A Logical Analysis of Winston Wu's Anti-Skeptic Article

This analysis is a response to Winston Wu's online article, "Debunking Common Skeptical Arguments Against Paranormal and Psychic Phenomena", located at http://www.victorzammit.com/skeptics/winston.html

Mr. Wu's text is rendered in black type. My comments are rendered in blue type. Most of Mr. Wu's text remains intact here, in order to provide correct context. It was necessary to remove some of his text for reasons that will be given at those places in this document. Some alteration of format was necessary to properly separate my comments from his text.

First, I'll define the logical terms used. These definitions are unfortunately brief. More detailed definitions can be obtained online at various locations. I suggest performing a Google search for "logical fallacies" for further quick reference. My primary reference has been "Fundamentals of Logic - Second Edition", by James D. Carney and Richard K. Scheer, (C) 1974 Macmillan Publishing Company, Inc., ISBN 0-02-319430-8

Basic Logical Terms

- **argument** - a set of statements given as reasons for another statement
- **premise** - a given statement; part of the *argument*
- **conclusion** - the statement for which reasons (arguments and premises) are given

Logical Fallacies

- **ad hominem** or **"To the Man"** the reasons given for a conclusion are no more than a criticism of a person or their particular circumstances. It also takes the form of assigning labels to people. Example: "Mr. Smith uses foul language; therefore he is immoral and anything he says is nonsense."
- **tu quoque** or **"You're Another"** - an argument is answered by responding with the same or similar arguments which are irrelevant to the conclusion. Example: "Yes, I do use foul language, but so do you."
- **Appeal to Popularity** - the argument is held to be true just because it is widely believed to be true. Example: "More than 70% of all people have had paranormal experiences, therefore the paranormal is real," or "Everybody knows we only use 10% of our brains."
- **"Appeal to Pity"** or **"Appeal to Emotion"** - a form of *Appeal to Popularity* which attempts to invoke sympathy in order to support a conclusion. Example: "If we don't end farm subsidies, millions of children will starve to death."
- **"Appeal to Force"** or "**Appeal to Consequences**" - the argument takes the form of "might makes right" or warns that if the conclusion is not accepted then dire consequences will result. Example: "Get right with God, or you'll be swept into Hell," or "Those who don't believe in the paranormal must be sad people."

- **"Appeal to Authority"** - committed when one attempts to support a conclusion by citing a person or persons who already assert the same conclusion, but who are not qualified to assert that conclusion. Often occurs when a person claims to be an authority when they are not. **Note: if the authority cited is a reliable, qualified authority concerning the conclusion, this can be a valid argument.** The fallacy lies in citing an authority that is not reliably qualified to assert the conclusion. Example: “Joe the plumber says that ghosts are electromagnetic plasma produced by the spirit.”
- **"Appeal to Ignorance"** – committed when the conclusion is asserted as true because there is no proof that it is false, or false when there is no proof that it is true, as in "there is no proof that *p* is false, therefore *p* is true" and vice-versa. There are two exceptions to this fallacy. One in certain courts of law, where people are presumed to be innocent until judged guilty. Another occurs in science, when a conclusion can be considered to be false when evidence cannot be found to support the conclusion, assuming that the scientist is expert enough to find evidence if it existed. Example: “We don’t know how certain processes in evolution work, therefore there must be an intelligence guiding the process.” Or “It cannot be proven that ghosts do not exist, therefore we should assume that they exist.”
- **"Begging the Question"**, **"Circular Reasoning"** - an argument is used to support itself, as in *p* is true, therefore *p* is true, or *p* is true because *q* is true, *q* is true because *r* is true, and *r* is true because *p* is true. The conclusion repeats the reason or premise. Example: “The Bible is can’t be wrong because it is the word of God. God can’t be wrong because the Bible says He cant’, and we know the Bible can’t be wrong because it is the word of God.”
- **Complex Question** - the arguments presuppose that the conclusion is true. Also known as a "Catch-22" or "double bind" or "forcing the conclusion". Example: “When did you stop beating your wife?”
- **Genetic Fallacy** - often a variation of *ad hominem*, the arguer describes the process that they feel led someone to a conclusion and infers from that process that the conclusion is false. Example: “You made an error in your reasoning at Steps 10 and 23, therefore your conclusion is false.” Not necessarily so.
- **Straw Man** - committed when a conclusion is misinterpreted or misrepresented an attempt is made to refute the misinterpreted or misrepresented conclusion. Example: “In your analysis of fried eggs, you said that brown eggs taste better than white eggs. Obviously you believe that white chickens are inferior to brown chickens. Well, genetic studies of all kinds of chickens show that brown chickens and white chickens are equally good.”
- **"False Cause"** or **"False Analogy"** - argument in which one gives an incorrect or unrelated reason for a given conclusion. Example: “When people tell me that apples are red, I can verify that they are red. This means that people are reliable, so when they tell me that ghosts are real I can assume that ghosts are as real as apples are red.”
- **Special Pleading** - the arguer considers only those reasons that support the conclusion. To avoid this fallacy the arguer must consider reasons both pro and con. Example: “It doesn’t matter that magicians can do what psychics can do. Psychics have genuine powers.”

- **Hasty Generalization** - the arguer infers from an insufficiently large or quantitatively unrepresentative sample (*fallacy of small sample*) or when one infers from a peculiarly selected or qualitatively unrepresentative sample (*fallacy of biased statistics*). Example: “Our survey of fifteen dentists show that nine out of ten dentists agree!”
- **Equivocation** - words or expressions having multiple meanings are used inconsistently and the correctness of the argument depends on consistent definition. Example: “I am a true skeptic. You are a false skeptic.”
- **Fallacy of Division** - committed when someone argues that something which is true only of the whole is also true of its parts taken separately. Example: “Chemical A and Chemical B explode when mixed together. Therefore each chemical must contain an explosive quality.”
- **Fallacy of Composition** - committed when someone argues that what is true only of the parts is also true of the whole. Example: “Bird can fly because they have wings. Therefore a bird’s wing should be able to fly by itself.”
- **Fallacy of Accent** - committed when a statement is accented in a way that changes its meaning, and is used in an argument.
- **False Dilemma** - arguer asserts that there are only two possibilities for a conclusion, when there are more. Example: “Either we drag icebergs to San Francisco for water, or California will go completely dry.”

Now that definitions have been set, we can begin the analysis.

Debunking Common Skeptical Arguments Against
Paranormal and Psychic Phenomena

By Winston Wu
(WWu777@aol.com)

Introduction

This article rebuts the most common arguments made by skeptics regarding psychic phenomena and the paranormal, and shows the flaws and limitations in their thinking and methodology. I've listed their common arguments one by one and pointed out the problems in them based on years of experience in debating and discussing with them. Skeptics who use these arguments include honest doubters, cynics, debunkers, Atheists, Humanists, certain scientists bent on materialistic reductionist world views, those for whom science is their God (even though they won't admit it), scientific materialists, haters of religion, etc. With the exception of sensational pro-paranormal programs, these skeptics are often given the chance to present their arguments and explanations in the media, national magazines, and certain television programs, without rebuttal from the other side, even when their explanations contradict the facts of the case. As a result, there is often an imbalance in the presentation of paranormal and psychic phenomena in the media, leaving most viewers and believers uninformed.

Mr. Wu paints skeptics with a very broad brush. This paragraph is nothing more than a statement of his opinion. His labeling of skeptic types, e.g. "scientific materialists, haters of religion, etc.", and his contention that they receive unchallenged time to voice opinions is **ad hominem**, **Appeal to Emotion** and **Appeal to Popularity**. The statement "those for whom science is their God" is an example of **ad hominem** as well as **Straw Man**. Not all of the types listed by Mr. Wu are necessarily skeptics, and not all skeptics share the attributes he lists. Mr. Wu's contention that such "skeptics" have unfair access to the media is unsupported.

This article attempts to counteract the imbalance by presenting sensible reasons, arguments and facts that most skeptics fail to consider. It is written both for the education and knowledge of the believer who deals with skeptics, and for skeptics who are willing to hear counterarguments to their positions.

First though, a little about me. My name is Winston Wu and I am a researcher, explorer and skeptic (honest inquirer, not cynic) of paranormal and psychic phenomena, metaphysics, quantum physics, consciousness research, realms of higher consciousness, and religion/philosophy. I've always had a sense of adventure and interest in esoteric things. I started out during childhood as a Christian fundamentalist. After a slow deconversion when I turned 19, I became Agnostic for a while. Realizing that there were way too many phenomena that couldn't be explained by conventional explanations, I

started looking for other answers and non-organized forms of spirituality. After much research and questioning, I discovered many fascinating things such as new paradigms that fit the unexplained data, a more comprehensive view of reality and spirituality, and that there is indeed powerful evidence (some of which is irrefutable)

Mr. Wu's statement, "some of which is irrefutable" is subjective opinion, leading to the **Appeal to Ignorance** fallacy -- Mr. Wu has assumed that because certain phenomena haven't been explained to his satisfaction, they require paranormal explanations. Also, his use of the term "irrefutable" is a form of "Circular Reasoning" -- the assertion of "irrefutable" evidence is used as an argument to support his conclusion that "powerful evidence" exists. One cannot assume what Mr. Wu means by "research". Research can mean anything from the reading of books to hard science done in a laboratory, or browsing the Internet. Mr. Wu's educational background is not given. Mr. Wu's research claim is an **Appeal to Authority** and is thus an invalid argument.

that many types of paranormal phenomena do have a basis, both scientifically and in terms of anecdotes. To try to gain an understanding of the other side, (which is what you should do when you want to learn something in depth) I went to skeptics to ask what they had to say and also read some of their literature. I found that what they had to say made sense on the surface, but was very different than what I heard from the literature about paranormal phenomena, accounts of paranormal experiences from credible people (some of which I know and trust), and my own experiences. In order to try to make sense of such different but arguable views, I weighed the evidence against their arguments. What I found was that although both skeptics and believers can be closed-minded and tend to rationalize away what they don't want to believe, in either case the objective evidence for the paranormal was incredibly strong in many areas. The skeptical arguments could not dismiss or vanish the mountain of evidence for the existence of paranormal and psychic phenomena. The only way they could try though, was by touting a very extreme type of closed philosophy system which was often manipulative as well. Although the weaknesses of their arguments were apparent, to my dismay I could find no article or book that critiqued the arguments of organized skepticism in depth, one by one. I wondered why for every other type of philosophy and belief system, there existed in-depth critiques, but not so with organized skepticism. After all, its flaws, fallacies, and insufficiencies were very apparent to me, so why hadn't anyone put together a more concerted effort to educate others on that? Well, since I had debated skeptics for a long time and knew the weaknesses of their arguments, I figured that I might as well be the one to write such an article then.

As I found more evidence for various paranormal phenomena, I presented them to skeptics both on message boards and internet newsgroups.
What resulted was an endless charade of arguments on both sides, with each side bringing up facts that support their side while denying the facts of the other side. This is typical of debates in general no doubt, but since there were so many types of paranormal phenomena, the topic range was broad and diverse enough to make continuous and interesting discussions. While debating them, familiarizing myself with their arguments and

reading their websites (such as Bob Carroll's "The Skeptic's Dictionary" at http://www.skepdic.com), I heard about every argument they had and saw the strengths/weaknesses of them, as an experienced chess player sees the strengths/weaknesses of the positions of his opponent's pieces. For almost three years now, I have debated skeptics ranging from honest doubters looking for truth (like me), to those who are clearly cynics masquerading as skeptics having already made up their minds before looking at the evidence. What I've learned is what I want to share with you.

Again, this is Mr. Wu's subjective opinion. Discussion media such as Usenet, e-mail lists, and the like, are not "debates" in the classical sense. Discussions on such newsgroups are usually chaotic, without formal rules. Mr. Wu's broad statement does not and cannot give an accurate picture of the nature of skeptics. More importantly, Mr. Wu does not provide examples of the kind of evidence he presented. What he's presenting here amounts to an anecdote. (The curious may wish to visit the sci.skeptic and/or alt.paranormal Usenet newsgroups, accessible via Google.) Please note Mr. Wu's characterization of himself as an "honest doubter looking for truth" versus "cynics masquerading as skeptics." This is **Appeal to Pity**, as well as an **ad hominem** attack on those who answered his Usenet posts. He seeks to support an invalid **Appeal to Authority** with other invalid arguments.

(Mr. Wu's paragraph regarding evidence for the paranormal omitted to conserve space – Paul)

> Before I begin, I want to clarify that I have nothing against honest skepticism. It is good to have a healthy dose of skepticism to protect one from scams, con artists, misleading advertising, misleading claims, jumping to conclusions, etc. It's when that skepticism turns to cynicism (without them realizing it even) and closes one's mind so that anything that doesn't fit into their world view is dismissed automatically as misperception, delusion, or fraud, that it's taken too far. That's where I draw the line between healthy skepticism and pseudo-skepticism, or closed-minded skepticism. Of course, every skeptic is going to say that they are open-minded and not cynical, but the proof of the pudding is in their actions and way of thinking. After a while, one can recognize these clues that distinguish a true skeptic and a cynic. One of the tell-tale signs of cynics and closed-minded skeptics is in the words they use when describing believers, such as: "delusional, irrational, gullible, charlatans, superstitious, wishful-thinking, primitive and child-like thinking", etc.
>
> Watch out if you see someone or an author frequently using words like that to describe what they don't understand. These kind of skeptics also tend to belong to organized Skeptics groups fighting to suppress paranormal evidence, such as CSICOP (Committee for the Scientific Investigation of Claims of the Paranormal), Australian Skeptics, ISUNY (Inquiring Skeptics of Upper New York), and many others. Skepticism should be a tool and method of inquiry to help one learn things and find truth, not as a cover to defend one's own paradigms and cynicism. Doubting things and looking for answers will help one learn things, but trying to debunk everything outside your world view does not lead to learning. Therefore

when I critique skepticism here, I'm not referring to honest healthy skepticism, but the cynical kind that tries to debunk everything outside of the materialistic world view, publishes or reads one-sided magazines like "The Skeptical Inquirer", belong to organizations like CSICOP (Committee for the Scientific Investigations of Claims of the Paranormal), and who consider James Randi's unwon million dollar psychic challenge to be proof that no one is truly psychic. This type of cycnicism masquerading as science is especially prevalent in the attitude of the popular skeptical newsgroup Sci.Skeptic. Not everyone who calls himself a skeptic fits into these categories of course. The true skeptic though, should be skeptical of his own beliefs and positions as well of others.

Mr. Wu invents several varieties of skepticism. These are all matters of subjective opinion. This is the **Complex Question** fallacy. Mr. Wu commits the fallacy of **ad hominem** when he identifies several skeptic organizations, accuses them of "fighting to suppress paranormal evidence", and claims that the "cynics and closed-minded skeptics" tend to belong to such groups. This is also **Special Pleading** and **Appeal to Pity**. Mr. Wu's rhetorical invention of "true skeptics" is **ad hominem**.

In debating skeptics, I've noticed some common flawed tactics that they use. These include:

1) Ignoring facts and evidence that don't fit into their preconceived world view, rather than updating their beliefs to conform to the facts, which is more logical. (e.g. "It can't be, therefore it isn't!")

There is a large difference between "fact" and "opinion". Unless both parties agree on what qualifies as "fact", there will be disagreements. It is not necessarily logical to alter one's worldview until the "facts" are all in, and an explanation of the "facts" has been developed. Even then, there will be different interpretations of the "facts". Mr. Wu does not explain what facts and evidence were ignored. We are left with his subjective opinion. This is the **Complex Question** fallacy, invalid because the question presupposes that the conclusion is true.

2) Trying to force false explanations to explain a paranormal event regardless of whether they fit the facts. In essence, cynical skeptics tend to prefer inventing false explanations rather than accepting any paranormal ones. For example, using "cold reading" to explain the amazing accuracy of a psychic reading when no known cold reading technique could account for the facts and circumstances. (see Argument # 16)

Mr. Wu fails to differentiate between "inventing false explanations" and the valid process of observation => hypothesis => theory. Mr. Wu commits the **Special Pleading** fallacy. Paranormal explanations cannot be accepted without also accepting fundamental changes in the laws of nature. Explaining a mysterious event in paranormal terms is the **Post Hoc** fallacy. To do so is unreasonable. All possible explanations of "paranormal" events must be considered, including real-world explanations. For example, cold reading is a known method. It is not the only known method. Mr. Wu fails to consider other possibilities. Mr. Wu again labels "cynical skeptics" in a repeat of **ad hominem**.

3) Moving the goal posts or raising the bar whenever their criteria for evidence is met. For example, a

skeptic wants evidence for psi in the form of controlled experiments rather than anecdotal evidence. When this evidence is presented, he will then raise the bar and demand that the experiments be repeatable by other researchers. When this is done, then he will either attack the researchers integrity and character, attack their methods, or demand a report of every detail and minute of the experiment or else he will contend that some unmentioned lack of controls must have been the culprit to explain the positive psi results, etc. He will always find some excuse due to his already made-up mindset.

Mr. Wu commits the **Straw Man** fallacy as well as **ad hominem**. Alleged misbehavior by skeptics does not relieve the paranormal researcher of the obligations of good science. It is quite valid and responsible to require accurate, detailed reporting of methodology, observations, and circumstances, especially in the area of "paranormal" phenomena. Fakery has been known to occur even in the "hard" sciences, let alone the "paranormal" sciences.

It is a mistake to set a "goal" in the first place. If I say, "cross this line and I'll be convinced", someone could find a non-paranormal way to cross the line. Experiments must be structured to rule out trickery or bias. It is not an easy task. Researchers must have integrity. Experimental details must be thoroughly recorded and accurately reported. These are necessary requirements for good science. Mr. Wu has not shown that the demand for such requirements is invalid.

4) Using double standards in what they will accept as evidence. For example, when a psi experiment shows well above chance results, they will not accept it as evidence against psi. But when a psi experiment only shows chance results, they will accept that as evidence against psi. In the same fashion, they will not accept anecdotal evidence for the paranormal because they consider it to be unreliable, but not surprisingly they will accept anecdotal evidence when it supports *their* position (e.g. "Others never reported any paranormal activity in the area").

This passage is primarily an **ad hominem** argument. Nevertheless, when any experiment shows results above chance, it is an act of responsibility to question the results and demand accountability.

Anecdotes are unreliable. They require corroborating evidence. Without it, they cannot be considered in formulation of theory. Mr. Wu commits a **False Analogy** fallacy by equating experimental evidence with anecdotal evidence. Experimental results are testable -- anecdotes are not. The statement, "Others never reported any paranormal activity in the area" is a claim of no anecdotal evidence -- Mr. Wu errs in referring to this as accepting anecdotal evidence. Mr. Wu's conclusion that skeptics use double standards may be true for some skeptics, but his premises, (1) that skeptics accept only evidence against psi and (2) that skeptics accept only anecdotes against psi, are contingent upon the word "accept", which infers agreement. This is a **False Dilemma**. Evidence is to be considered and examined, not "accepted" on face value. This may seem to be

quibbling on a minor detail, but it is an important point.

> 5) Attacking the character of witnesses and undermining their credibility their evidence or testimonies can't be explained away. As we all know, when politicians can't win on the issues, they resort to character assassinations. Unfortunately, this is also what skeptics and debunkers tend to do as well. When evidence or testimony from key people can't be explained away or are irrefutable, skeptics will find ways to discredit them such as character assassinations or grossly exaggerating and distorting trivial mistakes. This has especially been done with the direct eyewitnesses of the 1947 Roswell Incident, as Roswell author Stanton Friedman often points out.

It is undeniable that character assassination, or the **ad hominem** fallacy, is practiced on both sides. It is a matter of **tu quoque** to argue as to which side practices it more. However, Mr. Wu's obvious bias against skeptics in this statement is an **Appeal to Pity** and **Appeal to Popularity.** It is a matter of conjecture whether any given evidence or testimony is "irrefutable". Mr. Wu does not specify what this "irrefutable" evidence is. Mr. Wu again commits the **Straw Man** fallacy. Alleged misbehavior by skeptics does not invalidate the need for unambiguous evidence and unbiased reporting, just as **ad hominem** attacks on skeptics does not invalidate their opinions.

> 6) Dismissing all evidence for the paranormal by classifying it either as anecdotal, untestable, unreplicable, or uncontrolled. Skeptics who wish to close their minds to any evidence, even after asking for it ironically, tend to do so by classifying it into one of the categories above. If the evidence is anecdotal, they will say that anecdotal evidence is worthless scientifically and untestable. If the evidence is in the form of scientific experiments, they will then say that it is unreplicable or uncontrolled.

This is a rephrasing of point #4 above. Most anecdotal evidence is uncorroborated and is therefore useless. In and of themselves, stories prove nothing. Stories are untestable by their very subjective nature; however, as in the case of Nazi atrocities in World War II, personal accounts can be corroborated by physical evidence. This is a key issue: without corroboration, anecdotes cannot be considered as fact.

Any experiment must have sufficient controls to be considered valid. This is a basic tenet of science. If experiments contain flaws, it is reasonable to point them out.

> (For more on skeptical tactics such as these, go to http://www.eskimo.com/~billb/pathskep.html, and http://www.primenet.com/~lippard/stupid-skeptic-tricks.txt)

Based on these common tactics, it should be apparent by now that these people's skepticism is a philosophy, not a science (and a pretty useless one at that, but then again is philosophy much of any use anyway?). Even Bob Carroll of The Skeptic's Dictionary admits this to his readers on his site: (http://www.skepdic.com/comments/psicom.html)

> reply: I thank you for you kind comments. I agree that my skepticism is not scientific. I am not a scientist and I am not doing science. My skepticism is philosophical.

These illogical ways of thinking are strange coming from people who pride themselves on their logic and rationality! Of course, flawed thinking such as the above can come from both believers and skeptics. That is why it is good to point them out to keep both sides in check. Please enjoy these rebuttals and keep an open mind. (Note: I have assigned numbers to each skeptical argument below so that I can make references to them throughout this article.)

A few more **ad hominem** arguments. Earlier, Mr. Wu classified himself as a “true skeptic” and said that skepticism was useful; now, he says it is a useless philosophy. It is true that skepticism has its roots in ancient Greek philosophy, and still is a philosophy, although today’s version of skepticism is different from that practiced by Pyrrho of Elis.

Section I: General Skeptical Arguments Against The Paranormal

Argument # 1: "It is irrational to believe in anything that hasn't been proven."

This is the main philosophy behind most skeptical arguments. As Dr. Melvin Morse, Seattle pediatrician and author specializing in child NDE’s (Near Death Experiences) said:

> "The notion that 'It is rational to only believe what's been proven' somehow got twisted into ‘It is irrational to believe in anything that hasn't been proven’." (Video: "Conversations with God")

By "proven" skeptics mean proven according to the scientific method, which they consider to be the only reliable method. There are several problems with this argument:

1) First of all, just because something hasn't been proven and established in mainstream science doesn't mean it doesn't exist or isn't true. If it did, then nothing would exist until proven or discovered. Bacteria and germs would never have caused illnesses until they were proven and discovered, smoking would not cause cancer until it was proven, the planet Pluto would not have existed until it was discovered, etc. Anyone knows that this simply is not so.

Well, it *is* irrational to believe in anything that hasn't been proven. The term *irrational* means "not endowed with reason". Belief in something that has not been proved true is not an act of reason; it is either an act of foolishness or of faith, neither of which is based in logic. Perhaps a clearer statement would be that it is *unreasonable* to believe in anything that hasn’t been proven.

While it is true that certain things such as bacteria existed even though people didn't know they existed, Mr. Wu's examples do not address the argument. He commits the fallacy of **False Dilemma**. Bacteria were discovered by direct observation, not by blind belief. (Antony van Leeuwenhoek is credited with being the first to study bacteria. His findings were confirmed by Robert Hooke...following a scientific method. Other scientists didn't just "believe"

in Leeuwenhoek's reports – they made their own observations.) Pluto was discovered by Clyde Tombaugh, who painstakingly examined the evidence, building on the work by Percival Lowell, not by examining mythology. Examination of the evidence for NDE, on the other hand, is mainly an examination of personal accounts, highly questionable evidence at best. Mr. Wu equates true scientific discoveries with unverifiable and non-reproducible personal experiences. This is a **False Analogy**. It does not follow that because bacteria, cancer, and Pluto exist that NDE, OBE, or the paranormal reality they imply, are factually real.

> For instance, when Acupuncture was first introduced in the West, skeptics and certain scientists claimed that it had no basis and only worked due to the placebo effect because they couldn't understand how it worked. This reflected the typical false thinking of skeptics that anything they don't understand must be due to superstition or chance. However, practitioners and believers knew otherwise and were later validated by extensive studies have been done to show that it indeed does work for treating various ailments and getting results which placebos can't account for. An extensive listing of these research studies can be found on the Med lab website. In fact, the AMA (American Medical Association) has already declared that Acupuncture works and is an effective treatment, proving the skeptics wrong.

The AMA's opinion on acupuncture does not prove that it works, nor does it prove the skeptics wrong. Mr. Wu does not supply the text of the AMA opinion. *Even if acupuncture is effective in some situations, it does not follow that the mystical underpinnings of the practice are true.* There are numerous studies of acupuncture in the literature, and there are supported opinions that it does not work any better than placebo. For example: http://www.ncahf.org/pp/acu.html

Studies showing efficacy of acupuncture for treatment of cocaine abuse was performed on a very small sample of patients. *Any medical practice should be subject to questioning and skepticism.* Mr. Wu's subjective opinion about "the typical false thinking of skeptics" is **Complex Question** and **ad hominem**.

