



The Newsletter of The North Texas Skeptics

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Why I Don't Believe in Ghosts

by John A Thomas

The following piece was scheduled to appear in the August issue of The Source, the magazine of The Association for Parapsychology. Since TAP has broken up, it won't reach the intended audience that needs it most, but we thought our readers would want to see some of our missionary work.

Last October's issue of *The Source* was full of stories about ghosts and haunted houses. The writers saw ghosts frequently, and many seemed to enjoy the most intimate and convivial relations with them. I wondered if these stories could possibly be true. Were these ghosts real? After giving the matter some thought, I concluded the answer to be yes and no. First, I had to decide what I meant by "real."

Controversies between skeptics and believers in paranormal phenomena often turn on what the parties mean when they say something is real. The scientist says, "We can't observe this thing, much less reproduce it. We have to assume it's not real." The believer says "So what? It was real to me." What are they talking about?

To science, an event is real if it is objectively real. That is, if it exists in a world outside of and independent of our minds. Subjective events take place within our private thoughts and feelings. Subjective events may feel intensely real to us, but they may not refer to, or connect with, anything objectively real. Contrary to what many think, science does not claim to deal with all possible kinds of knowledge, but only with *public* knowledge. Public knowledge is knowledge which is available to anyone, believer or skeptic. We can reach a consensus about the truth of a public knowledge claim by checking it against experience, but we can't do so with purely subjective knowledge.

So skeptics want to know if ghosts are objectively real, like water is real, or other people, or tables, or clouds, or electrons and all the other furniture of the physical universe. Skeptics certainly don't deny that people have strange and powerful experiences; we just want to know if those experiences point to anything in this real world. I believe that

ghosts are not objectively real. First, no ghost story which has been thoroughly investigated has held up; and, second, there are plenty of good explanations for why people have ghost experiences (or remember that they did).

Readers interested in the history of ghost research may consult D.H. Rawcliffe's *Occult and Supernatural Phenomena*, or R.C. Finucane's cultural history, *Appearances of the Dead*. Suffice it to say, diligent investigators always seem to find that memories are faulty, that critical corroborating facts do not exist, and that witnesses, if more than one, tell contradictory stories. Usually the ghost tales expand upon the telling and become more and more fantastic. A recent example is the "Amityville Horror" hoax, which spawned several books and one bad movie as it ran its course.

More interesting to me are the reasons why people believe they have seen a ghost. Most of the time our brains are pretty good reasoning instruments, but occasionally they fail us. Psychologists have learned a lot about how this happens, and the results are fascinating. These anomalous experiences include hallucination, hypnogogic and hypnopompic dreams, fantasizing, memory confabulation and the feeling of "missing time." Anomalous experience is not limited to crazy people; it happens to all of us normal people now and then. For example, hypnogogic and hypnopompic dreams are hallucinations that occur upon falling asleep or waking, respectively. The sleeper may feel paralyzed or floating out of the body. He usually sees ghosts, aliens, monsters, or some such creature, and the experience seems very real, much more so than the typical dream. I had such an experience myself recently, in which I saw my father, dead for three years, in my bed-room, and even touched him. I can testify that the experience was strikingly real, but I don't claim I saw a ghost. (Or maybe I did; it just wasn't a real one.)

Psychologists estimate that fantasy-prone personalities make up perhaps 4% of the population. These people are perfectly normal except that they tend to fantasize much of the time, fully experience their fantasies with touch, smell and hearing, and are easily hypnotized. They also tend to mix their fantasies with memories of real events and construct new memories which seem real but are not. This process is called memory confabulation, and we all do to some degree.) Fantasy-prone people are in no sense crazy. They just exhibit a part of normal brain function to a greater degree than most people. Obviously, such persons are likely to see, or remember that they saw, ghosts, and sincerely believe their memories are real.

For these and similar reasons, I don't believe that ghosts are real. There is no objective evidence for them, and there are good explanations for most ghost experiences. Still, if I am mistaken, I would like to be the first to know. If any reader knows where I can observe ghosts or haunted houses, please get in touch with me. Those who want more information about ghost investigations or anomalistic psychology can also contact me. The North Texas Skeptics maintains extensive information on this and other paranormal subjects.

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William Jarvis Speaks at D/FW Council Against Health Fraud Annual Meeting

by Tim Gorski

The annual meeting of the Dallas/Fort Worth Council Against Health Fraud was held this past September 21 at the Scottish Rite Hospital for Children in Dallas. The opening address, entitled "Health Fraud: Past, Present and Future," was given by William Jarvis, Ph.D., the current President of the National Council Against Health Fraud.

