How happy rulers are that people don't think. -Adolf Hitler (1889 -1945)



The Newsletter of the Philadelphia Association for Critical Thinking July / August 2008

editor: Ray Haupt

email: phactpublicity@aol.com

www.phact.org

PhACT's Policy on Religion

By Bob Glickman in consultation with Dr. Andrew Petto

PhACT has recently been offered to join a billboard promotion involving Philadelphia area freethought and humanist groups. Since the message of that promotion lies outside of PhACT's mission, we elected not to become a member of that coalition. The following is a summation of our view.

The target audience for PhACT is the general public. Our goal is to promote critical thinking in all aspects of public life based on the evaluation of evidence and the assessment of real-world outcomes. We see major problems for general scientific literacy in the prevalence of pseudoscience, urban legends, and misinformation masquerading as fact in both general knowledge and the media. The uncritical presentation and acceptance of these unsupported ideas are crippling the general public's ability to think critically. Our goal is to present a rational voice and to promote evidence-based decision making to as many people as possible.

Surveys show that 90% of the public we are trying to reach believe in some kind of deity or deities. However, PhACT does not consider matters of personal faith or moral foundations for behavior based on religious (or other) beliefs to be a prime object of its mission. PhACT has drawn an admittedly crooked line in the sand to separate itself from examining religion per se, except in the cases where empirically testable claims are made. To PhACT, creationism or a crying statue isn't incorrect because the God concept or the Bible is false but because there is no basis for its empirical claims to scientific status.

The line in the sand is important to PhACT. As an organization dedicated to promoting science education, especially in the public schools, PhACT also needs to reflect the religious neutrality appropriate to public discourse, and so PhACT has made a reasoned decision to avoid such anti-

(Continued on page 4)

The PhACT Council

Eric Krieg, President
Bob Glickman, Secretary
Ray Haupt, Treasurer
Mike Caro
Dr. David Cattell
Dr. David Cragin
Tom Napier
Harry Rothwell
Becky Strickland

Phactum is, in theory, printed 6 times a year and is the main propaganda organ for the Philadelphia Association for Critical Thinking.

If you are not a member/subscriber we invite you to become one by sending \$15 for a one year membership to PhACT, \$10 for students. Donations are welcome.

Send letters of rebuttal, ideas, short essays, poetry, opinion pieces, complaints, and lavish praise to Ray Haupt, Phactum editor, at *phactpublicity@aol.com*.

PHACT CALENDAR

The Physics Department of Community College of Philadelphia hosts meetings of PhACT - at 2:00 PM on the third Saturday of most months at Community College of Philadelphia, 17th and Spring Garden Streets, West Building Room W2-48. Meetings are free and open to the public Parking is free at all PhACT events at CCP. Enter the college parking unless otherwise noted. lot on 17th Street which is one way south bound. At the meeting be sure to get a free parking voucher from Dr. Cattell.



Saturday, September 20, 2008 - Innumeracy - Math in Society. Dr. John Allen Paulos has been a major source of mathematical input to the media for years and has written numerous books including Irreligion, Innumeracy, A Mathematician Plays The Stock Market, Beyond Numeracy, A Mathematician Reads the Newspaper, Once Upon A Number, and I Think Therefore I Laugh. You can see more information on John's writings at http://www.math.temple.edu/~paulos/ and also on page 5 of this newsletter.

Saturday, October 18, 2008 - We the Person: Evolutionary Psychology and the Many Branches of your Brain. A central tenet of evolutionary psychology is that the mind consists of a large number of specialized systems, operating semi-autonomously. Here I will review the basic principles of the adaptationist approach to understanding human cognition and argue that 1) a great deal of what goes on in the human mind is not accessible to consciousness, 2) many parts of the human mind are not designed to generate true beliefs, 3) human minds frequently contain mutually incompatible cognitive representations isolated from one another, 4) making the very idea of a unified "self" suspect, and, finally, that 5) these ideas, taken together, explain the omnipresence of human inconsistency, including moral hypocrisy. Dr. Robert Kurzban, an Associate Professor in the Psychology Department at the University of Pennsylvania and founder of the Pennsylvania Laboratory for Experimental Evolutionary Psychology (PLEEP), is a leading authority on Evolutionary Psychology and will discuss that aspect of Human Evolution. For more information about Dr. Kurzban's work see http://www.psych.upenn.edu/~kurzban/.