> The point is that Acupuncture worked *before* it was proven to work, not after.
>
> 2) Second, just because something hasn't been proven to established science doesn't mean that it hasn't been proved firsthand to certain people. Established views are not the dictum of all reality. Many types of paranormal phenomena have been proved firsthand to eyewitnesses and experiencers. For example, even though the cases of NDE's don't prove the existence of an afterlife (at least not yet), those who have experienced them claim that the experience of the separation of body and spirit is firsthand proof to them of an afterlife, just as riding in a car is firsthand proof that cars exist, and they fear death no more. Those who have OBE's (Out of Body Experiences) also make similar claims, and they need no proof nor do they need to convince anyone. These claims are further supported by the fact that in many documented cases the subject could hear conversations or see things in other rooms and other places, which are later confirmed and verified to be remarkably accurate. Who's to say that they're

wrong just because we haven't had the same experiences? That would be equivalent to saying that because I've never been to Japan, everyone else who claims to have been there is mistaken or deluded. The same goes for eyewitnesses of ghosts, UFO's (Unidentified Flying Objects), alien abductions, Bigfoot, etc. These sightings and encounters range from the obscure and distant to ones that are crystal clear and at point-blank-range, making them much harder to dismiss.

Again, even if acupuncture is shown to work in some situations, it does not follow that its religious basis is true. Nor does it follow that other mystical beliefs are true.

Individuals who believe fervently in their own experiences may not require proof, but to expect others to believe without good evidence is **Appeal to Ignorance**. Comparing OBE/NDE to a car ride is a **False Analogy**. Although we cannot assume that the people who experience OBE are "wrong", neither can we assume that they are "right". Mr. Wu commits the fallacy of **Appeal to Ignorance** -- the phenomena haven't been shown to be false, therefore they are "true", as in "Many types of paranormal phenomena have been proved firsthand to eyewitnesses and experiencers". He assumes that he has all the necessary facts, when he does not.

3) Third, many research experiments and studies conducted under the scientific method HAVE passed with positive results. For example, experiments in micro-psychokinesis done by Dr. Robert Jahn and Brenda Dunn at the Princeton Engineering Anomalies Research labs (PEAR) using random generator machines to measure subjects' PK influence on them, obtained positive consistent results for over 20 years. These were done under proper controls and scientific procedures, even according to prominent skeptic Ray Hyman, who investigated the Prince experiments in person and conceded that he could find no flaws in the methodology. The small but consistent results achieved by PEAR over 20 years are calculated by chance alone to be 1 in 10^{35}. (For more on PEAR, see their website at www.princeton.edu/~pear/index.html). Likewise, the Ganzfeld experiments in telepathy done in the early 70's also had repeated success, with receivers in 42 controlled experiments scoring an average of 38 to 45 percent compared to the chance rate of 25 percent. (See Argument # 17) The odds of that occurring by chance are less than one in a billion. More recently, controlled experiments involving four prominent mediums accuracy were done by Dr. Gary Schwartz of the Human Energy Lab of the University of Arizona. (See Argument # 16) These mediums achieved a hit rate 70 to 90 percent, even when in one experiment they were NOT allowed to ask any questions of the sitters or see them! Skeptics repeatedly continue to ignore this fact! (See the Jan 2001 edition of the *Journal for the Society of Psychical Research*) A list of studies that produced psi results can be found in Dean Radin's book *The Conscious Universe: The Scientific Truth of Psychic Phenomena.* Many researchers will tell you that these studies prove that telepathy and micro-psychokinesis exist at least on the micro level.

Impressive as these experimental results may seem, they are still disputed. The alleged "small but consistent results achieved…over 20 years" statement is misleading – in and of themselves, many of the experiments over

those years produced no significant results. However, PEAR conducted a meta-analysis of many years' worth of experiments. It was this meta-analysis that produced the statistically significant results. Even given those results, it does not follow that "psi" is the cause.

Experimental results should always be subject to question and review. Hyman, by the way, has said that meta-analysis should not be applied to parapsychology, because the results of meta-analysis tend to follow the bias of the researcher. See The Evidence for Psychic Functioning: Claims vs. Reality Regardless of what "many researchers" may say, the subject is still very much undecided. Mr. Wu, in invoking these nameless "many researchers", resorts to **Appeal to Popularity.** Mr. Wu also fails to consider valid criticisms of the PEAR, Ganzfeld, and Schwartz experiments, thereby committing the fallacy of **Special Pleading**.

> The skeptics, of course will say that those tests yielded impossible results and therefore were not done under properly controlled conditions, or else the researchers' overzealous desire to get psi results botched the results. But this of course reflects their bias and *a priori* dismissal of facts that don't fit in with their beliefs. It is not logical to deny the facts that don't support your beliefs, it is more logical to update your beliefs to account for the facts. Nevertheless, new scientific discoveries tend to pass through stages first before being accepted (see last paragraph of Argument # 8)
>
> 4) Fourth, just because something is irrational to skeptics doesn't mean that it is irrational to others who know or believe that it is real. Skeptics and scientific materialists do not have the monopoly on rational thinking. Lots of rational intelligent intellectual people believe in God, spiritual dimensions, or that there is more to reality than the material world. The skeptics' system of rational thinking is not the dictatum by which all things that exist must conform to. This can easily be demonstrated by all the things that skeptics have been wrong about before, such as flight, laws of physics, quantum mechanics, giant squid, etc. proving their fallibility.

It is Mr. Wu's opinion that objections raised by skeptics are invalid. He has not shown that those objections are in error. Mr. Wu infers that since some skeptics in the past were wrong about some things, they are wrong about paranormal things. Applying such errors to all skeptics is a **Fallacy of Composition**. Mr. Wu has not established that skeptics "deny the facts". He claims that they do, but has not substantiated his opinion. Scientific discoveries do pass through certain stages, but just because something passes through certain stages doesn't make it true.

Mr. Wu's statement that "just because something is irrational to skeptics doesn't mean that it is irrational to others" is true, but it merely illustrates a difference of opinion. He cites "lots of rational intelligent intellectual people" in an **Appeal to Popularity** fallacy. It does not follow that any given belief is true, regardless of how many people believe it. Nobody has ever claimed that skeptics are infallible. Mr. Wu commits **Appeal to Ignorance** and **False Dilemma** by equating non-paranormal discoveries with "paranormal" phenomena.

Argument #2: "Extraordinary claims require extraordinary evidence."

This seems to be the mantra of hard nosed skeptics. One common way it is presented goes like this:

"If my friend told me that on the way here he was delayed because his car got a flat tire, then I would believe it because it is an ordinary claim. However, if he claimed that on his way here he was temporarily abducted by aliens in a UFO, then I would not believe his claim because it is extraordinary in nature. Extraordinary claims require extraordinary evidence."

Now it would help if the skeptics who proclaim this argument specify what they would accept as extraordinary evidence. Otherwise, arbitrarily stating this argument gives one an out no matter what evidence is shown. While it is reasonable to expect a higher standard of evidence for more extraordinary claims, there are nevertheless 6 difficulties to keep in mind.

1) First, although this rule is good as a general guideline, the fact that 3 possible alternatives exist make this rule fallible.

a) It is possible for something to exist without leaving behind collectable evidence as a souvenir to us. For example, planes, radio waves, electromagnetism, and light move around without leaving "hard evidence" yet they exist. Therefore, extraordinary phenomena can easily exist without leaving behind extraordinary evidence.

b) It is possible for something to exist yet the evidence for it hasn't been found or understood yet, which is the case for almost every discovery in history from fire and wheels to gunpowder and gravity, to planets, atoms and electromagnetism.

c) It is possible that the evidence is already there but that it's subject to interpretation, making it controversial. This is true for instance, of the alleged mysterious implants found by doctors and surgeons in alleged alien abductees. So even when something leaves a trail, residue or mark, they are subject to interpretation anyway.

Mr. Wu indulges yet again in **False Dilemma**. Lack of evidence is not evidence (**Appeal to Ignorance**). Extraordinary phenomena *may* exist, but it does not follow that they *do* exist. Mr. Wu's next fallacy is **False Analogy**. Airplanes do leave collectable evidence in the form of sound waves, air disturbances, light reflection, exhaust, and contrails. Phenomena in the electromagnetic spectrum also leave collectable and observable evidence. The presence of a foreign object in someone's body does not mean it came from aliens. See this article: Alien Implants and Foreign Bodies .

Of course, skeptics have argued that all these things are possible but not probable, hence the

requirement for extraordinary evidence. However, in order to really know all that is probable and improbable in the universe and reality, it would require that one have complete knowledge of every dimension and reality that exists in the universe and beyond. No one, neither skeptic nor believer, has that kind of knowledge, at least not consciously. Therefore, it would be more accurate to state that:

"Extraordinary claims require extraordinary evidence to convince skeptics, but not necessarily to exist in objective reality."

The purpose of evidence is not to convince a skeptic, but to test the hypothesis and to demonstrate the principles involved. Godlike knowledge is not required. Extraordinary claims should require at least *good* evidence. Anecdotes and indirect, second-hand, ambiguous evidence are not good evidence. For example, the claim that extraterrestrials have visited Earth is not sufficiently substantiated by abduction stories, the appearance of crop circles, or by fuzzy blobs of light in bad photographs. Mr. Wu proceeds from the false premise that godlike knowledge is required, thus committing the fallacy of **Straw Man**. The statement, "extraordinary claims require extraordinary evidence to convince skeptics, but not necessarily to exist in objective reality" is true enough, but does not invalidate the argument that "extraordinary claims require extraordinary evidence", nor does it validate extraordinary claims.

2) Definitions of "extraordinary claims" vary based on prior beliefs and experiences. Not everyone agrees on whether a claim is extraordinary or ordinary. Suppose we were fishes for example, and lived underwater our whole lives without ever seeing or hearing about land. The claim of land existing above water would be an extraordinary claim to us, though not to the creatures living on the land above. Now obviously just because the claim of land is extraordinary to us as fishes does not mean that the land doesn't exist. The point is that extraordinary claims are not extraordinary to everyone. What is extraordinary to some is ordinary and natural to others depending on their experience and level of consciousness. For example, the internal body energy of chi gong (or quigong) is mystical to Westerners but has been a natural everyday part of life for thousands of years in Asia. Chi is used, felt, and observed by its practitioners much the same as the effects of gravity are felt and observed by us. Likewise, the concept of Astral Projections and Out of Body Experiences is extraordinary to those who have never experienced them, but for those who experience them regularly, it is an ordinary thing to them that they know is a reality. In the same way, our cars, radios and cell phones are extraordinary to tribal natives in remote parts of Africa, but ordinary to us. The best solution, in my opinion, is for everybody to put their cards on the table by honestly specifying their prior beliefs. This sets the standards for what is to be expected and leads to a better mutual understanding of each other.

Scientists are well aware of the dangers of bias -- this is why peer review and replication is so important. Mr. Wu's examples of fishes and land are **False Analogy**. Sharing beliefs and biases does not change the requirement that bias must be controlled for in the experimental setting. Beliefs must be set aside if phenomena

are to be studied objectively. As regards "chi gong", Mr. Wu commits **Appeal to Popularity**. Belief by millions of people doesn't make it so. It is **Begging the Question** to presuppose that it exists becaue they think it does.

3) Different people have different standards for what is "extraordinary evidence." Depending on your definition, it could be said that we already have some extraordinary evidence for certain types of paranormal claims. Take the following 4 types of phenomena for instance.

Mr. Wu commits **Equivocation**. Evidence is that which supports the hypothesis. Either it does or does not. When the evidence is invalid, it can be determined by careful examination. Where no evidence exists, one must not invent it. If evidence "depends on definition", then no standard is being followed and the evidence is invalid.

a) UFO's (Unidentified Flying Objects): It can be said that there is extraordinary evidence to support the existence of UFO's from unexplainable photographs, video camera footage, multiple eyewitness sightings, abduction reports, Air Force radar reports, etc. All of these constitute convincing evidence for some people, but not for others. Although much of it can be explained as misperceptions, natural phenomena, weather balloons, aircraft, birds, balls of lightning, luminous Earth lights, etc. there are still many cases which are unexplainable and display features not known of any natural phenomena. One example is the *White House Merry Go Round Incident* of July 1952 where Air Force fighters repeatedly chased UFO's that kept appearing on Air Force radar was never adequately explained. Even skeptics admit that some cases are unexplainable, though they claim that unexplainable does not mean inexplicable. (See Argument # 11)

Since it's not always possible for extraordinary things to leave behind some type of tangible evidence, if I saw a UFO at close range and didn't have my camera with me and then it flew away, how am I expected to have extraordinary evidence? Am I supposed to be able to call that UFO back as if it were under my command or chase it like Superman? The fact that this event happened without our control makes us unable to satisfy this criteria. The same goes with ghosts and other things.

Mr. Wu commits the fallacies of **False Dilemma** and **Appeal to Ignorance**. Once again, when phenomena are not explained to Mr. Wu's satisfaction, he asserts that the phenomena are paranormal. It does not follow that because a particular incident has not been "explained" that the incident is paranormal. The terms "unexplainable" (sic) and "inexplicable" are identical terms -- any skeptic who uses such an argument is following "Circular Reasoning". However, something *unexplained* is not necessarily *inexplicable*. Anything unexplained simply requires further study. To claim a paranormal explanation is a **Post Hoc** fallacy. Photographs of UFOs are not extraordinary evidence, especially today, when images can easily be digitally manipulated. In the old days, a skilled retouch artist could achieve remarkable effects. Mr. Wu's questions, "…how am I expected to have extraordinary evidence?", etc. are **Special Pleading.**

For hard nosed skeptics though, even good evidence will not be enough, since their mentality is to debunk rather than to discover and learn. You see, even if I had a piece of a crashed flying saucer and

showed it to them, they would just say that it is probably just a piece of top secret military aircraft that we don't know about yet. They would want the full saucer itself to be convinced. Then if I found a whole saucer and showed it to them, that would still not be enough because then they could say that there is no proof that the saucer is extraterrestrial in origin and that it could just be a secret type of aircraft invented by the military. Of course, if they had real alien bodies in front of them, then it'd be much harder to dismiss <g> but you get the idea here. They will continually raise the bar. It's their mentality that causes them to close their minds and ignore everything that doesn't fit into their viewpoint.

Mr. Wu's opinion is unsubstantiated. Whenever the word "they" is used in such abundance, the writer is propagandizing. Mr. Wu commits **Straw Man, ad hominem, Appeal to Pity, False Dilemma, Appeal to Ignorance.** Every discovery raises new questions -- this is not "raising the bar" or "moving the goalposts" -- this is legitimate science. The questions *must* be asked. Evidence alone is insufficient -- it must be explained. When we stop asking questions, we stop learning, and *truly* close our minds.

Just recently in fact, a press conference for the UFO Disclosure Project (http://www.disclosureproject.com) took place in Washington D.C. at the National Press Club on May 9, 2001. At the conference, over 20 government, military and scientific officials testified that they had known of the reality of UFO's for a long time and the secrecy behind them imposed by the government. You can view a two hour video broadcast of the conference over the internet at http://www.connectlive.com/events/disclosureproject/ (I strongly recommend it) So far, all the skeptics and CSICOP have had to say about this conference is "so what?" Obviously, they'd rather pretend that it didn't exist. But then again, who likes to be proven wrong?

The Disclosure Project video is a classic example of anecdotal evidence. Testimony by alleged officials and scientists does not qualify as evidence that UFOs are anything other than terrestrial in origin. How can their stories be verified? They can't be verified. It is an **Appeal to Ignorance** fallacy to assume that what they say is true. Mr. Wu's statement, "Obviously, they'd rather pretend that it didn't exist." Is the **Straw Man** fallacy.

b) Ghosts and Spirits: The same goes with ghosts. There are many credible witnesses who have seen ghosts and experienced unexplainable things taking place in haunted houses, such as sudden apparitions, the feeling of an unseen presence, unnatural movement of objects, frequent displacement of things around the house, sounds, voices, etc. Paranormal investigators have even used geiger counters that detected electrical activity in a haunted area. Plus, there are also countless stories of hauntings in all around the world from the mundane to the incredible and uncanny. Although these claims are largely anecdotal, we must understand that while anecdotal evidence is not completely reliable, it is not completely unreliable either and is considered to be evidence in societal functions depending on various factors. (See Argument # 5 regarding the validity of anecdotal evidence) In addition, the amount of anecdotal evidence is also relevant because the higher the number and the more credible the witnesses,

the stronger the evidence.

Mr. Wu continues to rely on the **Appeal to Popularity** and **False Dilemma** fallacies. Anecdotal evidence, regardless of frequency, is unreliable and inconsistent. It is unrealistic to consider any given story to be completely factual. Example: in the 1970's, in Cleveland, Ohio, several hundred people reported sighting a UFO that was flying over the city, showing rotating lights below and flashing lights above in the classic "Adamski" UFO configuration. They were all wrong. It was a single-engine airplane with a marquee light system fixed under its wings advertising for a mayoral candidate.

However, die hard skeptics will not consider anecdotal evidence to be valid evidence regardless of the amount. To them, credible evidence has to be measurable in some conventional way and reproduced at our beck and call. The problem with this is that what we can measure is limited to our level of technology. For instance, before we had the technology to measure seismic-activity in the Earth's crust, they still existed even though they couldn't yet be measured. Furthermore, since we can't see radio waves, electromagnetism, air, gravity, magnetic force, etc. but they exist anyway, it is logical to assume that there are other things that *could* exist but aren't yet measurable. Our technology may not be up to the level to measure other things that could be there. Or it may be that our technology can only detect things of the physical plane and not the spiritual plane. Looking for physical evidence of something spiritual is like looking for evidence in the ocean for the existence of Mars rather than looking for it in space.

Once again, Mr. Wu commits **Appeal to Ignorance** and **Appeal to Popularity**. There may exist forces that we have not been able to measure, but it does not follow that they *do* exist. Lack of evidence is not evidence. Mr. Wu also commits **False Analogy** in comparing physical science to spiritualism. Mr. Wu commits the error of claiming that things in the "spiritual plane" may not be measurable, but has provided examples of how "spiritual" things have affected the "physical plane", i.e. ghosts. If something affects matter and energy in the known world, then it should be measurable. The Mars analogy is another **False Analogy**.

c) ESP (Extra Sensory Perception) and Telepathy: This is also especially true for ESP and telepathy. Experiments under controlled conditions have been done that revealed consistent well above chance results, which strongly point to the conclusion that ESP and telepathy exist at least to a small degree. (See Dean Radin's *The Conscious Universe* and Bernard Gittelson's *Intangible Evidence* for more specifics) These experiments, particularly the Ganzfeld and Autoganzfeld experiments done from 1974 to 1997, were repeatable too, with 2,549 sessions showing above average results. (See Argument # 17) The problem is that not all scientists and researchers are able to produce the same results. Skeptics usually point to the failures of psi experiments and ignore the successes. They will accept the failed psi experiments as evidence against psi, but not the successful psi experiments as evidence for psi. This is an obvious double standard, which is typical of closed-minded skeptics.

The apparent "above chance results" were derived not from the original studies but from meta-analysis of the results of the original studies. Meta-analysis is a complicated process with many variables -- please see: Meta-Analysis

There is still disagreement over whether meta-analysis can properly be applied to such studies, casting the conclusion that psi exists in serious doubt. Individually, these studies were not consistently replicable. Please note:

Ganzfeld Experiment

and

ESP findings send controversial message

> One skeptic I debated did not consider the high success of the Ganzfeld experiments as evidence for psi. She pointed out that the few failed experiments invalidated the other successful ones! She wanted a 100 percent success rate. (and even if she got a 100 percent success rate, she would obviously have moved the goal posts and charged fraud! Very few things are 100 percent!) Of course, not all skeptics are that closed-minded, but this gives you an idea of the mentality of closed-minded skeptics. I'm not saying that we should only pay attention to the successes and ignore the failures either, but that we should take them both into account, and when we do so, there is in fact strong consistent evidence that psi exists, both from scientific experiments and overwhelmingly large anecdotal evidence. It is possible of course, that some scientists skew the psi results because they are eager to find evidence for psi, but why do skeptics automatically assume that it must be that? Obviously it's because of their preconceived beliefs (which they will not admit). If ESP and telepathy exist, it doesn't mean that it has to be controllable at our beck and call like some raw energy. We've only begun to scratch the outskirts on the nature of the whole thing anyway.

More reliance on anecdotal evidence and **Appeal to Popularity**. Good science is replicable. Bias is present on both sides, and the question of bias must be raised in order to rule it out. The meta-analysis techniques used to arrive at the conclusions Mr. Wu touts are subject to such bias; see earlier remarks. Mr. Wu again resorts to **ad hominem** in complaining about "the mentality of closed-minded skeptics". The behavior of one skeptic cannot be applied to all skeptics. Mr. Wu complains about "moving the goalposts", then moves them himself when he claims that "we've only begun to scratch the outskirts". Some psychics *do* claim to have ESP and telepathy at their "beck and call"; some believers claim to know how and why ESP and telepathy work; some scientists speculate on possible "paranormal" mechanisms; yet all of them refuse definitive testing, and the rest of us are expected to believe that they have a special connection to mysterious powers. The fallacy in such thinking should be apparent. They are saying, in effect, "We have these powers. You cannot prove that we don't have these powers. We cannot control these powers, so they can't be tested, but we can use them anyway." It is the classic **Appeal to Ignorance**.

> Besides experiments, countless accounts of psychic experiences abound, both documented and

undocumented. Studies show that about 2/3 of Americans claim to have had psychic experiences, making them quite common rather than "extraordinary". The most common type of psychic experience is telepathy, such as when loved ones and close friends from vast distances apart know at the exact time when something traumatic happened to the other. Sometimes, every detail of the traumatic event is observed or felt from afar. They are extremely powerful personal proof. I've had a few of these kind myself. Often, what was suddenly felt out of nowhere about what happened to the loved one is later verified to be true, occurring at exactly the time it was dreamt or felt. This suggests some subconscious telepathic link between people who are close. Experiences of this kind are in fact very common. Skeptics of course say that these kind of things are nothing but pure coincidence, but this is unsubstantiated and a rush to judgment. They just don't realize that just because something happens that they can't understand doesn't mean that it MUST be coincidence or chance. In the same manner, if someone spoke Spanish and I didn't, that doesn't mean that the person speaking Spanish is speaking random gibberish. If someone living in a tribe in Africa saw me turning channels with my remote and didn't understand how remote controls work, that doesn't mean that my pushing buttons on the remote and the channels changing are just a coincidence!

Yet again, the **Appeal to Popularity**. Paranormal claims are not made valid because of their frequency. They remain extraordinary because they violate the laws of nature. Comparing cultural differences to the difference between normal and paranormal is an invalid comparison, or **False Analogy**. The skeptical contention regarding coincidence is well substantiated. See Coincidence.

d) Mystical Experiences: And what about mystical experiences, spiritual enlightenment, being "born again", Near Death Experiences and Out of Body Experiences? These can also be said by those who experience them to be extraordinary evidence as well, because they are often self-authenticating and life changing in themselves. As the 1994 New Grolier Multimedia Encyclopedia states under Mysticism:

> "Mysticism in general refers to a direct and immediate experience of the sacred, or the knowledge derived from such an experience……. First, the experience is immediate and overwhelming, divorced from the common experience of reality. Second, the experience or the knowledge imparted by it is felt to be self-authenticating, without need of further evidence or justification. Finally, it is held to be ineffable, its essence incapable of being expressed or understood outside the experience itself……. the experience itself is always of an Absolute that transcends the human efforts or methods of achieving it." (New Grolier Multimedia Encyclopedia 1994)

Experiencers will describe these experiences not as faith-based, but an "inner knowing." The fact that these type of experiences are dramatically life changing makes them "extraordinary evidence" themselves simply because ordinary experiences don't alter people's lives in this way. To say that these

self-authenticating, life changing experiences are just pure imagination is closed minded to say the least. As Faith, a practitioner of Shakti Gaivism and one who has had all-pervasive cosmic transcendental experiences of God in Unity state, constantly reminds us on my email group:

> "But remember .. there is "Belief" a chosen activity of mind... and there is an actual Knowing... via direct experience. They are 2 differnt things. I never could accept chosen Belief.. THAT is why I was an Agnostic.
>
> I like the example of the person working in an inner office with no windows. A co-worker could come in and tell them it is raining out. IF they accept That as truth... it is ONLY a chosen belief. But.. If they were to go outside themselves and stand in the driving rain and get soaking wet... then that is no longer a chosen belief... that would qualify as an actual Knowing.. by Direct experience.
>
> Your Mind is Limited... but "YOU" are far greater than your mind... you are ALL that is..... you just cannot see it yet. Mind keeps you contracted.... but You can go beyond individual mind and tap the All Knowing. The only way you can KNOW this... is by experiencing it. I am not talking about "Belief" here... but direct experience. IF you were to accept what I say here.... THAT would be a Belief.... No Good in my book or yours either I am sure. So... I will NOT be disappointed if you do not ACCEPT what I say.... on the other hand..... You cannot really know that what I say is really illogical babble either..... I think the fairest thing to do is... stay open to the possibilities.... That there are things beyond the scope of Science, things that your current logic based min has not been exposed to.... but that are none the less Possible." – Faith (email address redacted)

Mr. Wu continues to rely on anecdotes and personal testimony as evidence. This is again the **Appeal to Popularity** fallacy, as well as **Begging the Question** and **Appeal to Ignorance**. Belief in something, regardless of fervency, does not make it so. "Inner knowing" is purely subjective. Claiming that "life changing experiences" are "extraordinary evidence" because they are life-changing is mere **Circular Reasoning**.

4) "Extraordinary evidence" is subject to perspective because those who have firsthand direct experience of the phenomena already have their "extraordinary evidence" while others who haven't, don't. (See Argument # 5 regarding anecdotal evidence.) For instance, those who have had full blown OBE's already have a realization and knowing that separation of body and spirit can and has taken place, and that there is life after death, especially if they are able to witness specific details at a distance which are later verified as accurate. For them the experience is as apparent as it would be apparent to you whether you were in your own car or house. Similarly, those with transcendent mystical experiences describe it as an "inner knowing" that transcends all description and removes all doubt. In the same fashion, those who have seen Bigfoot or ghosts firsthand at close point-blank-range also have their

"extraordinary evidence."