Twenty years ago, Dr. Jarvis noted, he became interested in the subject of medical quackery and, in particular, wondered why it was that some people fell victim to it and why other people became quacks themselves. This eventually took the form of his involvement in combating health fraud by health education, "enhancing freedom of choice through reliable information."

Dr. Jarvis explained that understanding medical quackery is an exercise in understanding the overall psychology of

deception. He pointed out that the latter is widespread in our culture, essential to such accepted forms of human activity as sports (where's the ball?) and advertising. Deception is even more deep-rooted than this, though, he said. Studies in developmental psychology, for example, show that if children don't learn to lie, they have problems with self-assertion. Therefore, Dr. Jarvis concluded, it is unavoidable that we will sometimes fool ourselves.

Dr. Jarvis next noted the importance of, and the problems with, being clear about just what quackery is. The word "quack," of course, dates from an age when mercury, or quicksilver, was touted as a cure for syphilis and other ailments by itinerant "quacksalvers."

"A pretender to medical skills," is one definition of a quack. In practice, this often means someone who is unlicensed. Indeed, in some states, to call someone a quack is to accuse them of practicing medicine without a license. But, Dr. Jarvis pointed out, some 60% of cancer quacks possess medical degrees and licenses.

Another definition of quackery puts the emphasis on fraudulent representation. But this, too, has its faults. Many quacks do not intentionally pervert the truth as much as they perversely believe in falsity almost as a sort of religion. In this sense, not all quacks are frauds, he noted, and not all frauds are quacks. "There are lots of ways of cheating," Dr. Jarvis said.

Even taking misinformation as the crucial ingredient in quackery has its problems. The use of placebos, for example, can be part of the proper management of a patient by a physician. In addition, Dr. Jarvis pointed out, innovations in medical care often involve a less than perfect understanding on the part of both patients and physicians, citing as one example that of a mammary artery ligation, a procedure once performed for indications similar to those of present-day coronary bypass surgery. This kind of medical treatment, he concluded, is not included in the notion of medical quackery.

"Anyone who promotes medical schemes or remedies known to be false, or which are unproven, for a profit," was the definition of a quack used by the U.S. House of Representatives' Subcommittee on Health and Long-Term Care's 1984 Report entitled "Quackery: A \$10 Billion Scandal." Again, Dr. Jarvis noted, a too liberal reading of such a definition would be unworkable. But this one, he argued, puts an emphasis where it ought to be: on the ingredients of *promotion* and *profit*.

Properly weighing these two factors is a means of distinguishing innovations and legitimate experimental medical care from quackery, Dr. Jarvis said. Quacks enthusiastically promote unproven treatments, but they don't learn anything from their activities. Rather, they just continue to promote them. "Ultimately," Dr. Jarvis said, "quackery is promotionalism." And even promotionalism, he noted sardonically, has its quackery in such notions as subliminal persuasion.

Dr. Jarvis next gave an entertaining survey of quackery past. Breast developers, tonics to increase male sexual prowess, schemes to attain eternal youth, and claims for effortless weight loss, he showed, have had a long history. One slide showed an advertisement for a 19th century product: sanitized tapeworms. Others illustrated the popularity of purity in the last century.

Some of the quackery products of the past probably worked pretty well, Dr. Jarvis admitted, such as "soothing syrup" for cantankerous infants, the active ingredient of which was a narcotic. Others were entirely laughable, such as one which promised to halt the natural process of aging.

But today's quacks are outdoing their predecessors. Dr. Jarvis showed slides of schemes that are claimed not only to halt aging but to reverse it. And in the present, as in the past, quackery tends to take its cues from legitimate medical practices, as illustrated by the recent wave of "diet patches" that mimic the new transdermal drug delivery systems. The use by quacks of low power lasers would be another example. Quackery also continues to focus on areas in which medical science has not been able to win a clear-cut victory. Wondrous cancer cures are still with us, while in the treatment of syphilis penicillin has no rivals.

Modern quackery, however, unlike that of the past, is big business. In the last century, ineffective products often were little more than folk remedies. Some may have been no worse than those of medical science, such as it was then. The difference today is entrepreneurialism through wide-spread and effective marketing. Promotion and profit are the keys

to understanding the modern health fraud.

