimed that he had determined the ballot order by drawing capsules from an urn, giving Democrats and Republicans an equal chance of heading the ballot. Under the hypothesis that this was true, Dembski calculates the probability of



drawing 40 or more Ds as about 1 in 50 billion ("40 or more Ds" is the specification), and decides that this probability is sufficiently low to justify rejecting this hypothesis. He also claims that we have a compelling reason to think there could be no other natural explanation, on the grounds that "urn models are among the most reliable randomization techniques available". He therefore concludes the sequence above exhibits specified complexity, and was the result of design. So, in Dembski's sense, even a very simple phenomenon like this sequence can exhibit specified complexity. (Clearly, if Caputo had put the Democrats first all 41 times, there would have been even more reason to infer design, following Dembski's approach, and the sequence of all 41 Ds would also have exhibited specified complexity.)

Unfortunately, Dembski conflates his own usage of the term "specified complexity" with that of Orgel and Davies, although they are quite different. Most biologists would agree that living organisms exhibit specified complexity in the sense of Orgel and Davies. They would not agree that living organisms exhibit specified complexity in Dembski's sense, since they would not accept that he has given compelling reasons to think that any biological structure could not have evolved naturally.

It should be added that the above is an interpretation of what Dembski means by specified complexity. But he is extremely vague and equivocal on the subject, refusing to be pinned down to any precise definition. It therefore impossible for anyone to say with certainty what he means.

## How has Dembski applied his "specified complexity" method to infer design in biology?

Dembski has provided only one detailed application of his method to biology, namely to the flagellum of the bacterium *E. coli*. This occurs in his latest book *No Free Lunch*. In this case, the natural hypothesis which Dembski considers is the hypothesis that the flagellum appeared as a result of a purely random combination of proteins. It does not take into account any non-random effects. Most significantly, it ignores natural selection, the central principle of evolution theory. The hypothesis of purely random combination is already universally rejected by biologists (it is the old creationist "tornado in a junkyard" straw man), so Dembski's consideration of this hypothesis serves no useful function, and the probability calculation which he uses to reject the hypothesis is irrelevant.

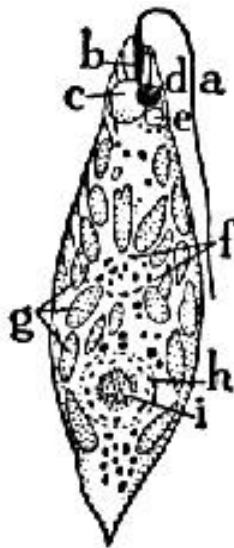
Since Dembski's probability calculation is irrelevant, all that really matters are his "compelling reasons to think" that there can be no other natural explanation (he calls this a "proscriptive generalization"). This takes the form of an argument from irreducible complexity, so we see that, when all the misleading terminology about "specified complexity" is unraveled, Dembski is just making another argument from irreducible complexity. What has he added to Behe's argument? Very little. Although he has tightened up Behe's argument against "direct" paths of evolution, he again fails to consider the possibility of the flagellum evolving from a system with a different function. Changes of function are commonplace in evolution, and are often referred to as "co-option" or "co-optation". Dembski men-

tions co-option, but only considers the possibility of individual proteins being co-opted. He ignores the scenario which biologists actually propose, which is the co-option of a substantial part of the system, consisting of many proteins, as a unit.

Biologists propose that the flagellum evolved from a secretory system. Indeed, the modern flagellum still retains the function of a secretory system. Although this scenario has not been developed to the level of detail which Behe and Dembski demand, it is highly misleading for Dembski to claim, as he does, that biologists "don't have a clue" how the flagellum evolved.

Detailed critiques of Dembski's arguments can be found [here](#)<sup>12</sup>.

## How does "information" enter the picture?



Intelligent Design advocates frequently make vague appeals to "information" in support of their arguments, claiming that the information in living organisms cannot be generated except by intelligent design. These appeals are useless without a clear definition of what the term means.

A number of different definitions of information are used in the field of information theory, the two most common being algorithmic information and Shannon information. The former is also known as Kolmogorov complexity, and has been briefly described above. The latter is a probabilistic concept used primarily in communications, where the aim is to maximize the efficiency and reliability of message transmission; the meaning of the messages is immaterial. Both these types of information can be shown to be generated by natural processes.

Dembski has attempted to formalize the argument from information, but his formulation turns out to be just the same as his argument from complexity. He uses the terms "information" and "complexity" synonymously. Both are just rescaled measures of improbability. When Dembski says that an event exhibits high information, he means that it has low probability. His "complex specified information" is exactly the same as his "specified complexity", and he uses the two terms interchangeably. See [Information Theory and Creationism](#)<sup>13</sup> for more.