Saturday, November 15, 2008 - TBA

Sunday, December 14, 2008 - Annual PhACT Winter Solstice Party. This event is free, but is reserved for PhACT members and their guests.

Saturday, August 2, 2008 7pm – 10pm, Buxmont Unitarian Universalist Fellowship, 2040 Street Rd. Warrington, PA 18976 First Saturdays are the **Humanist Association of** Greater Philadelphia's movie night. August, HAGP is showing "Taxi to the Dark Side." This documentary investigates the controversial issue of torture condoned by the Bush administration and justified by the War on Terror. Come for the film and stimulating conversation afterward.

Tuesday, August 5, 2008 7pm – 9pm Ludington Library (Basement) 5 South Bryn Mawr Avenue, Bryn Mawr, PA 19010 Freethought Society of Greater Philadelphia presents speaker Martha Knox, Celebrant and Director of the Humanist Association of Greater Philadelphia to speak on "Liberal Christianity: Is there a silent majority of Christians whose worldview is more similar to humanism than fundamentalism?"

Saturday, August 9, 2008 12:00pm – 1:30pm Olive Garden,

2328 W. Moreland Rd., Willow Grove, PA. Second Saturdays the Humanist Association of Greater Philadelphia hosts a casual luncheon at the Willow Grove Olive Garden.

Saturday, August 16, 2008, 7pm – 9pm Barnes and Noble, 102 Park Ave., Willow Grove, PA Third Saturdays the Secular Book Club meets at the Willow Grove Barnes and Noble. It is hosted by the Humanist Association of Greater Philadelphia and the Freethought Society of Greater Philadelphia. August's book is "Parenting Beyond Belief: On Raising Ethical, Caring Kids Without Religion," edited by Dale McGowan.

The **PhACT Calendar** is open to members and non-members who wish to announce meetings and events of other groups of which they are interested or affiliated. These events should be of some general interest to the Skeptical or Scientific community and should be within a reasonable radius of Philadelphia. Send submissions to the editor at phactpublicity@aol.com. Keep the announcements brief. Space is limited and insertions will be made on a first come-first served basis after the needs of PhACT are accomplished.

PHACT CALENDAR

University of Pennsylvania Museum of Archaeology and Anthropology

3260 South Street Philadelphia, PA 19104 215-898-4000

Surviving: The Body of Evidence Opened April 19, 2008. Through May 3, 2009

Penn Museum takes an up close and personal look at the scientific study of evolution with this challenging new traveling exhibition that puts you—and your fellow humans—at the center of the inquiry, on a journey of self-discovery.

Surviving, an interactive, multimedia exhibition supported in large part by a grant from the National Science Foundation, begins with the premise that you—and your fellow humans—are survivors. Your body holds the evidence. The process of evolution and its outcomes have had a profound impact on every aspect of your daily lives. And the process continues. This exhibition kicked off a city-wide programming initiative: now through May 2009, Penn, Penn Museum, and other Philadelphia cultural organizations join together to present a Year of Evolution programming for the public.

The Academy of Natural Sciences

1900 Benjamin Franklin Parkway Philadelphia, PA 19103 (215) 299-1000

Gregor Mendel: Planting the Seeds of Genetics Through Sunday, September 28, 2008

Learn the dramatic story of the brilliant 19th century friar who became the father of modern genetics. Recreate Gregor Mendel's famous pea experiment to discover the laws of heredity and meet modern scientists on the cutting edge of genetics. See the real thing: Mendel's botanical specimens, scientific instruments, correspondence and gardening tools. A mobile, collage, and sculpture are some of artists' interpretations of genetics concepts. Videos and hands-on interactive elements make the fundamentals of genetics accessible to everyone.