Modern quacks begin by feigning legitimacy if they lack it, using "credentials" from diploma mills which are either unaccredited or accredited through accreditation mills. A number of organizations which are nothing more than mutual admiration societies serve the same purpose. Then the claims of the quack: are put forward as "alternatives" to what medical science makes available, often being portrayed as representing some real controversy or division within the ranks of legitimate medicine.

The rest is promotionalism, the heart of which, Dr. Jarvis said, is not that it brainwashes us, but that "it takes advantage of our opinions." In other words, it strikes the responsive chord of beliefs already present

One of these is the myth of the "noble savage." The essence of this belief is that before modern civilization with all of its ills was a simpler and better time when human beings lived in harmony with nature. Dr. Jarvis cited acupuncture as drawing its appeal from this myth. An even better candidate would probably be the recent enthusiasm for a "Paleolithic Diet."

The myth of the "golden age" is closely akin. According to this myth, our present troubles began when certain elements of modern living, such as white bread or pesticides or processed sugar crept into and ruined an earlier age of health and happiness.

Then there is the "just moral hypothesis," which, Dr. Jarvis said, comes down to the idea that people get what they deserve. Before Pasteur, he noted, this was accepted without question as explaining why one person fell and another remained healthy. In the biblical story, for instance, Job's friends believe that he must have done something that accounted for his problems.

This myth seems very strong presently. For even thieves, murderers, rapists and child molesters are often pitied as unfortunate victims of a deprived childhood or inadequate education. But those who suffer or simply drop dead of some serious illness tend to be blamed for having whatever health risks are thought to be associated with it. And, obviously, the idea that you get what you deserve also relates strongly to faith healing claims.

"You are what you eat" is the bedrock of food faddism of all kinds, Dr. Jarvis said. This myth is currently being relied on very heavily in advertising, even the kind of "acceptable" commercial hype that finds its way onto network television. Has anyone missed seeing those invitations to "get into shape on the inside" by eating some cereal, delivered by an actor who has apparently just finished physical conditioning exercise?

Then there is the "rescue myth." People, and sick people especially, want to believe that they will be the miraculous exception. Therefore they are easy prey for those offering to snatch them from the jaws of suffering and death.

Related to this is the lure of asceticism, the notion that physical deprivation or even suffering of some kind will buy recovery and a new beginning. "No pain no gain," is the idea here, as is that of "paying your dues." It is linked to a strong cultural bias that equates pleasure with sin. This is the largest part of the appeal of Spartan diets and other unpleasant regimens among cancer patients, Dr. Jarvis said. And it is interesting to consider that it may also play a role in people's willingness to tolerate a good deal of discomfort even from effective medical treatment. Even children know that medicine has to taste nasty.

Plain old anti-intellectualism is an attitude easily appealed to because it is so widely held. People readily think of the mad scientist who may mean well, but is meddling with the unknown. The result, so the myth goes, is that those we most love are seriously harmed by the experiment gone awry. The solution, of course, is to stop the wheel of progress and be suspicious of anyone who asks questions.

"We believe in ourselves," is another attitude that often gets people into trouble, Dr. Jarvis said. People are only too willing to believe that their own personal intuition and skills will keep them from being fooled. But, Dr. Jarvis pointed out, this is only the precondition for being fooled. It is the whole basis of operation of confidence games: to get victims to trust themselves into trusting those who would exploit them.

Willpower is another ingredient of our self-image that quacks have learned to exploit, Dr. Jarvis said. Partly this seems to be the idea of "mind over matter." But partly it's a more vague, amorphous notion of personal grit and determination. People will say of a sick person (and I have many times myself heard it said even of a premature infant) that "he's a real fighter." But studies have shown that these factors play no role in disease outcome, said Dr. Jarvis.

The notion of "body wisdom" was the final myth that Dr. Jarvis considered. "Give nature a chance," is the idea here. An entire theory of medical quackery is based on this myth, that of naturopathy. These practitioners argue that disease symptoms are a sign of the body healing itself. Accordingly, they don't try to suppress fevers, but may try to induce or increase fevers! Dr. Jarvis labeled these theories "ideological metaphysical nonsense."

Dr. Jarvis comments about future health fraud were prefaced by his admission that he is no believer in precognition. But he indicates that quackery in the future will share the characteristics of quackery of the past and present. A fairly good guess, he agreed with me, would be that quack claims taking their cues from the advancing areas of bioengineering and gene grafts can be expected. perhaps a skin lotion or other product prepared from genetic material preserved in ancient Egyptian mummies? Or maybe injections of cloned DNA from an obscure tribe of aborigines with Methuselah-like longevities?)