It doesn't matter what they claim to have seen. Evidence is not subject to perspective. It is either valid or not. Stories alone prove nothing. More **Appeal to Popularity** and **Appeal to Ignorance**, as well as **Circular Reasoning**. The “inner knowing” Mr. Wu cites cannot be considered evidence due to its subjective nature.

5) The argument is based on an unproven premise. It is based on the premise that paranormal phenomena are either impossible or extremely improbable. The reason it reflects this premise is obvious. Someone who believes that paranormal events are impossible is obviously going to need a lot more proof than someone who believes that they are possible and normal. However, just because miracles, ESP, sightings of apparitions, or OBE’s haven't happened to skeptics doesn't mean they haven't happened to others. Likewise, just because I haven’t been to Spain doesn’t mean that everyone who has is mistaken or deluded. In order for one to know what is impossible or improbable, one would have to be an all knowing creator of the universe who possesses every knowledge that there is. But none of these hard nosed skeptics are anywhere near that level, so their assumption that paranormal events are impossible in my view is baseless. As scientist and author Arthur C. Clarke states in his first law:

> "When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong."

Yet again, **Appeal to Popularity** and **False Analogy**. People may have experienced strange events, but it does not follow that those events are miraculous. Also, Arthur Clarke is quoted out-of-context. The quote is one of his "three laws", written in his 1961 book *Profiles of the Future*, which deals with technology, not paranormal phenomena. Regardless of that, Clarke's "law" is merely Clarke’s opinion.

6) The argument favors conservatism or retaining the established theory in spite of contrary evidence. This has its pros and cons. Obviously, it makes sense to retain what works until something better comes along. However, when it comes to modifying our paradigms or world view we also tend to resist change, even when the data calls for it. This argument I fear, is used as an excuse for those who resist change. But if we never abandoned theories or expanded them, then science would not make progress. History has shown that progress comes with new discoveries and abandoning old outdated theories that no longer fit the new data acquired. This skeptical rule does not specify a sufficient condition for sufficient evidence. Therefore, rules should be established to clarify whether a competing theory is promising enough to warrant further research so that when those rules are satisfied, excuses can’t be used to try to dismiss the evidence off hand. Otherwise, as Ron Pearson says in his article *Theoretical Physics Back Survival:* (http://www.ozemail.com.au/~vwzammit/afterlifech33.html#Heading34)

> Science, however, cannot progress by theory alone; it requires a synthesis of theory and experiment. When observation runs ahead of theory to provide anomalies which seem

> inexplicable, then as history has shown by repeating itself over and over, the anomalies are avoided, ignored or discredited in order to maintain the status quo: to avoid the need to injure existing intellectual vested interests.

More of Mr. Wu's subjective opinion. Bias is a problem in all sciences. Good science controls for bias. Bad science ignores bias and calls it evidence. Mr. Wu continues to use **False Analogy** and **Begging the Question**.

Argument #3: The Occam's Razor rule.

Typical usage: "When there are two competing explanations for an event, the simpler one is more likely."

This argument is a principle that skeptics often misuse to try to force alternate explanations to a paranormal events, even if those explanations involve false accusations or do not fit the facts. This principle was popularized by scientist Carl Sagan in his novel turned movie "Contact", where Jodie Foster quotes it while during a conversation with a theist to defend her belief that God doesn't exist. (Ironically, at the end of the movie it is used against her in a public interrogation by a National Security Agent.) However, an analysis on the facts and assumptions of this argument reveals some obvious problems.

1) First of all, Occam's Razor, termed by 14th Century logician and friar William of Occam, refers to a concept that states that "Entities should not be multiplied unnecessarily." It was not intended to be used to evaluate claims of the paranormal as skeptics today use it for. As Phil Gibbs points out in "Physics FAQ": (http://www.weburbia.com/physics/)

> "To begin with we used Occam's razor to separate theories which would predict the same result for all experiments. Now we are trying to choose between theories which make different predictions. This is not what Occam intended……..
>
> The principle of simplicity works as a heuristic rule-of-thumb but some people quote it as if it is an axiom of physics. It is not. It can work well in philosophy or particle physics, but less often so in cosmology or psychology, where things usually turn out to be more complicated than you ever expected. Perhaps a quote from Shakespeare would be more appropriate than Occam's razor: "There are more things in heaven and earth, Horatio, Than are dreamt of in your philosophy."
>
> "The law of parsimony is no substitute for insight, logic and the scientific method. It should never be relied upon to make or defend a conclusion. As arbiters of correctness only logical consistency and empirical evidence are absolute."

Even Isaac Newton didn't use Occam's Razor like the skeptics of today do. His version of it was "We are

to admit no more causes of natural things than such as are both true and sufficient to explain their appearances." (see same Physics FAQ) Obviously, he was referring to explanations to explain *natural* phenomena, not paranormal or supernatural phenomena!

2) Second, what is "simpler" is often relative. As Phil Gibbs points out in the same Physics FAQ:

"Simplicity is subjective and the universe does not always have the same ideas about simplicity as we do."

3) Third, even if we take Occam's Razor at face value the way skeptics use it, just because one explanation is more likely doesn't mean that it's always the correct one. For example, if I toss a die, it is more likely that I will get numbers 1-5 than it is that I will roll a 6. But that doesn't mean that a 6 will never come up. Therefore, occasionally an unlikely explanation can be expected to be true sometimes. However, skeptics treat Occam's Razor as if it were an absolute rule and use it as an excuse for denying any claim, no matter how valid.

4) Fourth, while Occam's Razor may be a good rule of thumb, the problem with it is that skeptics tend to use it as an excuse to insert false explanations over paranormal ones. They will do this even if it means denying the facts and assuming things that aren't true or didn't happen. For example, if someone had an amazing psychic reading at a psychic fair (not prearranged) where they were told something very specific that couldn't have been guessed by cold reading, skeptics would start inventing false accusations such as: "Someone who knew you must have tipped off the psychic in advance", "A spy in the room must have overheard you mention the specific detail before the reading", "You must have something in your appearance that reveals the detail", "You must have remembered it wrong since memory is fallible", etc. Even if none of these accusations are true, skeptics will still insist on it simply because it's the simpler explanation to them. Similarly, when someone during an NDE or OBE hears a conversation or witnesses something many miles away and later upon verification, it turns out to be true, the skeptics will say that the simpler explanation is that the patient knew about the detail or conversation beforehand but forgot it. Likewise, if someone has a close up encounter of Bigfoot, skeptics will use Occam's Razor to claim that it is more likely that the experiencer was either lying or hallucinating. Even if none of those alternate explanations are true, skeptics will still insist on them anyway, using Occam's Razor as justification. Hence, they prefer a false non-paranormal explanation, even if untrue, rather than accept the truth that it happened the way described. This is clearly a case of bias rather than objectivity. What skeptics don't seem to understand is that reality is not confined or measured by Occam's Razor, and the use of Occam's Razor in this manner does nothing but impede progress and learning.

Occam's Razor is widely misunderstood and misused, but it is still a valid tool. I agree that Occam's Razor has often been incorrectly and unfairly used as an argument. Fortunately it is not the only logical tool available.

Use or misuse of Occam's Razor does not relieve the researcher of the obligation to follow proper methods, nor does it make anecdotal evidence valid. The usage Mr. Wu objects to is a way of forcing the investigator to consider the simplest explanations first, before discarding them in favor of a more complex "supernatural" explanation (unnecessary pluralities). Mr. Wu, engaging in **False Dilemma**, seeks to separate "paranormal or supernatural phenomena" from "natural phenomena", even though he has repeatedly cited anecdotal evidence from quite natural people who claim to have observed "paranormal or supernatural phenomena". If something affects the "natural" world, how can it then be "supernatural"? Isaac Newton's usage is quite correct in this circumstance. See article: Occam's Razor.

Argument # 4: The "invisible pink unicorn / dragon in the garage" false comparison tactic.

Typical Usage: "Of course I can't prove that God, spirits, UFO's, paranormal phenomena or metaphysical realities don't exist, but you can't prove to me that invisible pink unicorns don't exist either."

The comparison used in this skeptical argument is notoriously common, yet severely flawed and ludicrous. It is often more of a belittling tactic than a reasoned logical argument. Used when skeptics are challenged to disprove a paranormal claim, they often state it like this: *"Of course I can't prove that God, spirits, UFO's, paranormal phenomena or metaphysical realities don't exist, but you can't prove to me that invisible pink unicorns don't exist either."* Other similar variations of this are *"but you can't prove to me that there wasn't a dragon hiding in my garage either"* and *"but you can't prove to me that little green gremlins aren't stealing pennies from my pockets either,"* etc. The premise behind this argument is that if a claim is unprovable, then it's in the same category as everything that's been made up or fictionalized. However, it is a complete **straw man argument** because it falsely redefines the opposing position in terms that make it more easily attackable, using **false comparisons**. A simple examination reveals this.

The invisible unicorn analogy is logically valid. It seeks to point out the fallacy of **Appeal to Ignorance**. One cannot prove nonexistence. However, in science, given an absence of sufficient evidence for existence, one can *assume* nonexistence. If Mr. Wu contends that he has seen a ghost, we cannot prove that he hasn't. It doesn't mean that he did see one. All we can really know is that he claims to have seen it. Likewise, if I claim that we have an invisible unicorn in our garage, Mr. Wu cannot prove that I don't. Put simply,
Premise 1: There is no material evidence for God.
Premise 2: There is no material evidence for Invisible Unicorns
Therefore: Since there is no material evidence for either one, we cannot assume either one exists.
The point of this logical exercise is to show that certain concepts cannot be disproved. It does not then follow that they *do* exist.

1) First of all, the biggest problem with this argument is that what people *actually experience* is NOT the same thing as what a skeptic *deliberately* makes up for satirical purposes! To compare the two is

ludicrous and illogical. Since the skeptic using this argument hasn't really experienced invisible pink unicorns himself, everyone knows that he is deliberately making up something fictitious to put down something he doesn't believe in while the experiencer or claimant is not. Comparing them would be like comparing my real life experience of visiting a foreign country to any fictitious story you can find such as *Peter Pan* or *The Wizard of Oz*. That simply makes no sense, even if misperception was involved on my part in my experience. Not only would that be nonsensical, but also both downgrading and insensitive.

What is being compared are *anecdotes* or personal claims. We have only the person's word that they experienced it. Anyone can claim anything, claim that they cannot be proved wrong, and then claim that they are right. This is the fallacy of **Circular Reasoning** and **Appeal to Ignorance**.

2) Second, what someone *sincerely believes* is NOT the same as what someone *knowingly* makes up. Since the skeptic who uses this argument don't believe in invisible pink unicorns himself, it is pointless as well as inconsiderate to compare that to what people genuinely believe and experience, such as God, spirits, or ESP. Of course, just because someone genuinely believes something doesn't make it true, but to compare an honest person to a deliberate fraud is not a valid comparison.

See above. Belief in something, no matter how fervent the belief, doesn't make it so. The unicorn analogy is still valid. Belief, faith, "inner knowing", is not evidence.

3) Third, if like paranormal, psychic, religious, and spiritual experiences, there were millions of credible intelligent people out there claiming to have seen or experienced invisible pink unicorns or dragons in their garage, then this comparison would have some merit. But there aren't, so this comparison is without merit.

Once again, **Appeal to Popularity**. Mr. Wu fails to understand the analogy. Millions of people believed that the Earth was flat, but they were mistaken. Many people are known to have had hallucinations as part of mental illness or drug use -- this does not make the hallucinations either objectively real or supernatural.

4) Fourth, the significant difference between experiencing God, the divine, or the mystical, and the fictional example of invisible pink unicorns is that throughout history millions of honest, sane, intelligent people have experiences with the former which resulted in life changing effects, but the same can't be said for invisible pink unicorns.

Mr. Wu continues to miss the point and continues to rely on **Appeal to Popularity**. Mr. Wu cannot know with certainty that "millions" of people have had experiences with "God, the divine, or the mystical", or that nobody has an invisible unicorn in the garage.

5) Fifth, just because something is unprovable does not automatically put it in the same category as everything else that is unprovable. For example, I can't prove what I ate last night for dinner or what I thought about. Without witnesses, I can't prove what I saw on TV or how high I scored in a video game either. But that doesn't mean that these things are in the same category as every story in the fiction

section of the library.

Mr. Wu is **Equivocating**. If something is unprovable then it is unprovable, along with invisible unicorns. Mr. Wu again uses **False Analogy** to confuse verifiable physical reality such as eating dinner and "paranormal" experiences.

> The bottom line is that while it is true that no one can disprove the existence of invisible pink unicorns, the evidence to support God, spirits and psychic phenomena, although mostly anecdotal, is vastly greater, more significant, more relevant, and more sincere than the evidence to support invisible pink unicorns and other fictitious examples deliberately made up by skeptics.

Sincere it may be, anecdotal it remains, and is no more provable than the invisible unicorn. Belief proves nothing. Mr. Wu continues to rely on **Appeal to Popularity**.

> **Argument #5: The "anecdotal evidence is invalid" argument.**
>
> Typical usage: "All that we have to support paranormal claims is anecdotal evidence, which is unreliable and not valid evidence for paranormal claims."
>
> Corollary: "Anecdotal evidence is worthless as scientific evidence."
>
> The "anecdotal evidence" classification is one of the main categories that skeptics put paranormal evidence into in order to dismiss it. (Another category being the "unreplicable / uncontrolled" group that scientific experiments supporting Psi are often put into. See Arguments # 17, 18) Skeptics who use this argument often claim that the evidence we have for paranormal claims is largely anecdotal and therefore worthless as scientific evidence. They claim that anecdotal evidence is invalid because it is largely untestable and subject to error. Some skeptics will even go so far as to say that anecdotal evidence is zero evidence. Not surprisingly though, skeptics tend to quote anecdotal evidence when it supports *their* side! (another double standard) Therefore it appears that classifying evidence as "anecdotal" is simply a dismissal tactic to try to discredit evidence that skeptics can't explain away.
>
> One of the ways that skeptics dismiss anecdotal evidence to classify witnesses as either mistaken, lying, or hallucinating. This again reflect bias and pre-judgment on their part. Skeptics don't really know that a claimant *must* fit one of the above categories, they simply put them there to keep their mental model paradigms intact. This is further evidenced by the fact that many skeptics will continue to insist on one of these three categories even when they are shown to be either impossible or too unlikely to consider. This reflects cynicism rather than true skepticism.
>
> While it may be true that paranormal evidence is largely anecdotal in nature, that by no means makes them worthless or untrue. Not only is anecdotal evidence mostly reliable with regard to everyday things, but it's reliability can further be measured based on several factors. Consider the following.

1) Anecdotal evidence is mostly reliable in regard to everyday things. The main problem with the "anecdotal evidence is invalid" argument is that anecdotal evidence IS in fact mostly reliable with regard to everyday mundane things. Most of the stories and things I hear about tend to check out. If a tourist who visited France described the details of the Eiffel Tower to me, I could easily check it out by looking up books or brochures on it. When I hear that there is a sale going on for something at the local store, it is validated if I go and check it out. Once, when I heard that a new Star Wars movie was coming out, a year later the movie *Star Wars The Phantom Menace* came out. When I hear secondhand that something happened on the news, all I have to do is to turn on the news later and what I heard will be verified, often with regard to specific details such as names, number of victims, price hikes, etc. So we do see that anecdotal evidence is reliable in general. My experience has shown that over 90 percent of things I hear about check out later on. Now since anecdotal evidence is reliable and trustworthy for the MOST part with regard to everyday things, why should it be any different for paranormal phenomena just because it lies outside the skeptics' belief system? With skeptics, what is mostly reliable suddenly becomes worthless zero evidence. This is because this argument is a dismissal tactic, used by pseudo-skeptics who prefer to lump all paranormal claims into the small percentage of instances that anecdotal evidence is mistaken or fraudulent. What they don't realize though, is that if skeptics were right about anecdotal evidence being unreliable, then most of the things I hear about with regard to everyday things would check out to be false, but in fact the exact opposite is true as I just mentioned! This alone seriously damages the dogma of this argument.

2) Anecdotal evidence is dependent upon perspective. My firsthand direct experiences are anecdotal evidence to others, while their direct experiences are anecdotal to me too. Therefore, whether something is anecdotal or not depends on whether or not you are the experiencer, rather than on it being true or false. Obviously, just because something happens to someone else doesn't mean that it's false. This is not to say that what everyone says is true, but that just because my firsthand experience is anecdotal to someone else does not diminish its validity, especially if I am telling the truth. Of course, since closed-minded skeptics tend to prefer any explanation rather than a paranormal one, they will consistently use this dismissal tactic.

Anecdotal evidence seems to be the basis of Mr. Wu's beliefs -- if someone tells a story, it must be assumed to be true. This is illogical. Mr. Wu again confuses *verifiable* testimony with *unverifiable* testimony. This is **False Analogy**. Mr. Wu is moving the goalposts in favor of his opinion. This is **Circular Reasoning**. Without corroborating evidence it cannot be established that a given person is telling the truth. Relying on stories that support one's position while ignoring stories that do not is **Special Pleading**.

3) Important variables increase the reliability of anecdotal evidence. The degree of reliability of anecdotal evidence can usually be measured by variables such as:

a) The number of eyewitnesses.

b) The consistency of the observations and claims.

c) The credibility of the witnesses.

d) The clarity of and proximity of the observation.

e) The state of mind of the witnesses.

That is why anecdotal evidence is commonly accepted in many societal functions, such as in the court of law, with the strength of evidence directly proportionate to the number of eyewitnesses. If it was no evidence at all, the courts wouldn't be using it as such, but they do. Job interviewers rely on anecdotal evidence when they screen applicants by checking their references and former employers. If anecdotal evidence was worthless, they wouldn't be doing that. Most of us rely on anecdotal evidence when we get feedback from others about which brand of products are worth buying, which restaurants have good service, etc. (Of course, we consider this evidence more valid when it comes from people we know and trust.) In addition, psychiatric treatments and new medications are often evaluated based on anecdotal evidence.

Here is a further elaboration on the variables that determine the degree of reliability of anecdotal evidence, and how they have been more than adequately met for many paranormal phenomena.

a) The number and amount of eyewitnesses, testimonials and claims. The more eyewitnesses and testimonies there are, the greater the weight of evidence. If one person told me something amazing, I'd doubt it. But if a considerable number of people told me the same thing including people I know and trust, then I might think that there could be something to it. To put it simply, something is MORE likely to be true if a lot of people can attest to than if no one attested to it. This criteria is definitely met in the case of psychic phenomena and divine experiences. Surveys show that two-thirds of Americans claim to have had psychic experiences (mostly in the telepathic area) which is a significant number ranging over two hundred million in this country, not counting the rest of the world!

Mr. Wu *again* uses **False Analogy** and confuses testable, verifiable testimony with untestable, unverifiable anecdotes. Not everything said in a court of law is true, regardless of the oaths taken. Mr. Wu *again* resorts to **Appeal to Popularity**. Mr. Wu **Equivocates** by using several different meanings for the term *anecdote*. Mr. Wu is in error regarding psychiatric treatments and medications; such things are not evaluated purely on the basis of testimony by patients and doctors. Again, he confuses proper science with pseudoscience.

b) The consistency in the observations and claims of witnesses. The consistency in the reports

we get is also significant. If people were lying or hallucinating, then it is unlikely for there to be consistency in their claims. Of course, consistency in observations and experiences does not mean that what was perceived was really what occurred, but it helps rule out fraud for the most part and points us in the right direction. This criteria is also met for some paranormal phenomena. In multiple witness sightings of ghosts and UFO's for instance, there are accounts of several or more people witnessing the same thing and describing the same details. Even more striking is consistency among people who don't know each other nor live near one another. For example, in the case of NDE's, we have great consistency among experiencers in the form of seeing their body below them, moving through a tunnel, going to a great light of love that some call God, going through a life review, returning with permanent life changes, etc. Of course, skeptics see this consistency as supporting their side because they see it as pointing to the similar brain structure that we humans have, which shuts down in a way that produces similar NDE's. More on NDE's will be elaborated in Argument # 23.

Mr. Wu persistently relies on **Appeal to Popularity**. Consistency does not rule out fraud, imagination, drug influence, perceptual error, or cultural effects.

c) <u>The credibility of the witnesses.</u> The credibility of those making the reports and claims is also significant. Factors that influence credibility include integrity, character, whether they've been known to lie before, education and expertise, mental stability, how well we know them personally (obviously you would place more value in the claim of someone you know and trust as opposed to a stranger), etc. We definitely have anecdotal evidence from this group for various paranormal/psychic phenomena. That is indisputable. Doctors and scientists of esteemed reputations have attested to miracles or paranormal phenomena. Trained radar personnel and Air Force observers have observed UFO's both on radar and in the sky. Accomplished quantum physicists have found quantum evidence that make psychic phenomena more plausible, such as the discovery that particles behave differently when observed as opposed to unobserved, the nonlocality and connectedness of twin particles that are split, etc. (see Fred Alan Wolfe's *Taking the Quantum Leap* and Michael Talbot's *The Holographic Universe*) Prominent Psychiatrists such as Dr. Brian Weiss, author of *Many Lives, Many Masters*, have discovered and documented clinical evidence that past life memories are real and can be verified. Besides experts, people that we know and trust also claim to experience or observed things of a paranormal nature. Note that I'm not saying that an appeal to authority means that it's right, only that it carries more weight.

Mr. Wu resorts to **Appeal to Authority**. Witness credibility does not rule out fraud, imagination, drug influence, perceptual error, or cultural effects. Regardless of the credibility of the witness, the testimony is worthless without supporting evidence. Mr. Wu attempts once again to mix science with paranormal anecdotes. **Appeal to**

Authority is not a valid argument unless the authority is qualified and reliable, and that can be a difference of opinion. A psychiatrist is not necessarily qualified to speak authoritatively on matters of the afterlife. One wonders who among the living *would* be qualified.

d) The proximity and clarity of the observation. How close and clear an observation or experience takes place also an important factor. If someone thinks they see Bigfoot as a speck in the distance, then it could be dismissed as almost anything. However, if they saw Bigfoot at close-up point-blank-range, then it would be much more compelling and harder to dismiss. For the person to be mistaken at point-blank-range, he/she would have to be either lying or greatly hallucinating and in need of help. Otherwise, the skeptics should do some serious thinking about their beliefs! Again, this criteria has been met for some paranormal phenomena such as Bigfoot, UFO's and apparitions, which have been reportedly seen at point-blank-range in crystal clarity. Any research into will reveal lists of testimonials of this close-up nature.

Lists of testimonials are worthless without corroborating evidence. Again, Mr. Wu resorts to the tiresome use of **Appeal to Popularity**.

e) The state of mind of the witness at the time. Another relevant variable is the mental state of the witness, which include factors such as their alertness level, fatigue level, intoxication level, emotional level, fear and panic level, etc. This criteria has also been satisfied for paranormal/psychic phenomena because many of the witnesses were sober, awake and sane at the time of their observations and experiences.

Since we must rely on the witnesses to provide details of their state of mind, we are left with **Circular Reasoning**.

f) What the witnesses/experiencers stand to gain from their testimony or claim. Whether the witnesses profit in any way is also a factor to consider. What one stands to profit puts doubt on their sincerity since they have ulterior motives which might skew their objectivity. On the other hand, if they have nothing to gain then they are less likely to be manipulating us unless it was out of their genuine belief. This is especially so if they've suffered ridicule and damage to their reputation for their claims. The latter has been true for both paranormal experiencers as well as those who made new discoveries that validated paranormal phenomena. Esteemed scientists and experts in their fields have risked their reputations to share their discoveries. These include physicist David Bohm (a protégé of Einstein and author of *Wholeness and the Implicate Order*) who postulated consciousness related quantum physics theories that contradicted the reductionist views of the universe, Miami Chair of Psychiatry Dr. Brian Weiss (author of *Many Lives Many Masters*) who endured ridicule and criticism from his peers for his clinical reports and discoveries in past life regression, and others.

The witness may be as honest as Mother Theresa. It does not follow that what they believe is true. Mr. Wu again resorts to **Appeal to Authority** and **Appeal to Pity**.

> Now of course not all of the evidence for every paranormal and psychic phenomena have met all these criteria, but many of them have met some or all of them. Therefore we can conclude that the evidence is overwhelmingly strong, and certainly not zero evidence like the skeptics claim.

Appeal to Popularity, **Circular Reasoning**, and **Appeal to Ignorance**. All we can really conclude is that there are an awful lot of anecdotes. Anecdotes are not evidence. They are stories. Whether they are supported by other evidence is another question.

> Ordinarily, anecdotal evidence this strong is accepted as valid evidence in most circumstances, so why not in regard to paranormal or psychic phenomena, especially when it's so common? The reason is because skeptics and certain scientists don't think these things are possible, therefore they assume that the fallibility of anecdotes must be the cause. In my experience with skeptics though, no matter how much better evidence you give them, they will still find excuses to reject them, even if it means imposing double standards, denying facts or preferring false explanations over paranormal ones. It is apparent that closed minded skeptics aren't looking for evidence, but ways to shut it out to protect their views. After all, if they're really looking for evidence, then why would they shut it out every time it comes up?
>
> Even arch skeptic Bob Carroll of *The Skeptics' Dictionary* (http://www.skepdic.com) says that while anecdotal evidence may not be proof, but it helps point us in the right direction. (http://www.skepdic.com/comments/ndecom.html) This isn't saying of course, that we should believe every anecdotal claim out there. That would be foolish. This is just saying that just because an anecdotal claim doesn't fit one's world view, doesn't mean that it *must* be due to mistake, fraud or hallucination. The bottom line here is that although lots of people saying something doesn't mean it's true, (the ad populum argument) it at makes it MORE likely to be true compared to if no one at all said it was true.

No, lots of people saying something does not make a given thing more or less likely to be true. Mr. Wu continues to rely on **Appeal to Popularity**, and **Appeal to Ignorance** even when trying not to. Mr. Wu moves the goalposts yet again.