Gregor Mendel: Planting the Seeds of Genetics and its national tour were developed by the Field Museum in partnership with The Vereinigung zur Förderung der Genomforschung, Vienna, Austria, and The Mendel Museum, Brno, Czech Republic. This exhibit is presented by Villanova University and The Academy of Natural Sciences.

This event is a part of the Year of Evolution, a celebration of the 200th anniversary of the birth of Charles Darwin.

Wagner Free Institute of Science

1700 West Montgomery Avenue Philadelphia, PA 19121

ph 215-763-6529 www.wagnerfreeinstitute.org

The Wagner Institute's natural history museum contains more than 100,000 specimens illustrating the various branches of the natural world. The Museum includes founder William Wagner's mineral collection - one of the oldest in the country - and his fossil collection, representing many important European and American localities and collecting sites of the nineteenth century. Mounted animal skeletons, skulls, and skins; birds; an extensive regional entomological collection; and shells from around the world are on display, along with fossils collected on Institute-sponsored expeditions to the American South, Northeast, and Mid-Atlantic regions. All specimens are displayed in the cherry wood cases constructed for them in the 1880s, and many retain the original handwritten curator's labels. The exhibit is one of the largest systematically-arranged collections on display in the country.

Highlights from the Museum Collection

Case 71: Saiga Antelope, accession no. 12420 This strange ungulate was first identified in 1766, when it was placed in the same



Painting of Saiga Aantelope by artist Jennifer Rae Atkins.

genus as goats. Later, it was reclassified in the genus of Antelopes, and later still to that of Gazelles. The Saiga is now though to occupy a genus somewhere between sheep and antelopes. The Saiga is a nomadic species, living in the semi-deserts of Russia and Mongolia. An excellent runner, the Saiga can reach speeds up to 48 miles an hour and can cover 70 miles in one day. Its large, inflatable humped nose is its most distinguishing feature, used to filter out airborne

dust during the summer, and to heat the air before it reaches the lungs during the icy winters. The Saiga is a timid animal, has a poor sense of hearing and is easily startled. Its vision, however, is acute, and

the Saiga can typically spot danger up to one kilometer away. The Saiga is now threatened due to over hunting; it is often killed for its horns, which are said to make powerful aphrodisiacs.

Case 41: Ammonite fossil, found in the basement of the Wagner Institute and thought to have been purchased by William Wagner prior to 1885. The Wagner Institute has a substantial Ammonite fossil collection. These hard shelled, squid-like marine animals date from the beginning of the Paleozoic era, approximately 544-65 million years ago. They are considered some of the most successful species in earth's history. They were abundant in all of the earth's oceans and are thought to be the ancient equivalent of the modern-day nautilus. The name, "ammonite" was taken from the ancient Egyptian god, Ammon, who considered ammonite fossils to be divine. The Roman historian, Pliny the Elder, also collected ammonite fossils, believing that they could evoke prophetic dreams.

The Museum is open to visitors Tuesday through Friday from 9 AM - 4 PM for self-guided tours. Groups of more than six people are asked to phone in advance for reservations by calling (215) 763-6529, ext. 17. Admission is free; donations are encouraged.

(Continued from page 1)

religious entanglements in its effort to reach out to the largest possible segment of the public. This position removes questions about the legitimacy of religious belief (or atheism) from the table as we seek to focus on the issues of appropriate rational decision-making in education, public policy, and civic life.

To the extent that we share interests in promoting good science education and rational decision making in general with atheist, humanist or freethought groups, we welcome their support and will work together to achieve common goals. However, we reserve the right to separate ourselves from aspects of these groups' missions that PhACT does not share. The result of such an association would be to portray the membership and organization aims of PhACT inaccurately and potentially to reduce PhACT's effectiveness in achieving its own mission and objectives.