Dr. Jarvis concluded by stating that we have an unavoidable "cultural vulnerability" to health fraud, and that this arises chiefly from the fact that beliefs central to our views of ourselves and our place in the world, good ideas many of them, can be exaggerated and distorted. It cannot be expected, therefore, that efforts to combat medical quackery will ever eradicate it. Rather, like any chronic disease, we will have to live with it while we do our best to fight it. Education and information, Dr. Jarvis noted, are the primary tools necessary in this battle. That, and a heavy measure of *caveat emptor*.

Dr. Jarvis' basic message is obviously important to the cause of skepticism more generally. That is to say, that it needs to be borne in mind that nonsense will never go away. As P. T. Barnum said, "There's a sucker born every minute." Which means that the battle will never be over.

This may very well conflict with yet another of our cultural beliefs, that one should play to win and that an unwinnable conflict is not worth fighting. "No more Vietnams," is the idea here and, of course, there is a kernel of truth in it. But if this myth is working against us, perhaps it only means that skeptics need to be honestly realistic about their cause. For we cannot expect to win and, if we think we can, we will be fighting a lost cause.

The proper aim of skepticism is simply to go on with the battle, to keep reason alive. There may be suckers born every minute but perhaps every hour or every day someone wakes up and wonders how best to use their own thought and to understand a little of what this world is all about. We, and skepticism, need to be there for them.

The DIFW Council Against Health Fraud welcomes reports of possible health fraud and operates a telephone hotline for this purpose, (214) 263-8989. The address is 1200 Main Tower, Room 2100, Dallas, Texas, 75202. Take the time to send them any written materials related to possible or probable quackery. The squeaky wheel gets the grease!

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Psychic talk show cancelled

by **Tony Dousette**

KLIF Radio no longer carries John Catchings' *Psychic Line* talk show. NTS has contacted KLIF management in order to find the reasons for this change in their Sunday evening schedule. Programming Assistant Gwyn Randolph indicated that the program was dropped due to poor ratings. Ms. Randolph described Mr. Catchings' audience as small but enthusiastic. Management decided to replace the program with one with broader appeal.

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Meeting reports

by John Thomas

Chiropractor Jean-Scott Bendiks spoke at our September meeting on the movement within chiropractic to discard old theories and put at least part of the practice on a scientific footing. Dr. Bendiks is a member of the National Association for Chiropractic Medicine (NACM), a group which advocates placing the profession on firm scientific principles and practicing it as a limited medical specialty, like dentistry or podiatry.

Dr. Bendiks described D.D. Palmer's original theory that all disease is a result of vertebral subluxation (an in-complete dislocation of a joint). This concept has no scientific support at all, yet it is still taught in chiropractic schools. Even worse, many chiropractors still believe it. Bendiks believes that chiropractic must explicitly abandon the Palmer theory.

Bendiks argued that a specific treatment¹ spinal manipulation for low back pain, can be scientifically validated. Spinal manipulation is usually considered synonymous with chiropractic, but it is not. It is only a treatment method, with which chiropractors claim to be especially skilled. There appears to be substantial evidence that manipulative therapy has value in treating back pain. Still to be decided is whether the chiropractic technique can be shown to have unique value. Bendiks cited recent research by medically-trained orthopedic physicians into this question.

Bendiks answered many questions from the audience about chiropractic practice and schooling. It seems that many chiropractors do not limit themselves to manipulation for back pain, and attempt to practice general medicine. Many such practitioners use unproven, disproved or questionable methods, such as chelation therapy, colonic Irrigation, thermography, reflexology, herbology, and other quackery. Bendiks puts such practitioners at about 60% of chiropractors; some observers might put it higher. Readers interested in learning more can consult the position paper on chiropractic from the National Council Against Health Fraud. The NACM participated in the preparation of this paper.

For our October program we were treated to the observations of Prof. Joe Barnhart on the activities of the TV evangelists. Prof. Barnhart has a new book out about Jim and Tammy Faye Bakker, but he has been researching all of the well-known "electronic shamans," including Oral Roberts, Jimmy Swaggart, and Pat Robertson. It seems that sincerity is not really an issue; these evangelists become so caught up in their own acts that the line between what is the act and what one really believes becomes blurred. Faith-healing (which almost always accompanies TV evangelism), compromises integrity because of the fudging and deception necessarily involved. Prof. Barnhart believes that the deception soon spills over into other aspects of the evangelist's life. Also, as the evangelist becomes more successful, he tends to associate less with people who might point out inconsistencies, thus accelerating self delusion.