> Finally, it can also be said that the skeptic's subjective dismissal of another's experience is just as unreliable as any anecdotal evidence. Greg Stone, director of the film "A Campaign to Remember" with Ted Koppel and an NDE/consciousness expert, makes some intriguing points about how skeptics treat anecdotal evidence: (taken from his email to me)
>
> > (referring to the writings of Skeptic Paul Kurtz):
> >
> > "I suggest that rather than rejecting the eyewitness accounts of so many as unreliable, that he understand that his offhand subjective dismissal of another's experience is equally unreliable.

> What is missing is his attempt at understanding what is -- based upon the accounts. That they are laden with the complexity of personal observation does not mean the underlying phenomena are not actual and real. The confusion of the scientist in sorting out complex evidence does not itself render the phenomena unreal...it only means the scientist lacks the insight or tools to do the work. Only a fool of a scientist would dismiss the evidence and reports in front of him and substitute his own beliefs in their place."

Claiming that dismissing unreliable evidence is itself unreliable is the **tu quoque** fallacy. Mr. Wu fails to understand why anecdotes are not evidence. Anecdotes are far different from collected observations. Complexity of personal observation does not mean the phenomena exist. Again, lack of evidence is not evidence. How does one separate fact from fancy in such anecdotes? The scientist *must* dismiss anecdote during research in order to avoid bias. Anecdotes are no substitute for scientific observation. All the casual observations in the world will not supply the required data to discover the truth behind a given "event".

Argument #6: The memory malleability argument to dismiss anecdotal evidence.

Typical Usage: "Memory is malleable and unreliable. People can remember a highly edited version of what occurred, making anecdotal evidence unreliable."

A common skeptical sub-tactic to try to further discredit anecdotal evidence (covered above in Argument # 5) is to attack the reliability of people's memory. Skeptics argue that since memory is malleable, then the memory of paranormal experiencers is unreliable and therefore not to be trusted as valid evidence. This is related to the concept of *False Memory Syndrome*. Skeptics also try to justify it by using Occam's Razor, claiming that inaccurate memory is a more probable and simpler explanation than any paranormal one. However, two significant problems with this argument reveal that is not only weak, but inapplicable as well, making it one of the least convincing of the skeptical arguments.

1) The main problem with this is that although memory isn't perfect and doesn't work like a tape recorder, the majority of what sane people remember IS reliable and can be checked out and verified. (See criteria 1 of Argument # 5) This is easily demonstrable. I could make a long list of things I did yesterday, last week, or even last year. And I could also make a long list of events that happened from yesterday to years ago. The vast majority of these things (I would bet over 95 percent of them) could easily be verified by other people, records/receipts, news articles of the events, etc. No one of course remembers every detail of every second of their life, but what we DO remember tends to be accurate and can be verified. This simple fact is severely damaging to the false memory dogma of this argument. Of course, there are bound to be a few details that are fuzzy that I may not remember correctly, but these are addressed in the second point below.

Mr. Wu is correct when he states that memory "doesn't work like a tape recorder". This is precisely why anecdotes are not reliable evidence. Mr. Wu again confuses verifiable events with unverifiable claims in another **False Analogy** and **False Dilemma**. As to the malleability of memory, and the capability of people to remember details, try this link:
Short Term Memory Test

2) Where memory tends to be unreliable the most is in the area involving details that the brain considers too insignificant to remember (which is the category that most things go into such as the colors of the cars you saw on the way to work this morning, number of steps on a staircase, etc.). Thousands of details we perceive everyday which our minds consider useless and insignificant are discarded. Unfortunately for skeptics and debunkers, paranormal experiences don't fit into this category because they tend to be significant, shocking, and revealing. As we all know, significant life-altering events in our lives make the biggest impression in our memory and tend to be remembered immediately with clarity, not years afterward. Since paranormal/psychic experiences belong in this category, this further damages this already weak argument even more. In fact, people describing shocking or traumatic events from long ago tend to say, *"It was years ago, but I can still see it as if it were happening right now."* These memories are often the same way years later as they were the day they occurred. This means that the memory is consistent and reliable. It's not like I just thought of an event from years ago that made no impression on me back then and suddenly realize upon reflection that it was paranormal! Therefore memories of paranormal events are not likely to be created by memory malleability. Such was demonstrated in my own case when a psychic who sensed from my "vibrations" that there was a tragic period in my life when I was 9 years old. When a skeptic challenged the reliability of my memory of it, which only occurred a year and a half ago, I easily met his challenge by showing him a post I wrote up about it the day after it occurred, which contained the SAME details that I remember now. (it's ironic these days when science and technology helps us prove skeptics wrong!)

Therefore, based on the two points above, the memory malleability argument is not only too weak to use to dismiss significant paranormal claims but also inadequate and inapplicable as well.

Mr. Wu relies on **Circular Reasoning**. Mr. Wu admits that memory discards thousands of details. Mr. Wu contends that "paranormal experiences...tend to be significant, shocking, and revealing" and claims that such experiences "make the biggest impression in our memory." However, this is only his opinion, supported by his own experience; this is **Appeal to Authority**. There is a lot of controversy in this area and it is doubtful that Mr. Wu can make such statements with certainty. For example, Mr. Wu neglects the area of dissociation, which often results from traumatic or stressful events.

Argument #7: "The burden of proof is on the claimant"

Typical Usage: "Skeptics don't have to disprove anything because they're not the ones making a claim. The burden of proof is on the claimant."

When Skeptics who dismiss or deny are challenged to disprove something, they typically respond with this argument which states that since they are not the ones making the claim, they don't have to disprove anything, but that the burden of proof is on the claimant. This argument is similar to the "Extraordinary claims require extraordinary evidence" requirement of Argument # 2 (see rebuttal for that section). While this may be sound sensible on the surface, it poses some problems for the skeptics' pursuit of knowledge.

The burden of proof is *always* on the claimant. Mr. Wu commits the fallacy of **Straw Man**, **Appeal to Ignorance**, and **Appeal to Consequences**.

1) First of all, as said before, just because one is unable to prove something to others doesn't mean that it is false or nonexistent. For instance, I can't prove what I dreamed about or thought about yesterday, but that doesn't mean that it didn't happen. Also, I can't conclusively prove that I saw a certain movie last month either. The skeptics could say that my saved ticket stub was stolen or forged, that my memory of the movie was obtained from hearing about it, that the people that were with me in the theater only constitute testimony and not proof, etc. You see, there is no way it could be proven 100 percent. Anyone who wants to deny can always find a reason to. The burden of proof may be on the claimant for the scientific and skeptical community to accept it, which is fine and understandable. But this argument is no grounds to use to dismiss claims and explain them away with alternate explanations, which skeptics like Michael Shermer tend to do. That would be more of what a cynic does. After all, why is a debunker's subjective dismissal more credible than one's direct experience? Skeptics can dismiss all they want, but they never seem to understand that they are doing it on purely subjective and speculative grounds.

It is not incumbent on the skeptic to "disprove" a given claim. Offering possible explanations of a given event is valid. Mr. Wu again uses **False Analogy**. Attending a movie under the circumstances Mr. Wu outlines is a verifiable event. Seeing a ghost on the way there is not. Upon demand most skeptics will offer possible explanations. This does not make them cynics.

2) Second, this argument does nothing to aid the skeptic's understanding of the paranormal. All it does is maintain the status quo of their own beliefs. If skeptics want some proof for something, they have to go find it themselves.

This is a self-serving statement which allows any claimant to set the goalposts anywhere they like. This statement does not relieve the claimant of the obligation to prove their claim. It is a form of **tu quoque**.

Though not all paranormal experiences and encounters can be found by those willing to seek, some of them can at least. But asking a claimant to hand over proof on a silver platter isn't really going to lead anywhere. That's not how it works. How would one hand over proof of ghosts, UFO's, mystic

experiences, or telepathic experiences, to a skeptic? Can one take a piece of a ghost and bring it back? Skeptics who want to investigate ghosts and UFO's should talk extensively to the eyewitnesses and perhaps spend some nights over in a haunted place, rather than just sitting back and thinking up their own explanations for it. Even the well-liked late Carl Sagan, who dismissed alien abductions offhand in his book *The Demon Haunted World*, never bothered to interview any abductees to learn about the abduction experience. That's certainly not the action of someone trying to understand something or looking for the truth. If a skeptic wants proof of metaphysical realities through mystical experiences or OBE's, they will have to do the work required to experience it themselves. There are a variety of techniques for inducing OBE's and astral projections. However, most skeptics are unwilling to do these type of things because they consider it a waste of their time since they don't think it's real. Instead, they lazily offer this argument, which makes sense scientifically, but progresses them nowhere in their knowledge or exploration. In fact, not bothering to investigate or experience something yourself, but just sitting back lazily and using this argument makes no sense.

Where research in these areas exists, it must be repeatable. Research based on anecdotal evidence is not repeatable. Mr. Wu's **ad hominem** argument has not invalidated the requirement that the claimant must prove the claim.

3) Third, the claimant who already has his/her proof doesn't need to prove it to others to validate their experiences. NDEers often emphasize this. Their personal proof from their experience or encounter is a blessing, gift or message meant for them, not for the skeptics. In other words, the claimants, if sincere, have already proved it to themselves. Whether or not skeptics accept the proof is inconsequential to them. Skeptics can believe what they want, but what they think does nothing to change the reality of a paranormal phenomenon. The skeptics who only want to see proof from other people without looking for it themselves is totally missing out on their own transcendental experiences.

Mr. Wu indulges in **Appeal to Pity** and **Appeal to Consequences**. Any given claimant may certainly believe anything they wish. When said claimant then proceeds to promote their beliefs as fact, begins to sell books, appears on talk shows, tries to get others to believe the same things, and otherwise attempts to profit by their beliefs, then it is only responsible to expect some kind of proof. This applies particularly to faith healers, "speakers to/for the dead", and sellers of unproven "miracle cures". Asking a claimant to prove their claim is asking for simple accountability. Blandly accepting a "new paradigm" to accommodate the claim is irrational.

Argument #8: "There is no hard evidence to support any paranormal phenomena."

This is a vague argument because it doesn't define what constitutes "hard evidence." If by hard evidence they mean something solid and tangible, then it would not be possible to obtain this from certain things like UFO's, ghosts, spirits, or ESP. since they are intangible in nature and possibly involve

other dimensions we don't fully understand yet (could also be the case with UFO's). By this standard, we have no tangible evidence for stars, galaxies, black holes, or nebulas that are light years away either, although we can observe them. (Skeptics could argue that they're just holographic images on a giant movie projector.) In the same manner, although we can't reach out and touch UFO's, we have observed them hovering in the sky and outmaneuvering our best aircraft. Even if all the photographs and video footage of UFO's were hoaxed, there are still many cases of sightings that were observed by whole cities or towns, such as the Mexico City mass sighting of January 1995. This indicates that there's "something" there causing these mass sightings. Of course, this "something" could be a whole range of things besides alien spacecraft, but at least it's not zero evidence and not due purely to imagination. Though UFO's show up far less frequently than the other astronomical phenomena mentioned above, infrequent doesn't mean nonexistent. The possibility of winning the lottery is also very infrequent too, but not nonexistent. The same could also go for ghosts, Bigfoot, the Loch Ness Monster, apparitions of the Virgin Mary, etc.

Mr. Wu again uses **False Analogy**. Stars, galaxies, nebulae, and black holes generate measurable effects. Unidentified lights in the sky cannot be assumed to be extraterrestrial in origin without hard evidence. Photographs are much easier to fake than they used to be. Assigning a mystical significance to UFO's is **Begging the Question**. The chance of winning a given lottery is determinable. It is a **False Analogy** to equate it with ghosts, etc.

If by hard evidence they mean things that we can test and measure with experiments, then this would be difficult to do with ghosts and UFO's since they are out of our control, but this has already been done and replicated for psychic phenomena like telepathy and telekinesis (See evidence in Arguments # 17, 18). We have the vastly replicated Ganzfeld and Autoganzfeld controlled telepathy experiments, the 20 year consistency of the Princeton Random Number Generator PK experiments, the controlled tests on psychics such as Uri Geller that he succeeded in, the recent tests on mediums by Dr. Gary Schwartz, and others. Skeptics need to clearly define what they want as hard evidence, rather than being vague about it and then raising the bar when anything is presented.

Mr. Wu commits a **Fallacy of Composition**. The things Mr. Wu speaks of in this paragraph are still controversial and under review. They are not all necessarily related, nor do the each necessarily prove that any of the others is true. It is a fact of scientific research that research raises more questions than it answers. This is not raising the bar or moving the goalposts. Scientists who make extraordinary claims must be prepared to have their work reviewed and repeated if it is to gain credibility.

Argument #9: Science is the only reliable method.

Typical Usage: "The only reliable way to know about anything is through the scientific method. All other

methods are unreliable."

This statement is usually made by skeptics who glorify and worship science as their God, even though they would never put it in those terms due to the connotations of them.

Mr. Wu cannot know that skeptics worship science. It is his purely subjective opinion that they do. Mr. Wu equates an opinion about the reliability of the scientific method with worship. This is an **ad hominem** attack which does not invalidate the premise that the scientific method is the only reliable method of investigation.

1) First, this is an absolutist statement since there is not just one single way to know everything. Other ways of knowing things include direct observation, personal experience, textbooks and articles, and advice from those who are wiser and more experienced than us. There are countless real things I can experience that don't need to be proved by the scientific method. Even mundane examples can demonstrate that. For instance, I can see rainbows by direct observation even though I can't bring them back to scientists, though they can see them too if they chose to go look. I can learn parenting through the experience of being a parent, and swimming by the experience of going into the water. Marketers and businesses learn the marketability of their products through surveys. We can also learn valuable things from wiser and more experienced people too, despite the fact that we didn't use any scientific method to check them out. In addition, I can't prove where I was yesterday either with the scientific method, but that doesn't mean that any claim of where I was yesterday is false. Neither can I prove what I dreamed last night with the scientific method either, but that doesn't mean that I don't know what I dreamed about. Likewise, if Acupuncture or some alternative medicine technique works for me, then I know that it works for me regardless of whether it's proven by the scientific method or not. Not everything has to be official for it to be true. (See rebuttal to Argument # 1 for more on that.) The scientific method is a tool for testing hypothesis and finding out things, not for defending one's own paradigms.

Mr. Wu disparages the scientific method, then gives examples of its daily use. This is **Complex Question**. So far, he has not invalidated the premise that the scientific method is the most reliable. Belief in something doesn't make it so.

2) Second, since successful psi results have been achieved in tests conducted under the scientific method, (See Arguments 17, 18) it can be said that evidence for psi has been gained from the scientific method anyway. Not surprisingly though, skeptics tend to only accept results done with the scientific method that show the results *they* want, which is no psi results and only chance results.

Begging the Question. The "successful psi results" Mr. Wu speaks of were evident only after "meta-analysis" of scores of results. This technique is a matter of controversy. See previous comments regarding Ray Hyman. Mr. Wu makes a blanket statement about skeptics which is his opinion and which he has not supported.

3) Third, things don't have to be proved by science in order to be true. (as explained in Argument # 1)

Many things were true and real before science discovered or proved them. Though the converse of this is also true, why should we consider the skeptic's subjective dismissal as being more reliable than one's direct experience? Besides, without direct experience, how would we know anything at all? A member of my discussion list, Greg Stone, put it very well when he posted:

See previous comments about this **False Analogy**. Mr. Wu is also engaging in **Circular Reasoning**. Direct experience is not always reliable.

"But balanced against science's supposed lack of evidence one finds the DIRECT EXPERIENCE of those who report. And the reports are consistent and voluminous. Thus, while science, according to Kurtz, cannot weigh in definitively on either side of the equation, the DIRECT EXPERIENCES are a fact. And, as everyone knows, we do not need to check with science to confirm all the aspects of our daily lives...we did not need to wait for science to properly define and experiment with the atom before we could manipulate things made up of atoms."

"Experience, direct knowledge, is of a higher order of understanding than mere subjective speculation without experience. If one were to accept your argument that experience is intrinsically invalid as a way of knowing, then you undermine your entire position as you have nothing else upon which to base ANYTHING. Thus, we see the weakness of a position that replaces firsthand knowledge, firsthand experience with the SPECULATION of someone who has no experience."

"Which one does the real scientist consider more valid... the report of a direct experience (make that volumes of consistent reports) OR the musings of someone with NO experience, only their speculation?"

Again, the fallacy of **False Analogy**. Direct experiences are not necessarily factual experiences. Once again, **Appeal to Popularity**.

Now I don't dispute that science is our best way of collecting knowledge, testing theories, or discovering how things work. The point is that it is not the ONLY way. And since science has not disproved the existence of God, life after death, spirits, or psi, then there is no point in skeptics trying to use science to dismiss those things. Furthermore, the best method of knowing things also depend on the kind of knowledge one is attempting to acquire. There are many issues and problems everyday for which empiricism is impractical or impossible. We make many rational daily decisions both individually and as a society that are based on no empirical observations. Sometimes common sense and direct observation are all that are required.

Dean Radin points out in the beginning of his book *The Conscious Universe: The Scientific Truth of Psychic Phenomena*, that new scientific discoveries tend to go through stages. He writes: (page 1)

Mr. Wu now agrees with the premise that the scientific method is the most reliable. The other methods he speaks of are not useful in verifying "paranormal" phenomena. Using such ambiguous methods is "moving the

goalposts" again. Despite Mr. Wu's **False Analogy**, daily decisions and "common sense" are the result of informal use of the scientific method.

> "In science, the acceptance of new ideas follows a predictable, four-stage sequence. In Stage 1, skeptic confidently proclaim that the idea is impossible because it violates the Laws of Science. This stage can last for years or for centuries, depending on how much the idea challenges conventional wisdom. In Stage 2, skeptics reluctantly concede that the idea is possible but that it is not very interesting and the claimed effects are extremely weak. Stage 3 begins when the mainstream realizes not only that the idea is important but that its effects are much stronger and more pervasive than previously imagined. Stage 4 is achieved when the same critics who previously disavowed any interest in the idea being to proclaim that they thought of it first. Eventually, no one remembers that the idea was once considered a dangerous heresy.
>
> The idea discussed in this book is in the midst of the most important and the most difficult of the four transitions - from Stage 1 into Stage 2."

Mr. Wu again uses **Appeal to Authority**, in this case Radin's opinions, which are a hypothetical **False Analogy** of scientific discovery and paranormal explanations. Discoveries in the past may have taken the path he describes, but it does not follow that any idea which takes this path is objectively correct. The sequence ignores necessary experimentation and review which *should* have been taking place throughout the process. Acceptance of an idea by skeptics and critics does not replace proper scientific method.

Argument #10: "Paranormal and supernatural phenomena aren't possible because they contradict all known natural laws gained from science."

First of all, natural laws as we define them are based on our interpretation of empirical testing and observation. Therefore, they are subject to constant change as new discoveries are found which challenge or contradict our models. Throughout history, we have constantly updated and expanded our understanding of the laws of how the universe works. In the past, it was said that things like heavier than air flight and going to the moon were impossibilities. Skeptics of those things were proven wrong of course. At one time, according to the law of aerodynamics, a hummingbird shouldn't be able to hover, yet it did, so we had to figure out why and revise our laws of aerodynamics. When Albert Einstein discovered that light travels at a constant speed (e.g. if you're traveling in a car and shine a flashlight forward, the car's speed is not added to the light's speed), and formulated his theory of relativity (time slows down as you go faster), and postulated that gravity involves distortion of space, all these things contradicted the Newtonian laws of physics at the time, yet they were eventually validated. As of now, special relativity and quantum mechanics are at odds with each other, and physicists are seeking a grand unified theory to unite them both. As history has shown, we constantly update and expand our

laws of physics to fit the data, not deny the data and new discoveries just to protect our beliefs.

First of all, the natural laws are *not* subject to constant change. Our understanding of them does change, and our theories for how they work do change, but the laws themselves do not. Mr. Wu again uses **False Analogy**, attempting to confuse the natural with the supernatural. Skeptics have been mistaken, it's true. This does not mean that any given belief is true. Once again, Mr. Wu resorts to **Fallacy of Composition** and **Straw Man**.

> In fact, new discoveries in quantum physics each year are shattering the materialistic reductionist view we had of the universe, making psychic phenomena and other dimensions more plausible. These include the non-locality (meaning distance and space don't exist) of twin particles (discovered by Alan Aspect in 1982), string theories that postulate several other dimensions beside our own, the discovery that particles behave differently when observed (making psychokinesis more probable), etc. (See Fred Alan Wolfe's *Taking the Quantum Leap* and *The Spiritual Universe*) Each new discovery seems proves the skeptics wrong and moves us further from their views and closer to metaphysical paradigms. This is obviously not a good sign for their case. It appears that the skeptic camp is a sinking ship that one should get off to avoid embarrassment. Just the discovery alone in quantum physics that all matter is a form of vibrating energy makes paranormal and psychic phenomena much more plausible and understandable.

Mr. Wu indulges in the **Appeal to Consequences** fallacy by claiming that "the skeptic camp is a sinking ship" that will cause "embarrassment". Mr. Wu's discussion of quantum physics does not invalidate the premise that "paranormal" claims violate the laws of physics. Whether quantum physics is leading to "metaphysical paradigms" is a matter of opinion. The relationship of matter and energy has long been known...Einstein, Bohr, Planck, Fermi, Feynman, and others come to mind.

Finally, good theories try to unify the data. As Ron Pearson notes in his article *Theoretical Physics Back Survival:* (http://www.ozemail.com.au/~vwzammit/afterlifech33.html#Heading34)

> "Theories make sense of the experiments and show how apparently unrelated phenomena are aspects of the same thing. Good theories provide unifications. For example, magnetism and electricity were separate fields when science was in its infancy. As understanding grew it was found that magnetic effects could be produced by electric currents and the converse also applied. Now we speak of electromagnetism as a single force; one of the four forces of nature. Theoretical physicists hope ultimately to join these by a unified field theory arising from a single 'superforce'."

Mr. Wu again resorts to **Appeal to Authority**. Pearson's statements regarding theories are a matter of opinion and do not invalidate the premise that "paranormal" claims violate the laws of physics. Theory is intended to explain the data, not necessarily "unify" it.

Argument # 11: "Unexplainable does not mean inexplicable."

This phrase is emphasized by arch skeptic Michael Shermer, author of *Why People Believe Weird*

Things. This argument means that just because something is unexplainable does not mean that paranormal forces must have been involved, only that we haven't found the explanation for it yet. However, skeptic who use this should also remember that the following converses are true as well:

1) Just because something happens that they think isn't possible doesn't mean that it didn't happen. To do so would be to deny reality.

The question is whether something "happened" or is "reality" at all. Mr. Wu resorts to **Complex Question**.

2) Just because something happens that they think isn't possible doesn't mean that it *must* be due to misperception, fraud, or hallucination.

Certainly, explanations are not limited to those choices. Mr. Wu commits **False Dilemma**.

3) Just because a natural explanation hasn't been found for something unexplainable doesn't mean that only a natural explanation could exist.

Apparently an **Appeal to Ignorance**, this is actually a subtle form of the **Complex Question**. Arguing this statement forces one to accept the questioner's belief that supernatural explanations are possible.

4) If a natural explanation doesn't explain all the facts, that doesn't mean that you should insist on it anyway just to protect your belief system.

Another **Complex Question**. One cannot assume supernatural explanations.

Take the following example. In the reincarnation cases investigated by Dr. Ian Stevenson in his book *Twenty Suggestive Cases of Reincarnation*, none of the natural explanations account for the data and facts of the cases, such as babies and children having accurate detailed memories of their past lives which couldn't have been obtained in their environment, but are later verified to be true. Dr. Stevenson concludes that the reincarnation hypothesis best fits the data he personally investigated. Though the skeptic is free to insist that a natural explanation must be the culprit anyway, (and often does) he does so by flatly denying the four converse rules above. Would Shermer approve of that, I wonder? (For more on the reincarnation phenomena, check out *Twenty Suggestive Cases of Reincarnation* and *Reincarnation: The Phoenix Fire Mystery*.)

This example suffers from **Hasty Generalization** and **Appeal to Popularity** and **Appeal to Ignorance**. Twenty cases is hardly a representative sample and the "data and facts" are based once again on anecdotes. Mr. Wu's "rules" are inventions of his own twisted logic, thus he commits the **Appeal to Authority** and **Circular Reasoning> fallacies.**

Argument #12: "Skeptics don't have beliefs. They/I base our views and judgments on the degree of evidence."

Some skeptics on the extreme end even go so far as to claim that unlike the rest of the world, they don't have "beliefs" but reasoned judgments based on pure evidence alone. Not all skeptics claim to be immune to beliefs, but there are some that do. This is plain silly though, because statements of belief can be found in almost anything someone says. We all do things and say things based on assumptions we have, which are formed in part based on beliefs. These assumptions are sometimes in the line of beliefs because they are not always based on hard evidence, but our world views, predisposition, and natural tendencies. Beliefs are especially found in the skeptical arguments discussed so far, as most of the skeptical arguments in this article are clear statements of *a priori* belief, such as "It is irrational to believe anything that hasn't been proven" (Argument # 1) and "Extraordinary claims require extraordinary evidence." (Argument # 2) Further common skeptical beliefs include "Believers in the paranormal are irrational", "Psi is improbable", "Psychics and mediums prey on the gullible" and "Psi experiments show no better than chance results when proper controls are put into place".

Though skeptics will claim that their views are based on the evidence that they've examined, they rarely apply their skepticism to their own beliefs, which any true skeptic would do. Furthermore, upon close scrutiny it's obvious that they prefer false explanations to paranormal ones, resort to character assassinations, and ignore data that doesn't fit their hypotheses. Strange behavior for people who don't have beliefs! Rather, I think that skeptics are using this "I don't have beliefs" argument to excuse themselves from having to defend their views, while shifting the burden to believers and paranormalists.