## Endnotes

1. [www.talkdesign.org/volunteers.html](http://www.talkdesign.org/volunteers.html)
2. [www.talkorigins.org/origins/welcome.html](http://www.talkorigins.org/origins/welcome.html)
3. [www.au.org/churchstate/cs7003.htm](http://www.au.org/churchstate/cs7003.htm)
4. [www.public.asu.edu/~jmlynch/idt/wedge.html](http://www.public.asu.edu/~jmlynch/idt/wedge.html)
5. [www.reviewevolution.com/press/pressRelease\\_100Scientists.php](http://www.reviewevolution.com/press/pressRelease_100Scientists.php)
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10. [www.talkorigins.org/faqs/behe.html](http://www.talkorigins.org/faqs/behe.html)
11. [www.talkdesign.org/faqs/icdmyst/ICDmyst.html](http://www.talkdesign.org/faqs/icdmyst/ICDmyst.html)
12. [www.talkorigins.org/design/faqs/nfl/](http://www.talkorigins.org/design/faqs/nfl/)
13. [home.mira.net/~reynella/debate/informat.htm](http://home.mira.net/~reynella/debate/informat.htm)



("Suppressing a Smile" continued from page 3)

of his book *The Interrupted Journey*, Fuller also puts the extension of the wings before Barney sees the figures. He indicates the uniformed figures all "stepped back from the window toward a large panel." Fuller does not use the word scurry. The craft descends and the fins spread out "further" with an extension emerging underneath that may be a ladder. Fuller's account creates the impression that the saucer is preparing to land. Not a word of the smile appears here. He adds a detail about Barney seeing the eyes of the leader and they are unlike any eyes he has seen before. (IJ; pp. 31-2.) This is not in Betty's letter or Webb's summary and looks rooted in material that arose during the hypnosis sessions with Doc Simon years after the encounter. Fuller also quotes Barney's retort to Betty's "Now do you believe in flying saucers?" with a subtle difference: "Don't be ridiculous. Of course not." Webb's version specifically denies the craft is a flying saucer. By omitting "That wasn't a flying saucer" Fuller's version permits thinking his denial concerns the general interpretation of the experience as involving extraterrestrials, a plausible connotation of such a question. Webb says Barney detested the term flying saucer.

In the February 22, 1964 regression by Doc Simon, Barney relives the scene of the figures at the window and describes the figures as all moving towards levers in the back of the craft...or "to a big board." (IJ; p. 120.) Barney gets sidetracked by the matter of the leader and his eyes and jumps to a scene where the figures are standing on the road. The scurrying of the figures, the pulling of levers as the wings slide out, and the smile of the guy at the lever can't be found here. Barney's next session on the 29th also focuses on the look of the people on the craft rather than what they were doing. They stand at the window looking down on Barney, then they move back. (IJ; p. 145.) The rest of the book never gets into the details of this scene of the figures moving the levers. The extension of the wings is clarified at a later point in the account — "the wings that slid out were not like the wings of a plane, but they like a military bat-type of wing. It slid out." (IJ, pp. 244-5) But the coinciding pull of the lever and smile do not come up.

The presence of the smile does come up in one of Barney's regressions, but it is in a cryptic discussion in which Barney also insists on "the absence of a mouth." He saw what he "thought was a smile by our conventional method of smiling with the lips going up. It was more of a twinkling or a recognizing an eye as being part of a smile. And I just can't remember any mouth." (IJ, p. 272-3)

Jerry Clark has said the impression that the beings "had no mouths" is "a persistent myth" in the debunking literature, saying it is based on remarks taken out of context and without consideration of other material in the book where Barney speaks of lips without muscles. (*The UFO Book: Encyclopedia of the Extraterrestrial*, Visible Ink, 1998, p. 290) This line from Barney's regression however is no myth: "And I was always aware that somehow there was something peculiar, which is the absence of a mouth." (IJ, p. 272) This line incidentally is repeated in the 1976 docudrama "The UFO Incident." It is unambiguous and unqualified, both in the book and the film. Surrounding paragraphs in Fuller's book do nothing to change that impression. That other lines, elsewhere in Fuller's book,