Prof. Barnhart also talked about the "seed of faith" arguments used to get donations, the way big-time faith healers usually pitch their faith-healing as a supplement rather than replacement to conventional medicine, and how they inculcate the belief that individuals are responsible for everything that happens to them. The latter idea is particularly interesting, since it also occurs frequently in new-age beliefs, which fundamentalists usually reject as paganism or worse. Apparently it is difficult for many people to think in degree: of control over their lives. Prof. Barnhart entertained questions of these and other topics for over an hour. He and Dr. Ray Toledo, who spoke to us earlier in the year, are writing a novel about evangelism and faith-healing. It should have plenty of inside information.

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Media coverage of psychics

by John Thomas

The bad news is that *The Dallas Morning News* ran a story in its "Today" section on psychic "therapy" this September. The good news is that reporter Toni Joseph called us for our opinions on the subject beforehand. While the article still turned out to be mostly credulous, it at least let the readers know that psychic claims could not be taken for granted. Joseph also included comments by a Dallas Police officer about psychic scams.) *The News* then published this letter from Nancy E. Craig of San Angelo, which we think is a fine summary of news media practice:

When a politician makes outrageous statements, responsible reporters leap to verify his claims, questioning, probing, even digging back into his life, if necessary, to get at the truth. Apparently, this sort of investigative journalism is not required when dealing with psychic claims ('Psychic-Therapy,' Sept. 4). Quoting two skeptics and sprinkling the article with 'he claims' is not balanced reporting.

"Who says these people are psychic? Are we to take their claims at face value? Testimonials from clients are not scientific, and therefore do not count as evidence. Have the psychics been tested and, if so, by whom? It should be noted that in carefully controlled tests (i.e., no one was allowed to cheat), no evidence of psychic phenomena has ever been found.

"It's time the media quit lending a credulous ear to the extravagant claims of these so-called psychics and begin thoroughly investigating them and showing them for what they really are."

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Odds and ends

by John Thomas

Those of you who read the *Skeptical Inquirer* may have seen James Rusk's recent letter about our bibliography for librarians. As a result of this publication, we have had more than forty requests for a copy, from around the country and as far away as Scotland.

Some of you may be unaware that we now have an informational brochure available. It's a nicely typeset presentation of our positions and activities. We can send you three or four in an envelope with 25 cents postage. If you want larger quantities, please call or write.

Many readers may also be unaware of the extent of our database of material on paranormal and pseudoscience topics. We have a file drawer of material divided into more than forty topics.

Some files, such as creationism or graphology, are thick; others have less. For example, we recently opened a file concerning the often outrageous claims of the think-yourself-well movement. The first entry was the recent article in the *Journal of the American Medical Association* about psychological health and cancer death rates. We collect both scientific papers and bibliographies as well as articles from the popular press. The latter are not always reliable sources, but they do tell us what's going on in the popular media, and they often contain useful information to follow up elsewhere. If you see something you think relevant, send us a copy. If you want information about a topic, call or write.

It looks as if criticism of voodoo and black magic may no longer be ideologically correct. At a Dallas City Hall meeting this September, a speaker from a city worker's union was objecting to the city's pay proposal as a "voodoo pay raise." Councilwoman Diane Ragsdale said that voodoo was a religion practiced by many black people and took the speaker to task for making a racist slur. Of course, Ragsdale is not the first person to claim that a belief is exempt from criticism if it originates in a particular culture.

Member T.M. Henning has a letter published in the October 1989 issue of the *Mensa Bulletin*. Henning effectively

criticized recent credulous articles on psychic phenomena and suggested Mensans consult the *Skeptical Inquirer* for an alternative view. Let's face it: if only stupid people believed these sorts of things, we would not have a serious problem.

We need someone to act as program chairman. Collecting ideas for programs and making contacts can be fun, but it is something that should be done by someone without other responsibilities in the organization. We may have to curtail our program series at UTA next year unless we can get some help. Please give us a call to talk about it if you think you might be interested.

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TAP folds

by **Tony Dousette**

The Association for Parapsychology (TAP) is being disbanded by its Board of Directors. This decision was reached at the September 7, 1989 meeting of the board. Barbara Catchings, TAP office manager and editor of TAP's newsletter, *The Source*, blamed the failure on an inactive membership. Ms. Catchings asserted that only four or five of the members were running the office for an organization that had well over a thousand members, and that the burdens of this responsibility were too much for them.