This passage is one big **ad hominem** and **tu quoque**. Mr. Wu confuses "belief" with conclusions based on logic. Mr. Wu may really mean "bias", but we cannot assume so. Mr. Wu uses the **Equivocation** fallacy by attempting to equate skeptical opinion with belief in the "paranormal". Mr. Wu commits errors of **Ambiguity**, **Inconsistency**, **False Analogy**, and **Conflicting Condition**. Not to mention **Appeal to Authority** and **Circular Reasoning**. Mr. Wu fails to invalidate the argument that skeptics base their judgment on reasoning as opposed to "belief". The burden of proof still remains on the shoulders of the claimant.

Argument #13: "A common myth is that Skepticism is cynicism. It is not. Skepticism is a method of inquiry."

This statement is usually found in introductions or FAQ's sections of skeptical websites and books. Here is an example from the website of The Skeptics Society: (http://www.skeptic.com/faqs.html)

> "What does it mean to be a skeptic? Some people believe that skepticism is rejection of new ideas, or worse, they confuse "skeptic" with "cynic" and think that skeptics are a bunch of grumpy curmudgeons unwilling to accept any claim that challenges the status quo. This is wrong. Skepticism is a provisional approach to claims. It is the application of reason to any and all ideas—no sacred cows allowed. In other words, skepticism is a

method, not a position."

What these skeptics don't understand is that people in general don't have misconceptions about skepticism as a concept. The cynicism that people see in so called "skepticism" is not due to their misunderstanding of the word itself, but due to the cynical WORDS and ACTIONS of the PEOPLE who call themselves skeptics. When pseudo-skeptics make cynical statements such as in the arguments presented in this article, they portray to others a cynical closed method of thinking, dismissing anything that they don't understand or consider possible. That's where this impression comes from. Cynics who masquerade behind science and skepticism often reveal their cynicism through their words, thinking methodologies, closed system of beliefs, and dogmatic assertions. The six common flawed tactics described in the introduction of this article are the kind of things that give others the impression of cynicism. This is why even some of the well known skeptics and leaders of organized skeptic groups are perceived as cynics, including James Randi (the famous magician, author, debunker, and nemesis of Uri Geller), Michael Shermer (editor *of Skeptic magazine*), Joe Nickell (one of the leaders of CSICOP), Martin Gardner (psychic debunker), Susan Blackmore (University of London Psychology Professor and proponent of the Dying Brain Hypothesis of NDE's), etc. These people use closed ways of thinking to dismiss data that don't fit into their hypotheses, which is prevalent from statements made in their articles/books. Therefore, these closed minded skeptics are the ones that have the misconception of mistaking their cynicism with true skepticism.

Mr. Wu has not invalidated the argument. Mr. Wu resorts to more **Ad Hominem**.

Argument #14: "Believers in the paranormal are thinking in primitive, irrational, childish and uninformed ways."

This statement is often made by the more extreme and opinionated type of skeptic. Fortunately, many skeptic groups have realized the extremity and folly of these type of statements and have stopped making them in public. The fact is, many who hold spiritual beliefs or metaphysical views came to them after researching all the data and examining the different explanations, making informed conclusions.

Mr. Wu has correctly identified an **ad hominem** fallacy. Unfortunately, he now proceeds to the **tu quoque** fallacy...

Nevertheless, it can also be argued that closed-minded skeptics who are out to debunk everything paranormal are thinking in irrational and uninformed ways because they simply refuse to consider the data that support strong paranormal phenomena cases, but instead dismiss it on *a priori* grounds. If they are not up to date on the evidence, then they are the ones who are acting uninformed. How can one be truly informed if they only wish to look at the data that support their views? Rationalizing away facts to defend one's paradigm is not an example of rational thinking.

It is incumbent on the claimant to provide evidence for their assertions. Mr. Wu also commits the **Complex Question** fallacy.

> Furthermore, people who hold paranormal or other non-empirical beliefs may simply be expressing a cultural, personal or spiritual view, and nothing more. This does not mean they are less intelligent, more irrational or childish than non-believers of the paranormal. In fact, these people are usually capable of applying rational and intelligent thought to a wide variety of everyday situations when it matters, and no doubt do this effectively and rationally.

Mr. Wu commits **Equivocation** by equating belief with evidence. It is illogical to do so. Mr. Wu again commits **Appeal to Popularity**.

> We have to remember that basically, it is simply our *a-priori* beliefs that affect our acceptance of the data for paranormal phenomena. Closed minded skeptics and debunkers know going into an investigation that there is a natural explanation, and are firmly committed to finding it. The problem is that it can (and has in some cases) lead to incorrect or premature conclusions. It also doesn't do much for skepticism's reputation when a researcher goes in (falsely, and obviously so) proclaiming neutrality when the reality is otherwise. Why not just be honest and say "I don't believe it. It is possible to convince me, but I don't think that is going to happen because in my experience, the world doesn't work that way."'?

Mr. Wu again uses **Complex Question** and **ad hominem**.

Argument #15: "Skeptics are defending science and reason from a rising tide of irrationality."

This phrase has often been used in articles and websites of skeptical organizations and magazines, including CSICOP's *Skeptical Inquirer* and others. Fortunately, this phrase is now critiqued by skeptics themselves, and used less. Michael Sofka of ISUNY and author of the article *Myths of Skepticism*, (http://www.rpi.edu/~sofkam/talk/talk.html) points out that CSICOP often uses it in their fundraising requests. Folklorist Stephanie Hall comments on this in her article *Folklore and the Rise of Moderation Among Organized Skeptics*: (http://www.temple.edu/isllc/newfolk/skeptics.html)

> "Another change advocated by many Skeptics is in the choice of language used to represent skepticism to others. For instance, a phrase that has commonly appeared in articles by Skeptics and in statements in the brochures or Web sites of skeptic groups was an expression of concern about "the rising tide of irrationality." But although this phrase became an identity marker demonstrating alliance with organized skepticism and a statement of shared concern, it has increasingly been criticized by Skeptics themselves. At the NCAS Millennial Madness workshop in May 1999, Chip Denman critiqued this phrase as, perhaps, skepticism's own bit of Millennialism, asking questions

> such as, "What do we mean by irrationality? How is it measured? How do we know it is rising?" It seems that this phrase, as a marker of skeptical identity, may be going out of fashion.
>
> These events are an indication to me as a researcher that Skepticism is going through changes as it grows, as we might expect in any social movement, and that local groups are beginning to discover the things they have in common. Perhaps because the movement has steadily grown and this may inspire confidence and stability, Skeptics also seem increasingly willing to critique themselves and express strong views on the ways they do and do not want skepticism to be presented to the public. This self-analysis is, of course, a good thing, for any rational endeavor should be willing to critique itself."

Chip Denman, quoted above by Hall, makes a good point. The statement fails to define what is considered to be irrational. Most likely, what they mean by irrational is anything others believe in that doesn't fit their world view or hasn't been proven their way. Therefore, this is more a statement of bias and faith, rather than fact. If by irrational they mean unproven, then this is false too as there is strong evidence for many paranormal and psychic phenomena (See Argument # 1)

Evidence does not equal proof. Mr. Wu is **Begging the Question**. The argument at hand is whether "skeptics are defending science and reason agains a rising tide of irrationality". Mr. Wu assigns a definition of irrationality and puts words in the mouths of skeptics -- this is the **Straw Man** fallacy.

In fact, there does not seem to be any evidence of an increase in irrationality or superstition. I would challenge any skeptic to show me a mass poll where a high percentage of people admit literally that they believe in "superstition and irrationality". There probably aren't any, because most people don't label their beliefs as superstition or irrationality. It is the *skeptics* who label paranormal beliefs as such. That's an important thing to remember. Even the polls published over the years in *Skeptical Inquirer* indicate at most a shift in emphasis as one belief replaces another in the popular imagination. Moreover, to the extent that polls have been done we find church attendance dropping, and people shifting from organized religions to less formal or more individualized forms of spirituality. In the traditional religious sense, our society is more secular now than before.

It appears that on the whole irrationality, belief, and credulity are at about the same level as they have always been, just distributed in different ways. What probably is going on is that this phrase is used to describe new and expanded beliefs (i.e. New Age type beliefs) versus established beliefs in society, with the new beliefs appearing as though there is an increase.

Mr. Wu writes unsupported opinion and **Post Hoc** speculation. However, there obviously is a difference of

opinion as to what is rational or irrational. Certainly the statement "a rising tide of irrationality" qualifies as **Appeal to Popularity**. Skeptics should know better.

Section II: Critique of Skeptical Arguments Against Specific Paranormal Phenomena.

Argument # 16: "Psychics and mediums use a technique called cold reading to amaze you with accurate hits, not psychic powers.

This is a common skeptical argument against professional and non-professional psychics and mediums. Skeptics claim that psychics and mediums use cold reading to pick up clues about clients and amaze them. First, let me explain what cold reading is. Then I'll explain why it does not account for all psychic readings. **Cold reading** is an umbrella term for a series of techniques used by magicians and mentalists (specialists in mind reading tricks) to employ a variety of methods to gain information and clues about a client for a reading. These methods include but are not limited to: fishing for clues by asking questions, listening to everything a client says to get clues, making general or vague statements that most people interpret as hits, observing facial expressions and body language as you make statements, analyzing clues from a person's dress and demeanor, and other mentalist tricks, etc. (despite what politically correct people say, it is a fact that there are many things you can tell about a person based on their looks, even from a photograph) Even the smallest things can give a trained cold reader important clues about you. In conjunction with cold reading, another technique known as "hot reading" can also be used. **Hot reading** is the technique of investigating a person's background and records prior to a psychic reading to obtain specific information about them. Mentalists performing in stage shows often use hot reading to obtain prior information about audience members beforehand, such as maiden names, former addresses, etc. Cold reading can be used both consciously and unconsciously. Some cold readers knowingly use and develop their cold reading techniques like a skill or art. Others may subconsciously use cold reading techniques, attributing it to intuition or psychic abilities, thus deluding themselves as well as their clients.

Although it is true that there are many frauds out there who use cold reading the way mentalists and magicians do, it doesn't mean that every psychic is a fraud. That would be like finding some counterfeit money and concluding that all money was counterfeit.

Mr. Wu does a fair job of describing "cold reading" and "hot reading". However, his last statement is a **False Analogy**.

Mr. Wu cites hypothetical situations in support of his own argument, thereby engaging in **Circular Reasoning**.

Let me give some examples of psychic readings that I know of where cold reading was either impossible or too unlikely:

--> SECTION SNIPPED <--

At this point, Mr. Wu related some very long personal anecdotes to support his argument. We snipped that section for the sake of brevity. Those who wish to read his accounts can access his original document. As has been stated before, anecdotes are not evidence. The fallacies involved have already been discussed. Basically, he is committing **Appeal to Authority**.

> As you can see, the facts in these incidents don't suggest in any way that cold/hot reading was involved. Psychic reading accounts like this are abundant and come from people of all walks of life. Anyone who does a little research could come up with accounts like these.
>
> Just recently some famous mediums were tested under controlled conditions by Dr. Gary Schwartz of the Human Energy Systems Laboratory at the University of Arizona, which revealed some astonishing results. The experiments involved a group of mediums and sitters who were not told each other's identities beforehand. Separated by a cloth screen, the mediums were only allowed to ask a few yes or no questions before giving their readings. Their readings turned out to average between a 70 to 90 percent accuracy rate, far above the chance level of 33 percent! The odds of this happening by chance, according to Dr. Schwartz, are one in trillions! Even more astonishing, in the second experiment involving a different group of mediums and sitters, the mediums were not allowed to ask anything at all, yet they STILL retained the same level of accuracy as the mediums in the first experiment! A report on these experiments was published in the January 2001 issue of the *Journal of the Society for Psychical Research*. The report, *Accuracy and Replicability of Anomalous After-Death Communication Across Highly Skilled Mediums*, which you can obtain by emailing Dr. Schwartz himself at GSchwart@u.arizona.edu, contains the following key excerpts:
>
> "In a replication and extension experiment, medium's average accuracy an initial ten minute period that did **not** allow yes-no questioning was 77%."
>
> "The data suggest that highly skilled mediums are able to obtain accurate (p less than one in ten million) and replicable information. Since factors of fraud, error, and statistical coincidence **can not explain** the present findings, other possible mechanisms should be considered in future research. These include telepathy, super psi, and survival of consciousness after-death."

Although we am not equipped to debate the efficacy of Dr. Schwartz's research, we must point out that the statement regarding "other possible mechanisms" including "telepathy, super psi, and survival of consciousness after death" is not necessarily demonstrated by the results. In the scientific method, one observes, then hypothesizes, then designs experiments to test the hypothesis, and observes some more. One does this over and over again before one begins to develop hypotheses as to mechanisms. Even then, one's work must be subect to review. In Mr. Wu's example, Dr. Schwartz is engaging in a **Post Hoc** fallacy.

"It can be seen that the mediums varied in the number of total items they obtained and the number of questions they asked. Medium 1, in particular, **generated over 130 specific pieces of information yet asked only 5 questions**, 4 of which (80%) were answered yes."

"Medium 1, who obtained the lowest score (80%), only asked a total of five questions. Hence, **it is impossible to claim that medium 1's percent accuracy ratings (see below) were due to "cold reading" and "fishing for information.""**

"Though names were rated least accurately, the magnitude of the accuracy was still surprisingly high (67% for sitter one and 76% for sitter two). Initials received higher percent accuracy scores (90% for sitter one and 100% for sitter two). Personal temperament information was very accurately reported (95% for sitter one and 93% for sitter two)."

"For the first ten minutes, the mediums were instructed to receive whatever information they could about the deceased and share this information out loud. **They were not allowed to ask any questions of the sitters. The sitters were instructed to remain silent**..... The content of these two readings was dramatic. Information about the deceased son and dog were again replicated by both mediums. However, both mediums also received information about the recently deceased husband. Medium 2 reported being confused, saying "I keep hearing Michael times two, Michael times two." The father's name was Michael, the son's name was Michael, Jr."

"The two right bars display the percent + accuracy ratings for the silent and questioning periods, combining the data for mediums 1 and 2. **The average accuracy for the silent periods was 77% and for the questioning period, 85%.** The total number of items received during the silent period was 64, the total during the questioning period was 157. **The difference between the silent and questioning periods in percent accuracy was not statistically significant."**

"The accuracy of mediums 1 and 2 was replicated, including during a ten minute silent period when **no questioning was allowed.** New information about the deceased husband was received by both mediums. More information was obtained during the questioning period than the silent period, and the accuracy ratings were somewhat higher. **However, detailed information was obtained during the silent periods when no "cold reading" was possible."**

"These two experiments provide quantitative data that are consistent with the hypothesis that some form of anomalous information retrieval was occurring in these skilled mediums. Traditional hypotheses of fraud, subtle cueing, and statistical coincidence, are improbable explanations of the total set of observations reported here."

"The present findings do not speak directly to the mechanism (s) of anomalous information retrieval

observed. However, the apparent desynchrony of the medium's ECG's with the sitter's ECG during the reading periods compared to the baseline periods is inconsistent with a "telepathy with the sitter" interpretation of the findings."

"..........However, it is important to mention that the mediums spoke remarkably quickly and **generated a surprisingly large number of specific facts."**

"For the first sitter, all five mediums obtained information about a deceased son. **Three of the five mediums heard the initial M for the son, one said the name Michael. None gave a false initial or name for the son.** Also, none obtained information about a deceased daughter (her son did die, her daughter was alive)."

"Qualitative Example II: Receiving accurate information days before the readings

One of the mediums purportedly received communication from the deceased mother of one of the sitters a few days before traveling to Tucson. The mother purportedly conveyed to the medium a favorite prayer that she had regularly recited to her daughter as a child. Moreover, according to the deceased mother, the daughter was secretly continuing to offer this prayer for her. An assistant to the medium was instructed to locate the prayer, have it laminated, and gift wrapped.

When the reading was about to begin with the sitter, the medium unexpectedly reported to the experimenters that he had forgotten to bring into the laboratory a present he had brought for this sitter from her deceased mother. Surprised by the claim of such a gift, we instructed the medium that he could have his assistant bring it in after the reading had officially ended and the formal data had been collected.

The gift was brought into the laboratory at the end of the session and passed around the screen to the sitter. Upon opening the present, the sitter, in tears, confirmed that this was a special prayer her mother had taught her as a child. Moreover, she shared that she silently continued to say this prayer for her deceased mother.

Since the medium purportedly did not know who the sitters were ahead of time, and also did not know who was behind the screen, the observation of the medium receiving anomalous communication three days before the experiment and giving this particular sitter this particular gift raises challenging questions....."

Well, it pretty much amounts to anecdotal evidence. The controls are not described. Dr. Schwartz wisely uses the term "purportedly". Where did the assistant come from, and was the assistant controlled for in this series of experiments? This is one example of factors that have to be controlled in such experiments. This is insufficient evidence to discount the "cold reading/hot reading" hypothesis.

Argument #17: "Experiments that show evidence for psi must be replicable in order to count as evidence."

Corollary: "I won't consider successful psi experiments as evidence of psi unless the results are replicated by other scientists and peer reviewed."

This is another category that skeptics tend to use to dismiss evidence. If they can't it into the "anecdotal evidence is worthless category," then they put it into the "unreplicable category" (and by that they don't just mean replicable by a few other scientists, but by every scientist in the world!). While this standard may seem reasonable scientifically, it is usually just another tactic to try to raise the bar, because no matter how many times a successful psi experiment is replicated, they still will demand a never-ending higher rate of replication! (If the 2,549 sessions of the Ganzfeld and autoganzfeld experiments from 1974 to 1997 by different research laboratories which produced above chance results doesn't count as replicable, then what would?)

Appeal to Pity. Good science is replicable. Bad science is not. Mr. Wu misunderstands the terms. Replicable means that similar results must be obtainable through the same set of experimental design and controls. Resorting to repeated meta-analysis of the same body of data is not replicability.

Nevertheless, the first problem with this is that just because something hasn't been replicated doesn't mean that it didn't happen. For example, if Track and Field gold medalist Carl Lewis breaks a world record, and other athletes can't repeat it, that doesn't mean that Lewis didn't do it in the first place. Likewise, if I won a slot machine jackpot or threw a quarter and it landed on its edge and stayed that way (this is possible but there are astronomical odds against it), but couldn't repeat it again, it doesn't mean that it never happened the first time. Similarly, phenomena such as supernovas, balls of lightning, and comets are not replicable by us but are acknowledged to exist anyway. Therefore, replicating the appearance of UFO's or ghosts may not be possible because they are out of our control, but that doesn't mean they never happen or don't exist. All it would take is one genuine case of a UFO or ghost to prove that they were real and possible. As an unnamed law I found says: "If it happens once, then it must be possible."

Mr. Wu commits numerous **False Analogies** and cites an irrelevant truism. The question of whether or not "paranormal" events have in fact "happened" has not been settled.

In fact, the very nature of psychic phenomena makes them not easy to replicate. Dean Radin, Ph.D, Director of the Consciousness Research Laboratory at the University of Nevada, and author of *The Conscious Universe: The Scientific Truth of Psychic Phenomena,* lists 8 reasons why this is so: (page 40)

> "Psi effects do not fall into the class of easily replicated effects. There are eight typical reasons

why replication is difficult to achieve: (1) the phenomenon may not be replicable; (2) the written experimental procedures may be incomplete, or the skills needed to perform the replication may not be well understood; (3) the effect under study may change over time or react to the experimental procedure; (4) investigators may inadvertently affect the results of their experiments; (5) experiments sometimes fail for sociological reasons; (6) there are psychological reasons that prevent replications from being easy to conduct; (7) the statistical aspects of replication are much more confusing than more people think; and (8) complications in experimental design affect some replications."

Radin has cited several poor excuses for bad science. Skeptics have been saying all along that psi "effects" are highly subjective. This is nothing new. Radin is engaging in **Special Pleading**.

The second problem with this argument is that successful psi experiments definitely *have* been replicated by different researchers and laboratories. One famous solid example is the series of telepathy studies known as the ganzfeld experiments, in which subjects guess target images while sitting with ping pong ball halves over their eyes and listening to relaxing white noise designed to deprive them of sensory stimuli to heighten their intuition and psychic abilities. Dean Radin, in the same book quoted above describes the replicability of the Ganzfeld experiments: (page 78-79)

"At the annual convention of the Parapsychological Association in 1982, Charles Honorton presented a paper summarizing the results of all known ganzfeld experiments to that date. He concluded that the experiments at that time provided sufficient evidence to demonstrate the existence of psi in the ganzfeld…….. "

"At that time, ganzfeld experiments had appeared in thirty-four published reports by ten different researchers. These reports described a total of forty-two separate experiments. Of these, twenty-eight reported the actual hit rates that were obtained. The other studies simply declared the experiments successful or unsuccessful. Since this information is insufficient for conducting a numerically oriented meta-analysis, Hyman and Honorton concentrated their analyses on the twenty-either studies that had reported actual hit rates. Of those twenty-eight, twenty-three had resulted in hit rates greater than chance expectation. This was an instant indicator that some degree of replication had been achieved, but when the actual hit rates of all twenty-eight studies were combined, the results were even more astounding than Hyman and Honorton had expected: odds against chance of ten billion to one. Clearly, the overall results were not just a fluke, and both researchers immediately agreed that *something* interesting was going on. But was it telepathy?"

False Analogy. Meta-analysis is not replication. Ray Hyman, as noted before, has said that meta-analysis is not suited for psi studies due to bias in the person conducting the analysis.

Radin further elaborates on how researcher Charles Honorton tested whether independent replications had actually been achieved: (page 79)

> "To address the concern about whether independent replications had been achieved, Honorton calculated the experimental outcomes for each laboratory separately. Significantly positive outcomes were reported by six of the ten labs, and the combined score across the ten laboratories still resulted in odds against chance of about a billion to one. This showed that no one lab was responsible for the positive results; they appeared across-the-board, even from labs reporting only a few experiments. To examine further the possibility that the two most prolific labs were responsible for the strong odds against chance, Honorton recalculated the results after excluding the studies that he and Sargent had reported. The resulting odds against chance were still ten thousand to one. Thus, the effect did not depend on just one or two labs; it had been successfully replicated by eight other laboratories."

On the same page, he then soundly dismisses the skeptical claim that the file-drawer effect (selective reporting) could skew the meta-analysis results in favor of psi: (page 79-80)

> "Another factor that might account for the overall success of the ganzfeld studies was the editorial policy of professional journals, which tends to favor the publication of successful rather than unsuccessful studies. This is the "file-drawer" effect mentioned earlier. Parapsychologists were among the first to become sensitive to this problem, which affects all experimental domains. In 1975 the Parapsychological Association's officers adopted a policy opposing the selective reporting of positive outcomes. As a result, both positive and negative findings have been reported atg the Paraspsychological Association's annual meetings and in its affiliated publications for over two decades.
>
> Furthermore, a 1980 survey of parapsychologists by the skeptical British psychologist Susan Blackmore had confirmed that the file-drawer problem was not a serious issue for the ganzfeld meta-analysis. Blackmore uncovered nineteen complete but unpublished ganzfeld studies. Of those nineteen, seven were independently successful with odds against chance of twenty to one or greater. Thus while some ganzfeld studies had not been published, Hyman and Honorton agreed that selective reporting was not an important issue in this database.
>
> Still, because it is impossible to know how many other studies might have been in file drawers, it is common in meta-analyses to calculate how many unreported studies would be required to nullify the observed effects among the known studies. For the twenty-eight direct-hit ganzfeld studies, this figure was 423 file-drawer experiments, a ratio of unreported-to-reported studies of approximately fifteen to one. Given the time and resources it takes to conduct a single ganzfeld

session, let alone 423 hypotheitcal unrepoted experiments, it is not surprising that Hyman agreed with Honorton that the file-drawer issue could not plausibly account for the overall results of the psi ganzfeld database. There were simply not enough experimenters around to have conducted those 423 studies.

Thus far, the proponent and the skeptic had agreed that the results could not be attributed to chance or to selective reporting practices."

Another skeptical argument against the ganzfeld studies is sensory leakage. Radin addresses this as well: (page 81-82)

"Because the ganzfeld procedure uses a sensory-isolation environment, the possibility of sensory leakage during the telepathic "sending" portion of the session is already significantly diminished. After the sending period, however, when the receiver is attempting to match his or her experience to the correct target, if the experimenter interacting wit the receiver knows the identity of the target, he or she could inadvertently bias the receiver's ratings. One study in the ganzfeld database contained this potentially fatal flaw, but rather than showing a wildly successful result, that study's participants actually performed slightly *below* chance expectation……

Despite variations in study quality due to these and other factors, Hyman and Honorton both concluded that there was no systematic relationship between the security methods used to guard against sensory leakage and the study outcomes. Honorton proved his point by recalculating the overall results only for studies that had used duplicate target sets. He found that the results were still quite strong, with odds against chance of about 100,000 to 1."

Where skeptic Ray Hyman disagreed with Charles Honorton was in the role of randomization flaws affecting the ganzfeld results. However, as Radin points out, the consensus of the experts on meta-analysis is against Hyman's hypothesis: (page 82-83)

"A similar concern arises for the method of randomizing the sequence in which the experimenter presents the target and the three decoys to the receiver during the judging process. If, for example, the target is always presented second in the sequence of four, then again, a subject may tell a friend, and the friend, armed with knowledge about which of the four targets Is the real one, could successfully select the real target without the use of psi.

Although these scenarios are implausible, skeptics have always insisted on nailing down even the most unlikely hypothetical flaws. And it was on this issue, the importance of randomization flaws, that Hyman and Honorton disagreed. Hyman claimed that he saw a significant

relationship between randomization flaws and study outcomes, and Honorton did not. The sources of this disagreement can be traced to Honorton's and Hyman's differing definitions of "randomization flaws," to how the two analysts rated these flaws in the individual studies, and to how they statistically treated the quality ratings.