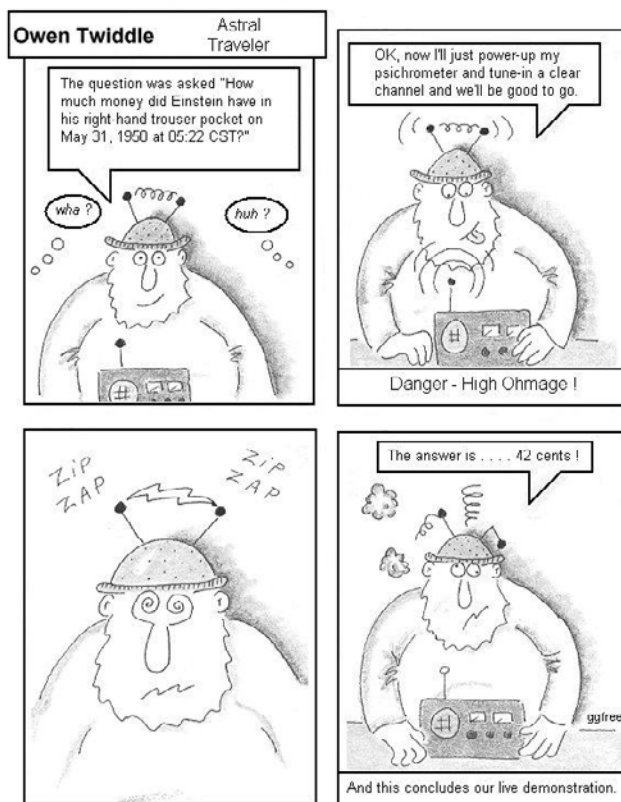
create a contradictory impression is true and very interesting. A fairer judgement is that writers on the case settled for the simplification started by the docudrama, not that they created a myth.

The fact that the smile/transformation connection appears only in what is a second-hand account may prompt concern that Webb created this detail, but the obvious objection is that Webb worries about this detail in his summary. He observes there is a contradiction between testimony of Barney saying he saw the smile and other testimony that he was not close enough to see the facial characteristics of the figures on the craft.

There are good reasons to prefer Webb's version over the others. The early date of writing reduces concerns over degradation of memory by time and "polishing" to suit various purposes to a minimum. Only Betty's letter comes earlier and her account is brief with the parts derived from Barney's experience as second-hand as Webb's. The omissions and variant order of elements of her letter can be blamed on the fact that Betty did not probe as deeply for details as Webb did in his 6-hour interview.

Webb's version also makes a good psychological fit to the rest of the journey. In the period leading up to Barney's seeing the transformation, Betty and Barney were arguing about the ufo with Barney taking the side of it being a plane (Piper Cub), an airliner headed to Montreal, or a military helicopter. He felt Betty was trying to convince him the object was a flying saucer. The transformer part seems a simple primary-process blending of the conflicting interpretations. It's not a saucer *or* a plane - it's both!

Why one might prefer to reject Webb's version is fairly blatant. Reflective readers may end up agreeing with Barney.



The wings coming out of the saucer *is* ridiculous. The reason the guy pulling the lever smiles is easy enough to intuit. He is changing the saucer into a plane. Nobody is going to believe Barney and Betty if they say they saw a flying saucer. Anybody else who comes along will only have seen a plane. The secret of the saucers remains a secret.

It's an old joke seen in places like spy fiction or murder mysteries. A witness sees something amazing, runs to tell somebody about it, but when he comes back the marvel has become something mundane. The people he brought back with him think he's crazy. Of course, the guy at the lever smiles. Fairy glamour.

Ufo tales with similar punch lines are common. One infamous report has an alien craft masquerade as a restaurant. Another speaks of seeing trucks flying over rivers. One claims that an ufo masqueraded as a weather balloon. What looks like a helicopter, isn't, for it lacks the necessary noise.

Twenty-first century ufo researchers will have other reasons for preferring to overlook Webb's version. The use of levers to set in motion the transformation seems distinctly primitive for an advanced technology. Voice activation or automatic computer response to being witnessed seems far likelier. We can sympathize why the whirlybirds of the 50s used levers and wire cables to control flight. The levers appearing in rocketships of the Flash Gordon serials (1938, etc.) now look humorously reflective of habits of thought of its era. Earth technology had not advanced enough to realize things should have been envisioned in better ways.