The former TAP office is located at 610 Presidential, Suite 104, Richardson, TX. A notice posted on the door and dated September 13 stated that TAP had abandoned the office and was in default on the lease for the period from May, 1988 through and including September, 1989. The total amount of the default, including escalation payments, totaled \$30,638.72. TAP chairman John Catchings has confirmed that TAP has had financial problems, but also indicated that TAP's financial position has improved over the past year. He confirmed Barbara Catchings remarks about an inactive membership. Mr. Catchings said: "We had some very talented psychics in our organization, but too few team players." Mr. Catchings noted the positive accomplishments of TAP, including its growth from 38 members five years ago to a current membership in excess of 1,000. He mentioned the increase in professionalism in the organization over the past several years and expressed pride in the establishment of a psychic code of ethics.

Psychic fairs and other similar activities that would have been sponsored by TAP will continue in the North Texas area, but under the sponsorship of individuals or some splinter groups that may be forming.

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On negotiating facts

by **John Blanton**

In my dream I was back in Emma Roberson's math class, only, now I was no longer the student, but I had been transformed into the teacher. Furthermore, as the teacher, I was engaged in that less than gladdening ritual of passing back homework papers.

Cindy Matherson was sitting, as usual, on the back row, scowling at her paper, obviously displeased with the result. She marched the offending transcript up to my desk and thrust it into my face. "You counted number seven wrong. I just checked it again with my calculator, and I get the same result It's exactly right."

As usual, I was infinitely patient. "Cindy, I recall grading your number seven (I was trying not to sound too superior), and as far as I can tell, the only way you could have gotten that answer is to use three for the value of pi."

"That's exactly right," she replied (she used "exactly right" a lot). "I used three for the value of π , and I got this answer, exactly."

My patience was starting to fray a little. "Cindy, this was a calculator assignment, and accuracy was a stated requirement. You have to use the correct value for π if you expect to get the right answer. The value for π is not three. It is 3.1415926 with some more digits following."

"Well my calculator does not have a π key, so I used three, which is just as good, and, besides, it does not take as long to type in."

I was thinking about my decision twenty years previous to go into teaching. "Cindy, if you are going to get accurate results, you will have to supply accurate data. The correct value is in the book. Three just will not do for the value of π "

Her jaw had taken on a set. "I don't see why three isn't just as good. We all know that those other digits are completely arbitrary. You just use them because someone in authority said to. if we want to use three, we should be able to. After all, this IS a free country. Your generation has had things its own way for a long time, and you don't want to acknowledge that others may have opinions, as well. When are you going to start to recognize the rights of others and to let someone else besides yourselves call the shots?"

"Cindy, π is not arbitrary. Its value is derived directly from the definition of a circle being the locus of points equidistant from a center point. Using strict mathematical logic, you cannot come up with any different value for π , and you certainly cannot come up with 3.0. The value for π is one of those hard facts of life that cannot be negotiated away."

"If this were an art appreciation class, we could argue over whether Rembrandt was superior to Van Gogh, because so many of the terms of our argument, such as values of stylistic elements and mastery of composition, are subject to differing interpretations by different people.

"If this were a philosophy course we could argue over the meaning of life and the existence of the human soul, and either party could make valid arguments for either case with little or no hard consequence riding on the outcome of the debate.

"However, mathematics and science are rigid disciplines, and their results are applied to the real world with physical consequences to human well beings. If calculations in engineering and business are not performed correctly, then the wings of airplanes may fall off because they are not designed to withstand the stresses of flight. There is no room for negotiation when hard facts are required.

I gloated in my triumph, sure that I had thoroughly put the matter to rest with iron clad logic. Magnanimous in victory, I went on. "look, I do not require that you use π to ten significant digits. As a matter of fact, many engineering calculations are performed using 3.1416 as a close approximation for π . if you want to do that, it's fine with me."

Her hard, gray eyes locked onto mine, and I know she had determined to make a stand. "3.14," she said with the self assurance that comes with seventeen years of getting one's own way. "And that is my final offer."

Reality washed over me like a dash of cold water. I sat up on the couch where I had been napping under the Saturday newspaper. "GROUP DEMANDS EQUAL TIME FOR CREATIONISM," read the headline on page two.

From the patio came the voice of my wife, the voice that had rescued me from my slumber. "You promised to plant those shrubs today. There are twenty-five of them, so you had better get cracking."

"Fifteen," I replied "And that's my final offer."

"What did you say?" came the voice from the patio. "Nothing," I muttered as I threw the paper aside and shuffled off to the garage.

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