These sorts of complicated disagreements are not unexpected given the diametrically opposed conviction with which Hnorton and Hyman began their analyses. When such discrepancies arise, it is useful to consider the opinions of outside reviewers who have the technical skills to assess the disagreements. In this case, ten psychologists and statisticians supplied commentaries alongside the Honorton-Hyman published debate that appeared in 1986. None of the commentators agreed with Hyman, while two statisticians and two psychologists not previously associated with this debate explicitly agreed with Honorton.

In two separate analyses conducted later, Harvard University behavioral scientists Monica Harris and Robert Rosenthal (the latter a world-renowned expert in methodology and meta-analysis) used Hyman's own flaw ratings and failed to find any significant relationships between the supposed flaws and te study outcomes. They wrote, "Our analysis of the effects of flaws on study outcome lends no support to the hypothesis that ganzfeld research results are a significant function of the set of flaw variables.

In other words, everyone agreed that the ganzfeld results were not due to chance, nor to selective reporting, nor to sensory leakage. And everyone, except one confirmed skeptic, also agreed that the results were not plausibly due to flaws in randomization procedures. The debate was now poised to take the climactic step from Stage 1, "It's impossible," to Stage 2, "Okay, so maybe it's real."

Even after the successful replicable series of ganzfeld experiments, further replicability was found in the computer-controlled autoganzfeld experiments, designed to be even more efficient and controlled than the original ganzfeld experiments (although not shown to be significant as mentioned above). This time though, two magicians who specialized in mentalism were brought in to check the protocals for cheating loopholes, as Radin describes: (page 86)

"In addition, two professional magicians who specialized in the simulation of psi effects (called "mentalists" or "psychic entertainers") examined the autoganzeld system and protocols to see if it was vulnerable to mentalist tricks or conjuring-type deceptions. One of the magicians was Ford Kross, an officer of the Psychic Entertainers Association. Kross provided the following written statement about the autoganzfeld setup:

In my professional capacity as a mentalist, I have reviewed Psychophysical Research Laboratories' automated ganzfeld system and found it to be provide excellent security against deception by subjects.

The other magician was Cornell University psyhcologist Daryl Bem, who besides coauthoring a 19954 paper on the ganzfeld psi experiments with Honorton, is also a professional mentalist and a member of the Psychic Entertainers Association."

Radin summarizes the results of the autoganzfeld experiments as follows: (page 86)

"The bottom line for the eleven series, consisting of a total of 354 sessions, was 122 direct hits, for a 34 percent hit rate. This compares favorably with the 1985 meta-analysis hit rate of 37 percent. Honorton's autoganzfeld results overall produced odds against chance of forty-five thousand to one."

Further replications beyond the ganzfeld and autoganzfeld experiments include the following: (page 87-88)

"The next replications were reported by psychologist Kathy Dalton and her colleagues at the Koestler Chair of Parapsychology, Department of Psychology, University of Edinburgh, Scotland. The Edinburgh experiments, conducted from 1993 through 1996 (and still ongoing), consisted of five published reports and 289 sessions using an improved, fullyl automated psi ganzfeld setup. It was based on Honorton's original autoganzfeld design and implemented in stages first by Honorton, then by psychologist Robin Taylor, then by me, and finally by Kathy Dalton. Other replications have been reported by Professor Dick Bierman of the Department of Psychology at the University of Amsterdam; Professor Daryl Bem of Cornell University's Psychology Department; Dr. Richard Broughton and colleagues at the Rhine Research Center in Durham, North Carolina; Professor Adrian Parker and colleagues at the University of Gothenburg, Sweden; and doctoral student Rens Wezelman from the Institute for Parapsychology in Utrecht, Netherlands.

While only the 1985 meta-analysis, the autoganzfeld study, and the Edinburgh study independently produced a hit rate with 95 percent confidence intervals beyond chance expectation, it is noteworthy that each of the six replication studies (after the autoganzfeld) resulted in point estimates greater than chance. The 95 percent confidence interval at the right end of the graph ois the combined estimate based on all available ganzfeld sessions, consisting of a total of 2,549 sessions. The overall hit rate of 33.2 percent is unlikely with odds against chance beyond a million billion to one."

Finally, at the end of the chapter, Radin concludes what the findings of the ganzfeld experiments and others before it suggest: (page 88)

> "Now jointly consider the results of the ganzfeld psi experiments, the dream-telepathy experiments of the 1960s and 1970s, the ESP cards tests from the 1880s to the 1940s, Upton Sinclair's experiments in 1929, and earlier studies on thought transference. The same effects have been repeated again and again, by new generations of experimenters, using increasingly rigorous methods. From the beginning, each new series of telepathy experiments was met with its share of skeptical attacks. These criticisms reduced mainstream scientific interest in the reported effects, but ironically they also refined the methods used in future experiments to the point that today's ganzfeld experiments stump the experts."

Thus from all this, it is indisputable that we have solid scientific and statistical evidence that one of the most successful and controlled series of telepathy experiments in history, the ganzfeld experiments, were definitely replicable. Therefore, the skeptical challenge of Argument # 16 has been met, and it's up to them to accept the obvious data or reject it.

Mr. Wu commits a **Fallacy of Composition** in using these claims to support a plethora of "paranormal" phenomena; such a conclusion is not supported by the evidence. The section is primarily **Special Pleading**. It is not indisputable that the Ganzfeld experiment results are replicable. Please see: Straight Dope.

Radin's book describes many other replicable psi experiments as well, including ESP, clairvoyance, remote viewing, and psychokinesis. So I highly recommend it. The book, *The Conscious Universe: The Scientific Truth of Psychic Phenomena*, can be ordered from Amazon.com. For more details about the ganzfeld experiments, see the following detailed articles which can be viewed online:

http://www.psych.cornell.edu/dbem/ganzfeld.html

http://www.psych.cornell.edu/dbem/does_psi_exist.html

http://www.psych.cornell.edu/dbem/response_to_hyman.html

Argument #18: "No psychic phenomena has been demonstrated under controlled conditions."

Corollary: "Whenever proper controls are put in place, psi experiments only get average chance results."

This argument is often used by those who don't believe psi is possible, and that only inadequate controls and methods can result in above chance psi results. Again, this is based on another *a priori* assumption that psi is impossible. This argument puts skeptics' mindframe into a closed way of thinking. Any experiment that supports psi is automatically assumed by skeptics to be uncontrolled, and any test that

fails is considered to be adequately controlled. However, this is simply not so because as mentioned in Argument 17 above, the successful ganzfeld and autoganzfeld experiments were controlled. For an in-depth description of the controls used, see the following articles. They can also be viewed online at the URL's listed below.

> Bem, D.J. (1996). Ganzfeld phenomena. In G. Stein (Ed.), Encyclopedia of the paranormal (pp 291-296). Buffalo, NY: Prometheus. Full text available at http://www.psych.cornell.edu/dbem/ganzfeld.html.
>
> Bem, D.J. & C. Honorton (1994). Does psi exist? Replicable evidence for an anomalous process of information transfer. Psychological Bulletin, 115, 4-18. Full text available at http://www.psych.cornell.edu/dbem/does_psi_exist.html.

Also, here is Daryl Bem's rebuttal to Ray Hyman's critique of the ganzfeld.

> http://www.psych.cornell.edu/dbem/response_to_hyman.html

Mr. Wu commits another **ad hominem** fallacy. Bias by skeptics does not invalidate the argument that psi experiments get chance results when properly controlled. Control problems *were* identified in the Ganzfeld experiments.

Skeptics will say that an experiment was uncontrolled even when they were never at the location of the experiment. This happened with the Stanford Research Institute's experiments on famous Israeli psychic Uri Geller. Psychic debunker James Randi (Geller's nemesis) and others who were not at SRI when Geller was tested, made a bunch of accusations against SRI such as poor controls and deliberate skewing of the results on the part of the scientists there, Harold Puthoff and Russell Targ. Since Randi and his skeptics were never there, all they have is speculation based on their closed beliefs.

Post Hoc fallacy. Experimental controls can be determined sufficient or insufficient by examining the protocols. Scientists must accurately report their protocols if their work is to be replicable. Once those protocols are known, they are subject to review and errors can be found, without the need for the reviewers to have "been there".

As Harold Puthoff told me in some email exchanges regarding Randi's criticisms:

> Puthoff:
>
> "Not true at all. They just quote Randi and his pronouncements, e.g., in his book Flim Flam. In Flim Flam, he gives something like 28 debunking points, if my memory serves me correctly. I had the opportunity to confront Randi at a Parapsychology Association conference with proof in hand, and in tape-recorded interaction he admitted he was wrong on all the points. He even said he would correct them for the upcoming paperback being published by the CSICOP group. (He

did not.)

In case one thinks that it was just a case of our opinions vs. his opinions, we chose for the list of incorrect points only those that could be independently verified. Examples: He said that in our Nature paper we verified Geller's metal-bending. Go to the paper, and you see that we said we were not able to obtain evidence for this. He said that a film of the Geller experiment made at SRI by famed photographer Zev Pressman was not made by him, but by us and we just put his name on it. We showed up with an affidavit by Pressman saying that indeed he did make the film. Etc., etc."

"Geller did the same kind of remote viewing in our lab, that more than fifty others from the government and army have done as part of the 25 year remote viewing program. If the whole world has remote viewing abilities, why shouldn't Geller have some?"

"Again, these claims of inadequate controls are generally just repeats of what Randi says. The truth of the matter is that none of Randi's claimed suspected inadequate controls actually had anything to do with the experiments, which of course Randi was not there to know of. This has been independently reported by Scott Rogo somewhere in the literature, who came out specifically to check each of Randi's guesses about inadequate controls and found them inapplicable under the conditions in which the tests were conducted. In fact, all of Randi's suggestions were amateurish compared to the sophisticated steps we took, suspecting as we did everything from magician's tricks to an Israeli intelligence scam."

In fact, during the course of his career, Uri Geller succeeded in 17 controlled experiments in different laboratories. Here are some quotes from the scientists who tested him. Notice the bold emphasis on the controls and strict conditions of the experiments.

"I tested Uri Geller myself under **laboratory-controlled conditions** and saw with my own eyes the bending of a key which was not touched by Geller at any time. There was a group of people present during the experiment who all witnessed the key bending in eleven seconds to an angle of thirty degrees. Afterwards we tested the key in a scientific

laboratory using devices such as electron microscopes and X-rays and found that there was no chemical, manual or mechanical forces involved in the bending of the key."

Professor Helmut Hoffmann (Department of Electrical Engineering,

Technical University of Vienna, Austria)

"Through intense concentration, Uri was able to bend a 3/8" cold rolled steel bar under **controlled conditions**, as he rubbed the top of it with his forefinger. I was sitting very close to him during this experiment. On another occasion, a radish seed sprouted and grew 1/2" as he held it in his hand. I watched this very closely as well. "

Jean Millay PhD. (Saybrook Institute U.S.A.)

"Uri Geller was tested in my laboratory at UCLA. During the experiments in Kirlian photography and after hundreds of trials, he produced three extraordinary photographs in which flashes of energy were clearly visible. What wonderfully welcome sights they were! I have also tested Uri's watch-fixing and metal-bending abilities. He has demonstrated

these to me under **controlled scientific conditions**, in a most convincing manner".

Dr. Thelma Moss (Professor of psychology at UCLA and one of the first

U.S. researchers to experiment with Kirlian photography - U.S.A.)

"Uri bent a strong heat-treated alloy bar held by myself and my assistant at each end. There was absolutely no pressure exerted by Uri while the bar was bending. All the **controlled experiments** I conducted with Uri Geller have been described in Sciences et Avenir, No. 345, pp. 1108-1113."

Professor Charles Crussard (Professor of Metallurgy, School of Mines,

Paris, and Scientific Director of Pecheney, France)

"Uri Geller, as a psychic genius, has been able to demonstrate the repeatability of **controlled scientific psychic experiments**. Thereby he has proved the reality of psychic phenomena (such as telekinesis, clairvoyance and telepathy)."

Professor P. Plum, MD (Emeritus Professor of Pediatrics, University of

Copenhagen, former chairman of the Danish Medical Research Council -

Denmark)

"We have observed certain phenomena with the subjects [including Uri Geller] for which we have no scientific explanation. As a result of Geller's success in this experimental period, we consider that he has demonstrated his paranormal, perceptual ability in a convincing and unambiguous manner." (The results of these experiments were published in the respected British journal Nature, Vol. 251, No. 5).

Dr Harold Puthoff and Russell Targ (Stanford Research Institute - California, U.S.A.)

"Laser physicists Russell Targ and Harold Puthoff of Menlo Park's Stanford Research Institute admit their kind of research invites chicanery and trickery. They have taken special precautions, they said, to conduct the Stanford Research experiments under **doubly strict laboratory conditions**."

"Under these conditions, they said, no magician has been able to duplicate through trickery the psychic feat performed by Uri Geller and others. Some won't even try."

Los Angeles Times, Monday July 28, 1975

"I have personally witnessed and experienced on two occasions the metal bending abilities of Uri Geller. These experiments were conducted under **rigorous laboratory conditions**. In these two experiments the thick steel rod I was holding and observing carefully bent, and continued to bend, in my own hand. One rod bent to 90 degrees during a period of approximately six minutes while I was holding it. The other steel rod bent after Uri Geller stroked it and continued bending on a glass table without anyone touching it. The steel rods were provided by myself. I consider the Geller effect to be a phenomena which should be studied seriously by science. "

"A scientist would have to be either massively ignorant or a confirmed bigot to deny the evidence that the human mind can make connection with space, time and matter in ways which have nothing to do with the ordinary senses. Further, he cannot deny that these connections are compatible with current thinking in physics, and may in the future become accepted as a part of an extended science in which the description 'paranormal' no longer applies, and can be replaced by 'normal'."

Dr. Kit Pedler, (Head of the Electron Microscopy department, University of London:)

As you can see, the testimony of experts who tested Geller appears convincing indeed. Besides, the

failed psi experiments often cited by skeptics are almost always done by skeptics and debunkers themselves. (Gee, how unbiased is that?) The results of real scientists, fortunately, are not so one-sided as skeptics would have you believe.

Appeal to Authority and **Appeal to Ignorance**. The career of Mr. Geller has been hotly debated elsewhere. We won't debate it here. It has been said repeatedly that scientists are not necessarily qualified to either detect trickery or to control for it. None of the examples given by Mr. Wu give details of the "strict controls". These "real scientists" may not have been qualified to test for psi effects or for trickery. Dr. Pedler commits **post hoc** fallacy.

Argument # 19: "Miracles are impossible and defy everything we know about science and anatomy."

This is an extreme claim and while not all skeptics adhere to it, there are some that do nevertheless. This claim is based on an *a priori* assumption that our known physical laws are all there is. How would skeptics know all that is possible and impossible though? Our natural laws are our interpretation of how the universe works. These laws are subject to change as new discoveries are made, which is how science has always been. (See rebuttals to Argument # 10) Current scientific principles only reflect the current knowledge that has been tested and replicated, not all that is or can be. In fact, what is considered to be miraculous or supernatural at first has often turned out to be natural once it's understood. Dean Radin elaborates on this in his book *The Conscious Universe: The Scientific Truth of Psychic Phenomena*: (page 19)

> "But a few hundred years ago virtually all natural phenomena were thought to be manifestations of supernatural agencies and spirits. Through years of systematic investigation, many of these phenomena are now understood in quite ordinary terms. Thus, it is entirely reasonable to expect that so-called miracles are simply indicators of our present ignorance. Any such events may be more properly labeled first as paranormal, then as normal once we have developed an acceptable scientific explanation. As astronaut Edgar Mitchell put it: "There are no unnatural or supernatural phenomena, only very large gaps in our knowledge of what is natural, particularly regarding relatively rare occurrences.""

History has shown that those who use the word "impossible" are usually proven wrong one way or another. Many things that were said to be impossible at one point were later proved to be possible such as flight, travel into space, relativity, quantum theory, etc. As Arthur C. Clarke, inventor of the communications satellite and author of *2001 A Space Odyssey*, states:

> "When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong."

- Arthur C. Clarke's First Law

We've been over this before. Mr. Wu and Dr. Radin both commit the **Straw Man** fallacy as well as **False Analogy** by equating previously unexplained natural phenomena with purported miracles. Mr. Wu's examples do not invalidate the argument that miracles violate what is known of science and anatomy. A few points:

1. The laws of nature are not in and of themselves subject to change. Our understanding of them may change, but the laws themselves do not.
2. Knowledge is incomplete, but it does not follow that any given thing outside that knowledge necessarily exists or can exist.
3. Arthur C. Clarke did not invent the communications satellite. He did suggest the possibility of communications satellites, but he did not invent them.
4. Arthur C. Clarke is again quoted out of context. He was referring to technology, not paranormal "miracles".

In either case, miracles do happen. Most doctors and nurses can attest to this. The question is, and skeptics like to point this out too, in how you define a miracle. Skeptics will usually accept miracles such as the miracle of life and science, or miracles due to flukes and rare chance occurrences, but not if they involve supernatural forces or divine intervention. Several possible explanations of miracles are supernatural forces, divine intervention, psychic abilities, unknown powers and healing abilities of the mind, spontaneous remission of illness, chance, or natural causes not yet understood. Whatever the case, the "miracles are impossible" argument is illogical because miracles *have* happened already. There is ample evidence of this both from anecdotals and hard evidence from X-Rays of the affected region of the patient's body that were taken before and after the miracle. One famous documented case of a miracle is the case of Vittorio Michelli. Michael Talbot in his book *The Holographic Universe* describes the case:

Mr. Wu again commits the **Straw Man** fallacy and **False Analogy** by equating paranormal miracles with "miracles of life and science". Mr. Wu commits **Equivocation**; he does not clearly consistently use the term "miracle". Skeptics hold that miracles of supernatural origin violate the laws of nature. This cannot be confused with the definition of miracle as a singular event. Many things are considered to be miraculous which are not. Anecdotals, once again, do not establish the reality of supernatural miracles.

"Perhaps the most powerful types of beliefs of all are those we express through spiritual faith. In 1962 a man named Vittorio Michelli was admitted to the Military Hospital of Verona, Italy, with a large cancerous tumor on his left hip (see fig. 11). So dire was his prognosis that he was sent home without treatment, and within ten months his hip had completely disintegrated, leaving a the bone of his upper leg floating in nothing more than a mass of soft tissue. He was, quite literally, falling apart. As a last resort he traveled to Lourdes and had himself bathed in the spring (by this time he was in a plaster case, and his movements were quite restricted). Immediately on entering the water he had a sensation of heat moving

through his body. After the bath his appetite returned and he felt renewed energy. He had several more baths and then returned home.

Over the course of the next month he felt such an increasing sense of well-being he insisted his doctors X-ray him again. They discovered his tumor was smaller. They were so intrigued they documented every step in his improvement. It was a good thing because after Michelli's tumor disappeared, his bone began to regenerate, and the medical community generally view this as an impossibility. Within two months he was up and walking again, and over the course of the next several years his bone completely reconstructed itself (see fig. 12).

A dossier on Michelli's case was sent to the Vatican's Medical Commission, an international panel of doctors set up to investigate such matters, and after examining the evidence the commission decided Michelli had indeed experienced a miracle. As the commission stated in its official report, "A remarkable reconstruction of the iliac bone and cavity has taken place. The X rays made in 1964, 1965, 1968 and 1969 confirm categorically and without doubt that an unforeseen and even overwhelming bone reconstruction has taken place of a type unknown in the annals of world medicine." (O'Reagan, Special Report, p. 9.)"

False Analogy, **Special Pleading**, **post hoc**, and **Appeal to Ignorance**. Despite the comments of the Vatican Medical Commission, regeneration of bone is not unknown to medicine. Formation of false joints is not unknown to medicine. Spontaneous remisson of tumors is not unknown to medicine. Michelli's "miracle cure" took place over several years. We are not told what medical treaments his doctors were already giving him, except that he was in a plaster cast. This story gives insufficient evidence for the conclusion that a supernatural miracle took place.

Some skeptics claim that miraculous healings are due to flukes in the probability curve. Their reasoning goes like this*: "Most people who are seriously ill are prayed for or seek divine intervention. The ones that don't make it are considered tragedies and forgotten cases. The few cases that result in a sudden complete recovery or go into spontaneous remission are then noticed and attributed to prayer or divine intervention. These cases of course, are the ones that get media attention."* However, this explanation is a lot like saying that anything we don't understand must be due to chance. Sure spontaneous remission happens as well, even to those who are Atheists and those that haven't been prayed for. But even so, who's to say that spontaneous remission is solely the result of chance and luck? The bottom line is that miracles do happen, that is a fact. How we interpret them is the issue.

Mr. Wu commits the fallacies of **Appeal to Ignorance** and **Circular Reasoning**. It has not been established that supernatural miracles are a "fact". Interpretation is not the question. The issue is whether an event is a supernatural miracle at all.

Argument #20: "Alternative medical practices such as acupuncture, homeopathy, psychic healing, etc. have no scientific basis and all work due to the placebo effect or the power of suggestion."

This is a very presumptuous statement and a rush to judgment. It basically presumes that if we don't understand how or why something works, then it must be due to chance, the placebo effect or the person's own imagination. Since we don't know everything there is to know about the body and mind, why should we assume that only what we understand is real and the rest is superstition? There are already many functions, mechanisms and processes of the body and mind that we don't fully understand. Some examples of these are photographic memory, the ability of people with autism to perform lightning mental calculations, extraordinary and gifted musical aptitude in child prodigies, certain mental disorders, dreaming, aging, consciousness itself, etc. Now if everything we didn't understand was due to superstition, then nothing would have really worked until we understood how it worked, which is ludicrous and almost anything in nature can prove that wrong. Likewise, we still don't understand why women who live together tend to menstruate in the same cycles either, but that doesn't mean that it's not true. Just because we don't understand why something works, doesn't mean that it doesn't work. Reality does not conform to what we are able to understand. There are not two strict categories where either 1) we understand it, or 2) it's just a placebo effect.

Mr. Wu continues to commit the **Straw Man** and **False Analogy** fallacies. He says, in essence, that because physical reality exists, the supernatural must exist. None of the examples Mr. Wu gives are supernatural in origin. He has not invalidated the argument. Until research definitively shows otherwise, we can only assume that the benefits result from the placebo effect.

The important thing is that if an alternative treatment works, then we should try to understand *how* and *why* it works, rather than trying to put it on the same significance level as placebos. Understanding the mechanism behind the placebo effect is important, as it teaches us more about the mind/body connection. Marcello Truzzi, one of the founders of CSICOP (who broke away from it later due to its rising fanaticism), has emphasized this to me before. Michael Talbot also pointed out in *The Holographic Universe*: (page 91)

> "We now know that on average 35 percent of all people who receive a given placebo will experience a significant effect, although this number can vary greatly from situation to situation. In addition to angina pectoris, conditions that have proved responsive to placebo treatment include migraine headaches, allergies, fever, the common cold, acne, asthma, warts, various kinds of pain, nausea and seasickness, peptic ulcers, psychiatric syndromes such as depression and anxiety, rheumatoid and degenerative arthritis, diabetes, radiation sickness, Parkinsonism, multiple sclerosis, and cancer."

Mr. Wu again resorts to the **Straw Man** fallacy and **False Analogy**. The quote from Michael Talbot supports the skeptic argument that placebo effect is responsible for the success of "alternative" medical treatments. Until the placebo effect is better understood, one cannot assume that it is caused by supernatural forces. If a given treatment happens to trigger a placebo effect, it does not follow that the treatment itself is medically sound, because the placebo effect cannot be induced reliably.

> Besides, many alternative medicine practices are based on the power of thought and visualization. For those, a case can be made for the validity of the mind over matter theory since labs like Princeton's PEAR research labs have pretty much proven that micro-psychokinesis exist (www.princeton.edu/~pear/index.html). Even before this, an abundance of medical research already proved that a mind body connection exists far deeper than we had thought. In fact, studies have been done to prove the power of mental visualization techniques over the body. For example, Dr. O. Carl Simonton, a radiation oncologist and medical director of the Cancer Counseling and Research Center in Dallas, Texas, did the follow study described by Michael Talbot in *The Holographic Universe*: (page 83)
>
> > "In a follow-up study, Simonton and his colleagues taught their mental imagery techniques to 159 patients with cancers considered medically incurable. The expected survival time for such a patient is twelve months. Four years later 63 of the patients were still alive. Of those, 14 showed no evidence of disease, the cancers were regressing in 12, and in 17 the disease was stable. The average survival time of the group as a whole was 24.4 months, over twice as long as the national norm. (Footnote 1) ……. Simonton has since conducted a number of similar studies, all with positive results."
> >
> > Footnote 1 from back of book:
> >
> > 1. Stephanie Matthews-Simonton, O. Carl Simonton, and James L. Creighton, Getting Well Again (New York: Bantam Books, 1980), pp. 6-12.

When a given therapy relies on thought and visualization, it is thereby subjective in nature. More than half of Dr. Simonton's patients died within the expected timeframe of twelve months, yet only the longer-term surviors are counted. This is **Hasty Generalization**. The "average survival time" may be mathematically correct, but incorrectly implies that all 159 patients lived longer than expected. A mind/body connection is not surprising since the brain, widely considered to house the mind, is part of the body. Dr. Simonton's study does not establish a supernatural cause for the remissions or for the stability cases. Concurrent treatments are not detailed. Mr. Wu yet again resorts to **False Analogy** by citing the PEAR research, which has not definitively proven any kind of psychokinesis.