The extension of the wings also has a mid-century state-of-the-art quality about it. In 1951, a plane called the Bell X-5 started to be flown that experimented with the idea of giving planes the option of changing the shape of wings in flight. The concept underlying this innovation was that an aircraft which could change the sweep of its wings "would enjoy enormous advantages in performance. Wings could be swept far back in flight for a speed advantage, yet extended nearly straight for easy takeoff and a safe landing speed." Pilots soon learned that the ability to change wing geometry allowed them to outmaneuver other aircraft in simulated dogfights. Engineers subsequently put the idea into practice in Air Force F-111's, B-1 bombers, and Navy's F-14 fighters. This concept of variable geometry was more colloquially termed "swing-wing" aircraft. ([www.edwards.af.mil/history/docs\\_html/aircraft/strange\\_planes.html](http://www.edwards.af.mil/history/docs_html/aircraft/strange_planes.html))

One small measure of the widespread nature of this knowledge on the eve of the Hill case is provided by the TV kiddie series Supercar. One of the gimmicks proving the super-ness of the car was that it had "folding wings for flight." (Roger Fulton & John Betancourt, *The Sci-Fi Channel Encyclopedia of TV Science Fiction* Warner, 1997, pp. 535-6.) It started airing mere months before the Hill encounter; running from January 28, 1961 to April 29, 1962. I point to this not because I think

Barney saw this show. Rather it shows the idea was "cutting edge" stuff in this period and a nice detail to have if you want your ufo to seem "gosh-wow" new. What is troubling is not that Barney's transforming saucer/plane is technically implausible — it is easily thinkable to an inventive mind. It seems like an idea whose time was just right for coming up just then.

Before leaving this topic, I feel it is a matter of fairness and courtesy to caution habitual cynics to not regard Fuller's omission of Webb's version as a calculated deception. One way Webb's version could have dropped away was discussion among investigators leading to doubts about the smile having actually been seen. Arguments about distance and Barney's

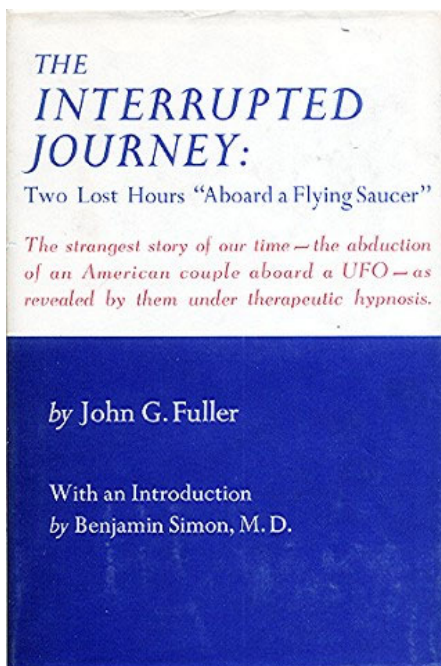
conflicting statement about not being able to see the facial characteristics of the black-suited figures are reasonable grounds for dispute. Barney's expressed worries over how ridiculous the transformation sounded, even to himself, could easily have taken charge. As he reconstructed his memories, he may have sought some more rational sounding scenario and convinced himself he simply got things wrong the first time. This could be rationalized by reference to the same mind-bending trick that allowed aliens to suppress the memories of what happened to him on board the craft. Barney could have told Fuller he preferred to forget Webb's version as one flawed by his not having had enough time to reflect on the experience and sort things out. The end-result is more rational, but the part about the extending fins becomes a loose end in the revision where the craft is preparing to land. What possible use does the extension of fins have in helping the craft land? The extension of the

ladder beneath the saucer mentioned in Fuller sounds more consistent with a landing scenario, but initial version told by Webb does not mention this detail.

Another consideration is that the initial form of Barney's experience probably mattered very little to Fuller compared to the drama of the hypnosis sessions and its revelations of medical procedures being performed on the couple without their remembering it. There are doubtless many possibilities.

Ultimately I don't much care how the smile got wiped off that guy's face. I'm just happy to see it back.

I wish to emphasize that this is an alternative view. Some will insist Webb's version is still entirely consistent with the idea that Barney was seeing a saucer preparing for a landing. The smile on the guy would be the equivalent to the crewman feeling, "We're gonna git you!" It's plausible. This is not a make or break issue. ☹



## Comments on Alien-UFOs.com web page about the Hill case

By Martin S. Kottmeyer

*This is a response to an article appearing at [www.alien-ufos.com/incidentshills.shtml](http://www.alien-ufos.com/incidentshills.shtml). The entries in italics are excerpts from that web page. The items not in italics are Martin's comments.*

*Dr. Simon believed that the Hills were suffering from anxiety syndrome stemming from their sighting and after six months of sessions a story remarkably similar to Betty's dreams began to emerge from both of the Hills, even though they were never present at each others appointments.*

This is untrue. Karl Pflock has established Barney was present at a speech Betty gave prior to the hypnosis sessions. Barney was the only one under actual treatment due to ulcers and his anxiety had multiple sources that pre-dated the sightings including a prior relationship to a woman who got custody.