> Although there are plenty of quack things in alternative medicine today, the fact is that certain types of alternative healing practices have already been proven to work. Skeptics are often misinformed on

these. One strong example is Acupuncture. When first introduced in the west, it was thought to be superstition and only due to the placebo effect. However, as it was more and more commonly practiced, doctors and the public came to realize that there was something to it after all. In fact, the American Medical Association now says that acupuncture is an effective form of treatment. There are also plenty of studies to support this. Michael Talbot describes some of them in *The Holographic Universe:* (page 113-116)

> "Although still controversial, acupuncture is gaining acceptance in the medical community and has even been used successfully to treat chronic back pain in racehorses.
>
> In 1957 a French physician and acupuncturist named Paul Nogier published a book called *Treatise of Auriculotherapy*, in which he announced his discovery that in addition to the major acupuncture system, there are two smaller acupuncture systems on both ears. He dubbed these acupuncture microsystems and noted that when one played a kind of connect-the-dots game with them, they formed an anatomical map of a miniature human inverted like a fetus (see fig. 13). Unbeknownst to Nogier, the Chinese had discovered the "little man in the ear" nearly 4,000 years earlier, but a map of the Chinese ear system wasn't published until after Nogier had already laid claim to the idea.
>
> The little man in the ear is not a just a charming aside in the history of acupuncture. Dr. Terry Oleson, a psychobiologist at the Pain Management Clinic at the University of California at Los Angeles School of Medicine, has discovered that the ear microsystem can be used to diagnose accurately what's going on in the body. For instance, Oleson has discovered that increased electrical activity in one of the acupuncture points in the ear generally indicates a pathological condition (either past or present) in the corresponding area of the body. In one study, forty patients were examined to determine areas of their body where they experienced chronic pain. Following the examination, each patient was draped in a sheet to conceal any visible problems. Then an acupuncturist with no knowledge of the results examined only their ears. When the results were tallied it was discovered that the ear examinations were in agreement with the established medical diagnoses 75.2 percent of the time. (Footnote 72)
>
> (In the book, a diagram of a fetus shape in the ear is here)
>
> (Figure 13 The Little Man in the Ear. Acupuncturists have found that the acupuncture points in the ear form the outline of a miniature human being. Dr. Terry Oleson, a psychobiologist at UCLA's School of Medicine, believes it is because the body is a hologram and each of its portions contains an image of the whole.)

Ear examinations can also reveal problems with the bones and internal organs. Once when Oleson was out boating with an acquaintance he noticed an abnormally flaky patch of skin in one of the man's ears. From his research Oleson knew the spot corresponded to the heart, and he suggested to the man that he might want to get his heart checked. The man went to his doctor the next day and discovered he had a cardiac problem which required immediate open-heart surgery. (Footnote 73)

Oleson also uses electrical stimulation of the acupuncture points in the ear to treat chronic pain, weight problems, hearing loss, and virtually all kinds of addiction. In one study of 14 narcotic addicted indiviuals, Oleson and his colleagues used ear acupuncture to eliminate the drug requirements of 12 of them in an average of 5 days and with only minimal withdrawal symptoms. (Footnote 74) Indeed, ear acupuncture has proved so successful in bringing about rapid narcotic detoxification that clinics in both Los Angeles and New York are now using the the technique to treat street addicts.

Why would the acupuncture points in the ear be aligned in the shape of a miniature human? Oleson believes it is because of the holographic nature of the mind and body. Just as every portion of a hologram contains the image of the whole, every portion of the body may also contain the image of the whole. "The ear holograph is, logically, connected to the brain holograph which itself is conected to the whole body," he states. "The way we use the ear to affect the rest of the body is by working through the brain holograph." (Footnote 75)

Oleson believes there are probably acupuncture microsystems in other parts of the body as well. Dr. Ralph Alan Dale, the director of the Acupuncture Education Center in North Miami Beach, Florida, agrees. After spending the last two decades tracking down clinical and research data from China, Japan, and Germany, he has accumulated evidence of eighteen different microacupuncture holograms in the body, including ones in the hands, feet, arms, neck, tongue, and even the gums. Like Oleson, Dale feels these microsystems are "holographic reiterations of the gross anatomy," and believes there are still other such systems waiting to be discovered. In a notion reminiscent of Bohm's assertion that every electron in some way contains the cosmos, Dale hypothesizes that every finger, and even every cell, may contain its own acupuncture microsystem. (Footnote 76)

Richard Leviton, a contributing editor at East West magazine, who has written about the holographic implications of acupuncture microsystems, thinks that alternative medical techniques - such as reflexology, a type of massage therapy that involves accessing all points of the body through stimulation of the feet, and iridology, a diagnostic technique that involves examining the iris of the eye in order to determine the condition fo the body - may also be

indications of the body's holographic nature. Leviton concedes that neither field has been experimentally vindicated (studies of iridology, in particular, have produced extremely conflicting results) but feels the holographic idea offers a way of understanding them if their legitimacy is established."

Corresponding footnotes from back of the book:

72. Terrence D. Oleson, Richeard J. Kroening, and David E. Bresler, "An Experimental Evaluation of Auricular Diagnosis: The Somatotopic Mapping of Musculoskeletal Pain at Ear Acupuncture Points," Pain 8 (1980), pp. 217-29.

73. Private communication with author, September 24, 1988.

74. Terrence D. Oleson and Richard J. Kroening, "Rapid Narcotic Detoxification in Chronic Pain Patients Treated with Auricular Electroacupuncture and Naloxone," International Journal of the Addictions 20, no. 9 (1985), pp. 1347-60.

75. Richard Leviton, "The Holographic Body," East West 18, no. 8 (August 1988), p. 42.

76. Ibid., p. 45.

False Analogy. Ongoing research may show that acupuncture "works", but cannot show that the religious basis for acupuncture is true. Studies have shown inconsistent results. It should be no surprise that poking needles into nerve fibers generates a physical response. If there is a mechanism behind acupuncture, it is most likely placebo and probably not a supernatural mechanism. Placebo effects can peform better than surgery. Please see: Placebo Effect: The Power of the Sugar Pill. Homeopathy is scientifically invalid. Please see: Homeopathy - The Ultimate Fake.

More recently, an experiment described in *Discover* magazine (September 1998 issue) revealed that neurological evidence from MRI scans of the brain supported Acupuncture. Here are some excerpts from the magazine, which you can read online at http://www.discover.com/sept_issue/acupunc.html:

"Cho's unexpected relief prodded his professional curiosity. As a physicist working in radiology, Cho develops ways to image the complex inner workings of the body; one of his inventions was a prototype PET scanner around 1975. How, he wondered, could inserting needles into seemingly random points on the body possibly affect human health? So he decided to take a closer look, and what he found astounded him. While sticking needles into a few student volunteers, he took pictures of their brains and discovered that by stimulating an acupuncture point said to be associated with vision-but that is nowhere near anything known to be connected to the eyes-he could indeed trigger activity in the very part of the brain that controls vision. There

just might be something to this acupuncture thing, he figured…….

To test that premise, Cho strapped student volunteers into an fMRI (functional magnetic resonance imaging) machine. While standard MRI provides static cross-sectional pictures of structures in the body, functional MRI goes further to reveal how those structures are working. It measures minute changes in the amount of oxygen carried in the blood, which is presumably a rough measure of glucose uptake by various tissues and thus a good indicator of which tissues are active; the results can be viewed as colorful fmri brain activation maps.

Cho first stimulated the eyes of the volunteers through traditional means: he flashed a light in front of them. The resulting images, as expected, showed a concentration of color-an increase in activity-in the visual cortex, the portion of the brain that is known to be involved in eye function. Then Cho had an acupuncturist stimulate the acupoint VA1. In one person after another, the very same region of the brain-the visual cortex-lit up on the fMRI image.

As odd as it seemed, sticking a needle into someone's foot had the very same effect as shining a light in someone's eyes. And this was not the generalized analgesic effect, produced by the primitive limbic system, that was seen in the pain studies; this was a function-specific response occurring in the brain's cortex, the area responsible for such sophisticated functions as speech and hearing, memory and intellect. Moreover, the magnitude of brain activity seen on acupuncture stimulation was nearly as strong as that elicited by the flash of light.

"It was very exciting," recalls Cho. "I never thought anything would happen, but it's very clear that stimulating the acupuncture point triggers activity in the visual cortex." To eliminate the possibility of a placebo effect, Cho also stimulated a nonacupoint, in the big toe. There was no response in the visual cortex.

Next, Cho tried each form of stimulation over time, twisting the needle for a moment or flashing the light, resting, then repeating. As before, the fMRI images were remarkably similar for acupuncture and for light stimulation. The time-course study was also done using the three other vision acupoints on the foot. The results were again consistent: except in the case of VA2, each acupoint lit up the visual cortex exactly as the light stimulation had done. This time, however, Cho noticed something else. When the activation data were graphed to show the intensity of the response over time, he saw that there were two distinct reactions among the dozen volunteers. During the acupuncture phase, some showed an increase in activity, while others showed a decrease. In other words, in some people, oxygen consumption in that brain region increased, while in others, it decreased.

"I figured we must have made a mistake," says Cho. Repeating the experiment, however, he saw the same results every time. "Finally one of the acupuncturists mentioned, 'Oh, yes, it's yin and yang.'" Cho asked him which subjects were yin and which were yang, and without seeing the data, the practitioner correctly pointed out who had shown an increase in activity (yang) and who had had a decrease (yin) in 11 of 12 cases. "I don't know how to explain it," Cho says.

Like many preliminary scientific reports, Cho's small study raises more questions than it answers. Still, he has demonstrated new functional effects of acupuncture. "Classically, acupuncture was the ultimate in experimentation; people collected data for thousands of years," says Joie Jones, professor of radiological sciences at the University of California at Irvine and coauthor of the study. "They noticed that when you applied a needle in one position, it would have an effect in another part of the body. But the connection through the brain was never made. With these studies, we've demonstrated that for at least some acupuncture points it goes through the brain."

Yet even if it does go through the brain, how does stimulating a specific point on the foot trigger activity in the part of the brain that controls vision? There is no explanation for that either, says Cho, although he suspects that the path is along the nervous system. If that proves to be true, it's probably not the same pathway by which acupuncture causes the release of endorphins, says Pomeranz. "That endorphins are released by stimulating certain types of nerves in fibers anywhere in the body, that's understood. But that there is a specific connection between your toe and your visual system is really bizarre. That's really mind-boggling."

Despite the absence of clear-cut explanations, acupuncture's clinical results are attracting interest from mainstream medicine. A panel of independent experts convened last year by the National Institutes of Health concluded that acupuncture is indeed effective in treating nausea due to anesthesia and chemotherapy drugs. It is also helpful in treating post-surgical and other forms of pain. Moreover, the panel noted, despite the pervasive belief in the superior clinical effects of Western medicine, plenty of conventional treatments for chronic pain show the same success rate as acupuncture-and often with harmful side effects.

One of the more provocative acupuncture studies used SPECT (single photon emission computed tomography) to record images of the brains of patients with chronic pain. That study, by Abass Alavi, chief of nuclear medicine at the University of Pennsylvania Hospital, measured blood flow to the brain structures that are suspected of releasing endorphins in response to acupuncture stimulus-the thalamus, hypothalamus, and brain stem. Comparing baseline images of people who were in pain with images taken after they received acupuncture treatment, Alavi found clear evidence of increased blood flow in the thalamus and the brain stem. He also found

that treated patients felt less pain.

Like Cho, Alavi was not a believer in acupuncture or other forms of Chinese medicine before doing this study. "I thought acupuncture was more or less psychological, not an objective effect," he says. "I did this study just for fun. I figured nothing would show up.""

Post hoc fallacy. Mr. Wu correctly states that the article supports the argument that acupuncture produces physical effects. However, an article in Discover magazine is not evidence of a supernatural basis for acupuncture. It was not established that the concepts of yin, yang, or chi are true. It should be no surprise that nerve stimulation involves the brain. Alavi's work supported the hypothesis that acupuncture triggered endorphin release.

Some skeptics have agreed that Acupuncture may be effective for some things, but they maintain that the theory of chi and meridians on which acupuncture is based, has no merit. Skeptic Bob Carroll of *The Skeptics Dictionary* (www.skepdic.com) emphasized this in his entry on Acupuncture. What they don't understand about chi though is that it not only works and gets results, but those using it also feel its effects too, the same way you would feel heat from a fire. In fact, this was shown on one episode of Bill Moyers' *Healing and the Mind* series. Moyers himself experienced this firsthand. A chi gong healer put his finger near Moyer's arm and Moyer smiled and said he definitely felt the heat go into his arm. I too have had this experience when I was in Taiwan. In the same episode, a chi master was also shown to be able to remain stationary while lots of other people tried to move him. Chi practitioners can see and test chi at work just like we see gravity at work. Chi has been used by martial artists, tai chi practitioners, and quigong practitioners, to heal, move objects/people without touching them, strike hard body blows with a light touch, remain stationary when groups of strong burly men try to move them, snuff out candles from across the hallway, and other feats. While everyone supposedly has chi, learning to control it takes years, though some seem to be able to summon it naturally. All a skeptic has to do to learn about chi is to visit a martial arts dojo where chi is taught and used. If they ask, a demonstration of chi can be made either on them or one of the students. I have done this myself and seen demonstrations such as masters sparring striking blows onto students (apparent by the painful grimace on the students' faces) without barely even touching them, if at all. I have also seen chi practitioners in Taiwan bend long metal steel poles with just their necks, and I inspected the poles afterward and they were made of steel alright. (I was told this was a common chi feat in Asia.) One time in a dojo, I held chopsticks in my own hands while a student used the paper the chopsticks were taken out of, to break them. (I still have the broken chopsticks today.) It would really be poetic justice I think, for a skeptic to feel the effects of chi firsthand.

Mr. Wu again resorts to anecdotes as evidence. This is, yet again, the **Appeal to Ignorance**. These anecdotes took place in uncontrolled conditions. They are thus invalid evidence. The physics involved in breaking boards,

bending metal poles, blowing out candles, breaking chopsticks, etc. are well known. Please see: Breaking Boards - The Physics of a Karate Chop. No "chi" required. Mr. Wu finishes with a possible **Appeal to Consequences** fallacy.

> Finally, I would like to share some good advice on how to approach alternative medicine and supplements that I've gotten from a doctor who lives in our neighborhood, Dr. Frank James (who volunteers his time to treat patients in India and Tibet as part of humanitarian projects, see for more on him and his humanitarian projects).

This is **Appeal to Pity**. Dr. James's humanitarianism has no bearing on the validity of "alternative medicine".

> With alternative medicine we should keep one thing in mind. Although certain types of alternative medications, herbal supplements, nutritional supplements, etc. may not be proven by double-blind studies to work on the population at large, it doesn't mean that it's not effective for individual people. For example, some supplements, such as herbs, grapeseed extract, or anti-oxidants, may have phenomenal health benefits for some people, yet only proven to be as effective as placebos in most scientific studies. What works well for some people may not in studies that measure effects on the population at large. Therefore, each person has to try out different medications and supplements (as long as they're safe of course) to see what works for them. Conversely, medications and supplements that are proven effective in studies on the population at large may not necessarily work for everyone either. Each person's physiology and biochemical reactions are different and therefore each person needs to find out what works for them.

Dr. James commits a **Fallacy of Ambiguity**, specifically the **Fallacy of Division**. His argument can be used to justify anything. What "works" for one person won't "work" for another, but this is not valid justification for using improperly tested "alternatives". Each person's physiology may differ in some respects, which partly accounts for the numerous conventional -- properly tested -- medications, but tthe similarities outnumber the differences. As mentioned earlier, even the placebo effect can outperform conventional methods in some circumstances -- but not consistently or reliably.

> **Argument # 21: The Skeptical explanation for answered prayers.**
>
> Typical usage: "Prayer only works because you selectively remember the answered prayers but not the unanswered prayers, which occur by chance and coincidence."
>
> This is argument is pure speculation. Again, just because skeptics can't see how a God could exist or how thought intentions could affect external reality doesn't mean that any claim of answered prayer is merely the result of chance. There are several counter-arguments to this and compelling evidence that prayer works as well.
>
> First of all, we don't even know what a coincidence really is or even if it really exists. It's just a term to

define something that behaves unpredictably or doesn't behave according to a pattern that we can see. According to physicist David Bohm, there may be two kinds of order in the universe, implicit and explicit. (See his book *Wholeness and the Implicate Order*) Things that appear random may in fact contain a higher degree of order that we can't perceive.

Mr. Wu resorts once again to **Appeal to Ignorance**. Coincidence is understood quite well. Please see: Coincidence. Mr. Wu confuses randomness with coincidence. David Bohm's mights and maybes are not evidence that prayer works.

Second, as I heard one preacher said "If answered prayer is coincidence, then there sure are many more coincidences that come up when I pray than when I don't pray." For spiritual or religious people, praying results in a higher rate of coincidences that help manifest the desire or wish, often higher than by ordinary chance. Of course, there are countless anecdotal accounts of prayer answered in miraculous or sometimes humorous ways. As Theology Professor Greg Boyd of Bethel University told me in an email:

> "My wife prayed that God would honor a "deal" with her about who she would marry (this deal included her future husband saying a certain particularly unusual phrase), and despite all my frustration with knowing she had made such a deal, I said what was "included" in her deal with God without ever actually knowing what the phrase was, not only that, it was the last thing I said to her, several times, immediately before I distinctly felt God leading me to propose to her."
>
> "The phrase was "It's good to be alive." This seems like a fairly unusual thing to say since it is so obvious at one level. Anyway, it is not something that I would be likely to say on an average day. On the day of our "engagement" I said it several times at just the right moment (during a prayer about our relationship) and actually the prayer (we were praying together) immediately followed a longish conversation about why I didn't believe in engagement periods at all. It seems God has quite a sense of humor at times."

Appeal to Authority and **Appeal to Popularity**. Mr. Wu continues to cite anecdotal evidence. This is, yet again, **Appeal to Ignorance**. Just because we can't prove it isn't so doesn't make it so. Human courtship is a bit more complex than Professor Boyd suggests. He ignores the possibility of nonverbal communication that may or may not have taken place. We can only speculate. It becomes a **Complex Question** that cannot be answered and is thus invalid as evidence of anything.

== ANECDOTES SNIPPED ==

Again, we apologize for cutting a large section of personal stories from Mr. Wu. Interested parties may read them in his original document. The fallacies of anecdotal evidence have already been mentioned.

Fourth, and perhaps most importantly, recent studies on prayer done by Duke University and others have revealed the effect that the power of prayer has on those who are critically ill. Double-blind tests

done have shown that those who were prayed for recovered much more quickly and at a higher success rate than those not prayed for. As one of Duke's own articles summarized: (http://www.dukenews.duke.edu/Med/MANTRA2.HTM)

> "In a feasibility study conducted by the Duke University and Durham Veterans Affairs medical centers, angioplasty patients with acute coronary syndromes who were simultaneously prayed for by seven different religious sects around the world did 50 percent to 100 percent better during their hospital stay than patients who were not prayed for by these groups."

Of course, Christian prayers are not the only ones that get answered. In fact, amazing accounts of answered prayers are common from all faiths and beliefs. This is even true of the spell work of Wiccans and those into witchcraft. Some propose that rather than answered prayers being the result of deities, they could also be due to the psychic energy of the one praying, in conjunction with the true intent of their higher selves. While we don't know for sure whether God or psychic mental abilities are the force behind answered prayers, the bottom line is that prayer does seem to work in ways that ordinary coincidences can't explain.

Mr. Wu fails to understand the mathematics of coincidence. The Duke study does not explain how angioplasty recovery was quantified into percentages. Subjective at best. Mr. Wu finishes with **Appeal to Ignorance**.

Argument #22: The Skeptical explanation for precognitive dreams.

Typical usage: "The only reason that precognitive dreams come true is that you selectively remember when your dream comes true but not when they don't, thus attribute it to psychic precognition."

We don't know that much about where dreams come from and what they mean to assume that they're nothing but random thoughts and images. We understand how people dream, but not why. Skeptics again are inadvertently claiming to know too much to declare something false or coincidental. In addition, the fact that there is convincing evidence for psychic phenomena in general such as telepathy from the numerous labs that did the ganzfeld experiments, psychokinesis from Princeton's 20 year PEAR programs, and remote viewing/clairvoyance from SRI and other research labs, makes precognition much more probable than otherwise. You see, when one form of psi is proven, it raises the plausibility of the others by indicating that there are indeed paranormal powers of consciousness that we don't understand.

The case for precognitive dreams is based on anecdotal evidence and **Appeal to Ignorance**. Mr. Wu again resorts to **False Analogy**, **Begging the Question**, a **Fallacy of Composition** and the **Fallacy of Equivocation**. The PEAR statistics do not increase the plausibility of any paranormal powers because the mechanism behind the results of the PEAR meta-analysis has not been established. It is unreasonable to

assume it is due to supernatural causes. No form of psi has been proven. Even if "remote viewing" were proved, it would not follow that "precognition" was any more plausible than before.

Argument # 23: The Dying Brain Hypothesis for Near Death Experiences.

Typical Usage: "Near death experiences (NDE's) are simply hallucinations that stem from the result of a dying brain that shuts down in a way that produces those experiences. They aren't evidence of an afterlife."

This argument, called the Dying Brain Hypothesis, is purported by many skeptics and materialists. NDE Skeptic and University of London Psychology Professor Susan Blackmore is one of the main proponents of this. Her book *Dying to Live* argues that the NDE is merely the result of hallucinations from the brain that erupt as it malfunctions and collapses. The main criticism of her work by other NDE experts tends to be that she dismisses the vast data that doesn't fit into her hypotheses. Kenneth Ring pointed this out in an article he wrote for the Winter 1995 issue of the *Journal of Near Death Studies*. Greg Stone, an NDE expert on my discussion list, recently wrote an elaborate critique of Blackmore's book in his article *A Critique of Susan Blackmore's Dying to Live and Her Dying Brain Hypothesis,* which can be read at http://www.cinemind.com/atwater/zapsb.html

It should be especially noteworthy to skeptics that Ms. Blackmore herself, in response to Greg's critique of her book, admitted that her theories do not prove the Dying Brain Hypothesis. This of course, is a big blow to the many Skeptics and CSICOP members who make such a claim on her behalf. With her definitive statement on the record now, it should no longer be an issue. Here are her words:

> Blackmore:
> I have not claimed that any of my work proves the Dying Brain Hypothesis. In fact no amount of research ever could. The most I could hope to do, and in fact what I tried to do in Dying to Live, is to show that we can account for all the major features of the NDE without recourse to such ideas as a spirit, a soul, or life after death.

Mr. Wu misunderstands the difference between hypothesis and theory. Hypotheses are not proved -- they are formulated and tested, revised, then tested again. Please see: Introduction to the Scientific Method. Susan Blackmore's statement is correct and is not "a big blow" to any skeptics anywhere. The case for NDE as a supernatural phenomenon is based on **Appeal to Ignorance**.

Although many features of the NDE can be explained by neurological or physiological processes, this doesn't explain the message being sent. In fact, the neurological effects could just be the result effects of the NDE, rather than the cause. Perhaps the TV/radio analogy to the NDE helps explain this best. As NDE researcher and webmaster Kevin Williams relates:

> "Such reductionism, however, may only be explaining the mechanism of the near-death experience, not necessarily the near-death experience itself. In the same way, it is possible to reduce a television set to its basic elements such as electrodes and tubes, but one cannot satisfactorily explain the television show being played on it using reductionist terms. Concerning the chemical basis of the near-death experience and using this television analogy, if the brain can be thought of as a television set, then the near-death experience can be thought of as the television show being played on it. Science maybe able to quantify everything concerning the television set components (i.e. the brain), but science is unable to satisfactorily quantify the television show being played on it (i.e. the near-death experience)."

Still more **Appeal to Ignorance** and **Post Hoc** speculation. Science may not have adequately explained "NDE", but it does not follow that NDE is supernatural.

> There are several convincing categories of evidence to suggest that NDE's are not just mere hallucinations caused by a brain that is shutting down. For more on this, see http://www.near-death.com/experiences/skeptic1.html. These tend to be ignored or dismissed by Blackmore and others who support the Dying Brain Hypothesis:
>
> 1) First and most importantly, there are many well documented cases where the NDEer while out of body were able to see specific details and hear conversations in other rooms and far away places that they couldn't have known about beforehand, and yet upon returning to the body find that what they saw or heard was in fact verified to be accurate and true. This is a phenomena that skeptics and materialists still haven't been able to explain away no matter how hard they try. Blackmore herself knows about these cases and even mentions them in her book, but she dismisses it simply by stating that she doesn't believe them. This of course reflects the closed mental model of skeptics who dismiss facts and data that don't fit into their hypotheses.

Such cases have not been "explained" because of the lack of sufficient information. Mr. Wu resorts to **ad hominem** in his statement about "close mental model".

> If NDE's and OBE's were just dreams or hallucinations, then these perceptions at a distance wouldn't turn out to be accurate. The separation of spirit from body or the mind's ability to remote view are the best hypotheses that fit this well documented data.

Post Hoc speculation.

> One famous example of this is the case of a nurse named Kimberly Clark. Talbot describes this incident in *The Holographic Universe*: (page 231-232)
>
> > "Such facts notwithstanding, no amount of statistical findings are as convincing as actual accounts of such experiences. For example, Kimberly Clark, a hospital social worker in Seattle,

Washington, did not take OBEs seriously until she encountered a coronary patient named Maria. Several days after being admitted to the hospital Maria had a cardiac arrest and was quickly revived. Clark visited her later that afternoon expecting to find her anxious over the fact that her heart had stopped. As she had expected, Maria was agitated, but not for the reason she had anticipated.

Maria told Clark that she had experienced something very strange. After her heart had stopped she suddenly found herself looking down from the ceiling and watching the doctors and the nurses working on her. Then something over the emergency room driveway distracted her and as soon as she "thought herself" there, she was there. Next Maria "thought her way" up to the third floor of the building and found herself "eyeball to shoelace" with a tennis shoe. It was an old shoe and she noticed that the little toe had worn a whole through the fabric. She also noticed several other details, such as the fact that the lace was stuck under the heel. After Maria finished her account she begged Clark to please go to the ledge and see if there was a shoe there so that she could confirm whether her experience was real or not.