*Barney's hypnosis lead to a detailed description of the aliens, they had large black eyes, stood about five feet tall and had grey skin. They had abnormally small noses and mouths but abnormally large chests and used telepathy to communicate.*

An amusing piece of confusion. Barney said the eyes wrapped around the side of the head. His drawing had eyes that had white and iris and pupil. Betty's precise description: "Hair and eyes were very dark, possibly black." The blackness is both uncertain and, in context, may be more importantly referring to the hair. Betty said the noses were abnormally large and like Jimmy Durante. Both Betty and Barney specifically denied the involvement of telepathy. The description here is obviously tailored to imply these are archetypal Grays.

Yet this is highly contentious. Let's run down the list of problems:

Barney's drawing forbids calling the eyes completely black as modern Grays are consistently described and drawn.

At no point does Betty say the head was big or bulbous or brainy.

They had hair.

They had lips with a bluish tint.

They had Jimmy Durante noses.

They are large-chested, not willowy.

They are friendly. The examiner smiles at least twice.

They show emotions — exasperation, startledness, concern and empathy [when Betty experiences pain, the examiner asserts if he had known that would happen, he wouldn't have done it.], and excitement. They scurry at one point.

They also wear navy blue military uniforms with Air Force type hats — not the skin tights of more recent lore.

*Martin S. Kottmeyer, a skeptic, related the Hills' story to the 1953 movie, 'Invaders from Mars' and other science fiction, including an episode of 'Outer Limits' shown less than two weeks before one of Barney's hypnosis appointments. Investigator Karl Pflock argues that the Hills were not science fiction fans and had not seen the above so no influence can have come from those sources.*

A strangely absolute statement and even Pflock is not this totally dismissive. Probably 99% of the viewers of *The Outer Limits* could not be called science fiction fans in Pflock's sense of having a collection of books and pulps. We have only Betty denying the likelihood — her husband not seeing a particular episode of a tv show — decades after the fact. But she also states she never heard of the show — doubtful, it was well promoted at the time — and that Barney couldn't have seen the show because he worked the night shift which we know is untrue because the shift started hours after the show aired. I mean, is it honestly so hard to accept she merely forgot after all this time? Even Pflock cannot escape the coincidence in appearance and time warrants an explanation, not such a flat denial.

I find it curious there is no notice of the rebuttal to Clark and Bullard that I wrote for REALL News.

*Kehoe's literature could also have been an influencing factor but Betty and Barney were unaware of this book when they reported their sighting to the air force.*

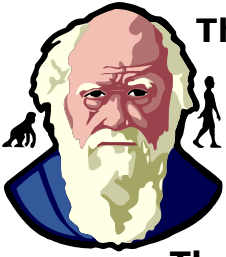
Irrelevant and misleading since **noone** has claimed the book to be an influence on the original sighting. It has always been about Betty's nightmares. And she had most definitely read the book before she had the dreams of abduction.

*Dr. Simon, in order to keep his reputation could not admit to believing the Hills...*

Another flat statement of what is only innuendo. It is almost certainly false since we know Simon stated his position identically when among believers and unbelievers.

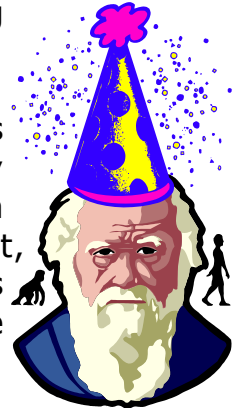
## Our Next Two Meetings

### *A Field Trip and a Celebration!*



**The Field Trip:** On our next regular meeting date, Tuesday, February 1, local anti-evolutionist John Mark Henry will be presenting "Intelligent Design: A Scientific Alternative to Evolution". This will be held in Lincoln Library's Carnegie Room North. Rather than hold a meeting literally next door, we will be attending his talk.

**The Celebration:** In addition, Saturday, February 12 is Darwin Day, the anniversary of the birth of Charles Darwin. February also marks the 12th anniversary of REALL. We'll be celebrating both events on that day! We'll have an early afternoon meal in a restaurant, along with an "Evolution Jeopardy" contest and whatever other silliness comes to mind. Details are still being finalized, so watch for a future postcard.



[www.reall.org](http://www.reall.org)

Springfield, Illinois  
Lincoln Library (7th & Capitol)  
Tuesday, February 1, 7:00 PM

Free and Open  
to the Public

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