Skeptical but intrigued, Clark went outside and looked up at the ledge, but saw nothing. She went up to the third floor and began going in and out of pateients' rooms looking through windows so narrow she had to press her face against the glass just to see the ledge at all. Finally she found a room where she pressed her face against the glass and looked down and saw the tennis shoe. Still, from her vantage point she could not tell if the little toe had worn a place in the shoe or if any of the other details Maria had described were correct. It wasn't until she retrieved the shoe that she confirmed Maria's various observations. "The only way she would have had such a perspective was if she had been floating right outside and at very close range to the tennis shoe," states Clark, who has since become a believer in OBEs. "It was very concrete evidence for me."" (Footnote 8)

8. Bruce Greyson and C. P. Flynn, The Near Death Experience (Chicago: Charles C. Thomas, 1984), as quoted in Stanislov Grof, The Adventure of Self Discovery (Albany, N.T.: SUNY Press, 1988), pp. 71-72.

The problem with such stories is that they are unverifiable. We can neither confirm nor invalidate such anecdotes. They count for nothing as evidence. Clark applied a supernatural explanation which cannot be disproved, but which also cannot be verified. This does not mean that a supernatural explanation is correct.

In addition, research studies back up these claims as well. One example is the experiment done by Cardiologist Michael Sabom. Talbot describes this as well: (page 232-233)

"Experiencing an OBE during cardiac arrest is relatively common, so common that Michael B.

Sabom, a cardiologist and professor of medicine at Emory University and a staff physician at the Atlanta Veterans' Administration Medical Center, got tired of hearing his patients recount such "fantasies" and decided to settle the matter once and for all. Sabom selected two groups of patients, one composed of 32 seasoned cardiac patients who had reported OBEs during their heart attacks, and one made up of 25 seasoned cardiac patients who had never experienced an OBE. He then interviewed the patients, asking the OBEers to describe their own resuscitation as they had witnessed it from the out-of-body state, and asking the nonexperiencers to describe what they imagined must have transpired during their resuscitation.

Of the nonexperiencers, 20 made major mistakes when they described their resuscitations, 3 gave correct but general descriptions, and 2 had no idea at all what had taken place. Among the experiencers, 26 gave correct but general descriptions, 6 gave highly detailed and accurate descriptions of their own resuscitation, and 1 gave a blow-by-blow accounting so accurate that Sabom was stunned. The results inspired him to delve even deeper into the phenomenon, and like Clark, he has now become an ardent believer and lectures widely on the subject. There appears "to be no plausible explanation for the accuracy of these observations involving the usual physical senses," he says. "The out-of-body hypothesis simply seems to fit best with the data at hand." (Footnote 9)

9. Michael B. Sabom, Recollections of Death (New York: Harper & Row, 1982), p. 184.

Again, such accounts are untestable. The OOBE hypothesis may seem to be the best, but other possibilities exist. The "dying brain" hypothesis has not been ruled out here.

Also significant are the studies done that support the validity of Out of Body Experiences (NDE's are considered a type of OBE). Rick Stack describes one notable example of these in his book *Out of Body Adventures*: (page 12-13)

"A notable study by Osis and McCormick involved an out-of-body subject trying to view a target that was contained within an optical image device and could be viewed only from a specific location. The target was a picture composed of several elements. These elements were not physically together in any one place within the apparatus. If you looked through the viewing window from a point directly in front of the apparatus, however, the various elements of the final target came together as an optical illusion. The OOBE subject, Alex Tanous, was instructed to project into the room with the target, which was several rooms away, and to try to view it. Meanwhile, the experimenters attempted to measure physical effects at the target location (effects that may be caused by the subject's out-of-body presence). They placed sensor plates in a shielded chamber at the viewing location. The sensors were capable of picking very small movements, or vibrations, which would then generate electrical impulses in extremely sensitive

strain gauges. These strain gauges, therefore, enabled the experimenters to note very minutes changes in the vibration of the sensor plates. Tanous was led to believe that the strain gauges were being used only for a subsequent task in order to reduce the possibility of his deliberately trying to affect the sensors while attempting to view the optical image device.

Osis and McCormick thought that the OOBE might be a state that fluctuated with respect to degree of externalization; that is to say, there may be degrees of clarity of intensity in the out-of-body state. It may be possible, for example, to be both partially out of and partially in your body. The investigators hypothesized that when the OOBE subject was most fully out and, consequently, able to view the target more accurately, there would be greater mechanical (physical) effect caused by the experient's out-of-body presence than there would be when the subject was less out and, therefore, less able to accurately view the target.

The results of the Osis-McCormick study supported their hypothesis "that ostensibly unintentional kinetic effects can occur as by-products of narrowly localized OB [out-of-body] vision." In other words, apparently unintentional physical motion or effects can occur when someone sees something at a specific location while feeling that he is out-of-body. The strain gauge activation level that occurred when the subject was viewing the target and scored "hits" was significantly higher than when the subject scored "misses." This finding lends some support to the concept that the greater vibration of the sensor plates was caused by some exteriorized portion of the subject's personality." (Footnote 2)

2. "Kinetic Effects at the Ostensible Location of an Out of Body Projection during Perceptual Testing" Journal of the American Society for Psychical Research 74 (1980): pp. 319-329.

This account has not established that Tanous ever left his body in the first place. Without access to the complete reports it is impossible to determine whether the controls were adequate or that other vibration-producing events were controlled for. Furthermore, this remote viewing experiment is irrelevant to NDE.

Another notable example was done by Charles Tart, where a girl known as Miss Z was able to identify a 5 digit number above her bed in a position that she could only have seen if she had floated up there. This experiment is described at http://www.paradigm-sys.com/cttart/sci-docs/ctt68-apsoo.html

2) Second, NDE's usually result in permanent life changing effects whereas dreams and hallucinations do not. Usually, real experiences are what cause life changes, not imaginary ones. NDEers usually report that through their NDE they gain valuable insight into the universe, about themselves, what their lives are really all about and how we're all really connected in a vast superconsciousness, etc. Many also report life reviews where everything they've ever done flashes through in a brief moment and they feel the impact of their actions on others, which allows them to reevaluate their lives from a much higher

perspective. As a result, many learn to love more altruistically and be less selfish. In addition, most NDEers lose all fear of death as well, claiming that they've discovered that death is just a doorway, not an end.

Individual subjective reporting of NDE effecting "life changes" does not invalidate the "dying brain" hypothesis. It is not surprising that people change their outlook after being near death. It does not follow that NDE is supernatural.

3) Third, people have had NDE's while they were declared dead with flat EEG lines on their brain activity. Any activity in the brain/mind, even simple thoughts, results in some EEG activity. Therefore, it should be impossible (according to materialistic science) to have any kind of conscious experience while your brain shows a flat EEG line, yet this has happened with NDE's.

It is purely speculative that people experienced NDE while flatlined. NDE is the subjective report of the person who experienced it. Obviously, anyone who reported an NDE wasn't completely dead.

4) Fourth, some people have NDE's even when they were not in danger of death. Pediatrician Dr. Melvin Morse notes some of these in his article *Are Near Death Experiences Real?:* (http://www.melvinmorse.com/e-what.htm)

> "The experiences do not only occur to dying dysfunctional brains. The Journal of the Swiss Alpine Club, in the late 1800s, reported 30 first hand accounts of mountain climbers who fell from great heights and lived. The climbers reported being out of their physical body, seeing heaven, having life reviews, and even hearing the impact of their bodies hitting the ground. They were not seriously injured.
>
> Yale University Pediatric Cancer specialist Dianne Komp repoorts that many dying children have near death experiences, without evidence of brain dysfunction. Their expereinces often occured in dreams, prayers, or visions before death. One boy stated that Jesus had visited him in a big yellow school bus and told him he would die soon. Others heard angels singing or saw halos of light.
>
> The American Journal of Psychiatry, in 1967, reported the experiences of two miners trapped for days in a mine. They were never near death and had adequate food and water. They said that mystical realities opened before them in the tunnels. They also said a third miner who seemed real to them helped them to safety, but disappered when they were resuscued."

The problem with all these accounts, and with all anecdotal "evidence", is that they are subjective and unverifiable and can be safely dismissed. None of them invalidates the "dying brain" hypothesis. There is some **False Analogy** of dreams and NDE by Dianne Komp. Such dreams are more likely due to cultural ideas rather than supernatural causes.

For more on NDE's, this website has the most extensive information I've ever seen on the web: www.near-death.com. You can also go to www.spiritweb.com and select "Near Death Experiences". Also look for books by authors such as Kenneth Ring, Raymond Moody, and PMH Atwater. In my opinion, the biggest and most comprehensive easy to read book is PMH Atwater's *The Complete Idiot's Guide to Near Death Experiences.* In it, she writes of Blackmore's Dying Brain Hypothesis:

> A parapsychologist at the time of her original work but now focusing on psychological research, Blackmore has written one of the most influential books on the near-death experience - *Dying to Live: Science and Near-Death Experience* - in which she presents a detailed version of the dying brain theory. Her aim is to provide a materialistic interpretation of near-death states.
>
> Blackmore's theory is too complex to present in its entirety here, but the following is a summary of it:
>
> · Anoxia can cause the occurrences of hearing music (by stimulating the cochlear region of the ear), seeing tunnels, and seeing a light.
> · An inordinate release of endorphins at the time of death are the source of the euphoria associated with a near-death episode.
> · The actions of endorphins and neurotransmitters cause such cerebral structures as the hippocampus (associated with memory) o release stored memories, resulting in the life review.
> · The sense of timelessness is the result of the breakdown of one's sense of self at death (the self being the basis upon which we distinguish moments of time).

Atwater confuses hypothesis with theory.

To respond to each of these points is not necessary. Instead, we can offer a rebuttal to the whole by quoting Dr. Kenneth Ring's criticism from his excellent review of Blackmore's book in the Journal of Near-Death Studies (Winter 1995, p. 123): "Does the brain state associated with the onset of an NDE explain the experience or does it merely afford access to it?" In other words, although many (all?) of the near-death-related phenomena may be traceable to our body's responses to dying, does that mean that those responses explain the phenomena, or do they simply provide us with an interesting way of talking about them?

There is no answer.

To see this, consider the popular Psych 101 experiment of imagining that you're eating a lemon. Make that experience as vivid, as sensory-rich as you can. If you imagine it strongly enough, you'll taste the tartness and you'll begin to salivate - despite there not being any lemon in your mouth. So the

imagination can produce the identical physical responses as an "objective" experience. Does this mean, then, that when you're eating a real lemon, it's not the lemon but your imagination that's producing the physical sensations you're having?

Well, we know the answer to that.

Atwater gives an example of conditioned reflex. Nothing here shows that NDE is the result of supernatural causes. Dr. Ring's comments are **Moving the Goalposts** or **Complex Question**, or the old standby, **Appeal to Ignorance**. If there is no answer, then supernatural causes cannot be assumed.

Argument # 24: "There is no such thing as a soul or spirit that lives on after you die. Consciousness is purely neurological and nothing else."

This is the standard materialistic view of life after death. While at this point we can not prove conclusively whether or not there is life after death, there are many compelling categories of evidence for it. A great summary of all these categories can be found at the following website, which lists over 20 categories of evidence by a lawyer named Victor Zammit, with an essay for each category.

http://www.ozemail.com.au/~vwzammit/index.html

Here are the categories of evidence that it lists:

A LAWYER PRESENTS
THE CASE FOR THE AFTERLIFE

The Irrefutable Objective Evidence
Revised Version © July 1999

Victor Zammit BA (Psych) MA (Hist) LLB. PhD
retired Solicitor of the Supreme Court of New South Wales and the High Court of Australia
Psychic researcher and Lecturer in psychic phenomena

Contents

7. Rebutting the skeptics on EVP and ITC
8. Einstein's E=mc2 and materialisation
9. Other psychic laboratory experiments
10. Scientific observation of mediums
11. Leonor Piper- a US medium who convinced all skeptics
12. Two closed minded cheats
13. Materialisation mediumship
14. Helen Duncan- a magnificent British medium
15. Direct voice mediumship
16. A modern medium who confounds the skeptics
17. Irrefutable proof- Frederick Myers Cross Correspondences
18. Proxy sittings refute the allegation of mind reading
19. Science and the Out of Body Experience
20. Science and the Near Death Experience
21. Science and apparitions
22. Deathbed Visions
23. Science and the magnificent aura
24. The ouija board
25. Xenoglossy
26. Poltergeists and the failure of the (British) SPR
27. Reincarnation
28. Summing up the objective evidence
29. Communicating with afterlife intelligences
30. What does happen when we die?
31. Bibliography for afterlife research
32. Links to similar sites

Part 2

Theoretical physics backs survival

By British Physics analyst RON PEARSON- author, lecturer on subatomic particles

Part 3

The Seven Laws of Psychic Energy by Dr Victor Zammit

Victor Zammit's "book" is a storehouse of logical fallacies too numerous to discuss here. The basis seems to be **Appeal to Ignorance**, dependent as Zammit's text is on untestable stories. We can't prove it isn't so -- it does not follow that it is so.

Argument #25: "Spiritual experiences only exist in your mind, not in external reality."

Since no one knows all that exists in all of reality, including skeptics, no one can say with infallible authority what exists and what doesn't. Even if we take something out of fantasy like unicorns and dragons, for instance, we don't know that those type of creatures don't exist in the trillions of other planets in the universe since we haven't even been to any others beside our own. Furthermore, string theory in physics suggest that there may be many dimensions, which if true may suggest other planes or levels of reality that we don't understand yet. These other levels of reality could contain creatures or beings that we can't even imagine, even unicorns and dragons. Even arch skeptic James Randi has said that to say that something doesn't exist is an extraordinary claim. When Eldon Byrd, the Naval Scientist who tested Psychic Uri Geller's effects on Nitinol, saw this argument in my article, he wittily remarked, *"The lack of spiritual experiences only exists in the Skeptic's mind, not in external reality."*

False Analogy and Mr. Wu's standby, the **Appeal to Ignorance**. Eldon Byrd's statement is **Appeal to Ignorance** and **Ad Hominem**. A spiritual experience does not equate to existence of any supernatural phenomena.

Argument # 26: "New Age philosophies are just childish fantasies for dealing with a cold uncaring world."

This is another biased statement of belief. A lot of psychic experiences don't come as fantasies but as firsthand direct experiences. Often the experiencer doesn't even choose to have them in the first place, as in the accounts of those who have sudden NDE's or OBE's. Mature adults who are not childish in attitude or behavior have had paranormal or psychic experiences. There are also many tough people (both mentally and physically) who believe in God too. In addition, even if a belief or religion is used to cope with life, that doesn't mean that that belief or religion is false. I can use music or reading to relax myself too, but that doesn't mean that music and books don't exist! (See similar rebuttal in Argument # 14)

Skeptics who use Argument #26 shouldn't. It is **ad hominem**. Mr. Wu's conclusion is correct, but experiences by individuals do not prove that the paranormal exists. He once again uses a **False Analogy.**

Argument # 27: "There is no evidence to support the existence of UFO's or the notion that we are being visited by extraterrestrials."

See Argument #2, point 3a.

Other than to note that Mr. Wu does not define the term "evidence", we also refer the reader to our comments regarding Argument #2.

Argument #28: "Since Evolution and natural selection are sufficient to explain the origins of life, there is no need for God to fit into the equation."

Although evolution and natural selection may explain how life evolved on earth with random mutations resulting in beneficial characteristics more suitable for survival, there are many missing links in this theory. Any Creationist website or article can point some of these out. While I personally do believe in Evolution, I do not believe that it explains everything nor do I believe that it rules out the existence of God. Greg Stone, from my discussion list, put it eloquently when he said:

> "Not only is there a residue of feeling, but there is a sound argument that Darwinian evolution is not big enough. It is not. Darwinian evolution deals with the specific nature of the evolution of biological forms on this planet. And it fails to account entirely even for that realm. It does not account for the overall evolution of complexity within the universe, which then leads to the "special case" of Darwinian evolution. It does not account for the origin of life forms, and most importantly it in no way accounts for the existence of the spirit and the spirit's effect upon the evolution of forms. Thus, Darwinian Evolution is incomplete when it comes to explaining life. And those, like Dawkins, Blackmore, Pinker, etc. who try to make Darwinian Evolution do more than it can will be seen in the long run to have been quite foolish."

Furthermore, it has been computed as impossible for life to evolve by chance on its own because of the astronomical impossibility of the conditions for life being set up by chance. Theist J.P. Moreland presented the arguments for this, using math and science, in his debate against Atheist Kai Neilsen, described in the book *Does God Exist?* In his debate with Atheist Kai Neilsen, Moreland explains with math and science why chance alone could not explain how the conditions for life evolved. While this field is not my expertise, one can find plenty of literature on the Creation vs. Evolution debate in libraries and bookstores, as well as on the internet. The Evolution/Creation debate is a vast and complicated subject, but one thing the Atheists can never explain is "Who set up the vastly improbable default conditions for life to evolve in the FIRST PLACE? Where did the matter to create the universe and life come from? Why isn't the universe a giant void of nothing instead?" It's kind of like this. We know the mechanics behind how and why a pot boils, but that doesn't tell us about the person who put the pot on the stove. Some Atheists also like to point out that the need for belief in God can also be explained by Evolution. However, David Marshall, a Christian missionary and philosopher rebuts that point well when he stated on my email discussion list:

> "To make the jump from "evolution can explain belief in God" to "there is no God" without involved argument would be the generic fallacy, again. To repeat my earlier example, even if you can explain the human ability to do math by evolution, that does not prove math is invalid. In

theory, it should be possible (given your presuppositions) to show how the human faculty for mathematics arose through natural processes. That does not mean E=MC2 does not accurately describe real events in the real universe. The fact that evolution may have created an awareness of dependency on one's mother on a child's part, does not mean real mothers do not exist and do not care for their children. In the same way, even if you were able to describe the evolution of faith in God, it would still remain an entirely separate argument, whether God exists in fact or not."

Mr. Wu's fallacies include **Appeal to Popularity, Appeal to Authority, Begging the Question**, **Complex Question**, and **Appeal to Ignorance**. The phrase "Who set up the...conditions for life to evolve in the FIRST PLACE?" is classical **Complex Question**. The question cannot be explained because it is impossible to address without agreeing with its presupposed conclusion. It is an invalid argument. Mr. Wu again fails to understand the difference between hypothesis and theory and completely The references he cites fail to address the tremendous amount of time involved in the evolutionary process. David Marshall correctly identifies **Genetic Fallacy**, but commits a **False Analogy** by comparing mathematics to the question of the existence of God. It is not incumbent on atheists to disprove God.

Argument #29: "It is just as irrational to believe in God as it is to believe in Santa Claus."

This is an absurd analogy much like the invisible pink unicorn comparison in Argument # 4. (See rebuttals under that section for details.) Again, there are a lot of credible people now and throughout history that have experienced God personally in some way, while there are few if any people who claim to have seen Santa Claus flying around the night sky using a team of reindeers. As former Naval Scientist Eldon Byrd told me about his theistic view, *"I don't have to prove God exists. I KNOW he exists, just like I know how salt tastes though I can't prove it to anyone."*

Well, it *is* just as irrational to believe in God as it is to believe in Santa Claus. Such beliefs are not based on reason. Many children believe anything their parents tell them, from Easter Bunny to Santa Claus to the Tooth Fairy to God. This does not make such beings real, even though they are imagined to be real. Mr. Wu commits the fallacy of **Appeal to Popularity**, **Appeal to Authority**, and **Appeal to Ignorance**. Eldon Byrd engages in a **False Analogy**. The taste of salt is testable and verifiable. God is not. Mr. Wu is correct in contending that he does not have to prove his subjective beliefs, just as we are under no obligation to accept his beliefs. However, when such beliefs become a matter of expecting changes in the basic framework of science or for changes in government or law, it is reasonable and rational to ask the claimant for proof. If, for example, a dowser claims to be able to detect minerals using just a dowsing rod, it would be reasonable and rational for any prospective employer of that dowser to demand proof. It is our opinion that the same burden of proof should extend to those people who claim to be able to find dead people -- or speak to them.

Argument # 30: "Atheists don't hold the belief that God doesn't exist. An Atheist is one who is without a belief in God, or lacks a belief in him. Therefore the burden of proof for God is on the theist, not the atheist."

Atheists like to remind others of this argument because they feel that people have a misconception about their position. They emphasize that their position is not that they believe that "God doesn't exist", only that they don't believe in God. Using semantics, they point out that definition of Atheism is to be without belief in God because the "A" in "A - theism" means "without" and "theism" means "belief in God". However, this makes little difference either way because their core philosophy toward God is still the same. The reason why they emphasize this strongly, I believe, is to put themselves in a less attackable position. This way they can demand the burden of proof on the theist, who believes in God, while claiming that since they don't "believe" in God, they don't have to defend that belief. It's a political semantic ploy, I think. This is why most Atheists prefer the term "I don't believe in God" to "God doesn't exist". You see, they can't really prove that God doesn't exist because you can't prove a negative. Regardless of either definition, the Atheist obviously believes deep down that there isn't a God or deity anywhere anyway, which is prevalent in their attempts to debunk and refute every single argument for the existence of God. Therefore this trivial debate about the technical definition of the word "Atheism" seems pointless in substance.

This passage is irrelevant to skepticism. All atheists are not skeptics, just as all skeptics are not atheists. Mr. Wu's semantic games as to what atheists believe or do not believe are irrelevant. This passage is yet again only Mr. Wu's unsubstantiated opinion and **Appeal to Ignorance**. Atheists are under no requirement to disprove something they do not believe. The burden of proof remains on the claimant. Mr. Wu has not shown otherwise.

Conclusion

As we have seen, these common skeptical arguments are not as rational or sensible as they seem. There are many critical flaws and limitations in them. They also show a closed system of thinking as well, which reality does not always agree with. Although some of these arguments serve as good guidelines, they by no means are the dogma of reality. They are not all encompassing, nor do they account for every fact and anomaly. In fact, they can be rigid enough to close one's mind to new things. The true skeptic should be skeptical of his own beliefs as well as of others. NDE/Consciousness expert Greg Stone, a member of my discussion lists, sums up the skeptics' mentality quite well in terms I never would have thought of:

> You see the subjective evaluation of a skeptic holds less weight than the subjective direct observation of the experiencer. What is needed, and sorely missing, is a real understanding of the nature and factors of subjective knowledge. Without this all such discussions will be foolhardy. The skeptic continually fails to understand and admit that he works on a subjective

basis. And seems mystified when someone accepts someone's direct observation over the skeptics subjective evaluation.

Appeal to Authority and **Ad Hominem**. Greg Stone is in error -- "subjective knowledge" depends upon the vagaries of individual perception. Objective evaluations depend upon their testability by standards outside the individual belief system. Where the skeptic evaluates using objective standards, the skeptic is not relying on subjective thought. Skeptics, by definition, discard subjectivity in favor of objective, verifiable reasoning. We are not mystified by the acceptance of subjective beliefs.

Former Naval Scientist Eldon Byrd also wittily comments:

> What major contribution has any skeptic made to the betterment of humankind? How many Mother Teresa's have they produced? How many great scientific discoveries have they made? Many of them are like movie critics--useless and usually wrong.

Eldon Byrd commits the **ad hominem** fallacy. What skeptics have or have not produced is irrelevant to the question of the existence of supernatural forces.

Regardless of what belief you take toward the paranormal, the important thing is to keep an open mind and not rush to judgments based on our personal world views. A quote by Hendri Poincare makes this point well:

> "Doubt everything or believe everything: these are two equally convenient strategies. With either we dispense with the need for reflection." - Henri Poincare

After all, what you can accomplish or do is not dependent on another's beliefs, as Martin Caidin reminds us:

> "What you believe someone else can or can't do hasn't got beans with the doing. Or lack of doing. Just go back through your history books and you'll discover that just about everything you take for granted today in your daily lives was absolutely impossible not so many years ago." - Martin Caidin

Do we have all the answers to the mysteries of the paranormal and of existence? Of course not. Neither the most rational skeptics nor the most evolved spiritualists do. But what I can tell you is this. Based on my research and direct personal experience, I know that psychokinesis, telepathy, prayer and spells are real and they work. The question is how and why. The problem is that although these things are real, they don't fit into conventional paradigms of reality.

Mr. Wu continues to rely on **Appeal to Ignorance**, **False Analogy**, **Appeal to Authority,** and **Circular Reasoning**. His testimony about his personal experiences proves nothing.

Therefore, we definitely to update our beliefs and world views to account for these facts and find new paradigms that account for them. In the meantime, we should keep in mind that the beauty of mysteries

and paranormal phenomena lies not in finding the answers to every question, but in the awe and appreciation we have for them. Therein lies the great lesson that there is always "more to learn" and "something better out there". Let me close on this with three profound quotes which state this in a poetic way.

> "The most beautiful thing we can experience is the mysterious. It is the source of all true art and science." - Albert Einstein
>
> "Truth is stranger than fiction, but it is because Fiction is obliged to stick to possibilities; Truth isn't." - Mark Twain
>
> "Let the mind be enlarged... to the grandeur of the mysteries, and not the mysteries contracted to the narrowness of the mind" - Francis Bacon

Thank you for reading my article.

Sincerely,
Winston Wu

-- END OF WINSTON WU'S ARTICLE --

Final Comments

Mr. Wu finishes with a statement akin to worship and an **Appeal to Authority**. His philosophical opinion of "paranormal phenomena" is irrelevant to the question of their objective reality.

In this article, in all cases, Mr. Wu fails to support his conclusions with valid arguments. He failed to adequately define terms and he consistently resorts to numerous logical fallacies, particularly that of **Appeal to Ignorance**. The arguments he claim to have been advanced by skeptics remain valid, such as they are stated. Mr. Wu has not established any veracity to his claims regarding "paranormal" phenomena.

Overall, Mr. Wu's article is a grand **Appeal to Authority**, **ad hominem**, and primarily an **Appeal to Ignorance**.