To engage and attract the general public, a "safe" entry point is required in order to introduce rational, critical thinking. By keeping our focus on that objective, PhACT can avoid potential pitfalls that will reduce the likelihood of success by introducing issues other than the promotion of critical thinking. It also allows us to reach out to allies who might be put off by an insistence on atheism. If the tools, methods and lessons of critical thinking can get a chance to take hold (our goal), then future citizens (and future civic discussions) will be based on rational evaluation of evidence and real-world results, which we think will lead to a better, more productive, and ultimately happier society.

Editor's note: We wish to thank Dr. Andrew Petto, a member of the Board of Directors of NCSE, the National Center for Science Education, for sharing his thoughts on the matter of a Critical Thinking organization's attitude toward religion. Dr. Petto is senior lecturer in anatomy and physiology at the University of Wisconsin, Milwaukee, and has twice been speaker at PhACT events.

The NCSE is dedicated to defending the teaching of evolution in public schools. To accomplish its goals NCSE is religiously neutral and prefers to accomplish its goals through consensus and cooperation. It does in fact work with religious organizations as well as scientific ones.

Ω Ω Ω

All is mystery; but he is a slave who will not struggle to penetrate the dark veil. -

Benjamin Disraeli (1804 - 1881) Twice Prime Minister of the United Kingdom (Feb 1868 - Dec 1868, Feb1874 – Apr 1880)

Women Aren't Supposed to Fly: The Memoirs of a Female Flight Surgeon

By Harriet A Hall

ISBN: 0-595-49958-9 Paperback, 234 pages, **\$18.95** Published: March 2008

What was it like for a woman to become a doctor and a military officer in 1970? Challenging, frustrating, always interesting, and often hilarious.

When the author graduated from medical school only 7% of American doctors were women. As the second woman ever to do an Air Force internship, she had to fight for acceptance. Even a patient's 3 year old daughter proclaimed, "Oh, Daddy! That's not a doctor, that's a lady!" She was refused a residency, paid less than her male counterparts, couldn't live on base, and couldn't claim her husband as a dependent because he wasn't a wife. After six years as a general medical officer in Franco's Spain, she became a family practice specialist and a flight surgeon, doing everything from delivering babies to flying a B-52. She earned her pilot's license despite being told "Women



aren't supposed to fly" and eventually retired from the Air Force as a full colonel. She is witness to an era when society was beginning to accept women in traditionally male jobs but didn't entirely like the idea yet. She found unconventional ways to cope, like admitting a spider to the hospital! Her warped sense of humor sustained her and it spices the stories she tells about her experiences and the patients and colleagues she encountered.

Books by Dr. John Allen Paulos

All books available at bookstores and online through Amazon, Barnes & Noble, or Booksense.

His most recent book

Irreligion: A Mathematician Explains Why the Arguments for God Just Don't Add Up

Hardcover: 176 pages **Publisher:** Hill and Wang (December 26, 2007 **ISBN-10:** 0809059193

From Publishers Weekly

Few of the recent books on atheism have been worth reading just for wit and style, but this is one of them: Paulos is truly funny. De-spite the title, the Temple University math professor doesn't actually discuss mathematics much, which will be a relief to any numerically challenged readers who felt intimidated by his previous book Innumeracy: Mathematical Illiteracy and Its Consequences. In this short primer (just the gist with an occasional jest), Paulos tackles 12 of the most common arguments for God, including the argument from design, the idea that a moral universality points to a creator God, the notion of first causes and the argument from coincidence, among others. Along the way, he intersperses irreverent and entertaining little chapterlets that contain his musings on various subjects, including a rather hilarious imagined IM exchange with God that slyly parodies Neale Donald Walsch's Conversations with God. Why does solemnity tend to infect almost all discussions of religion? Paulos asks, clearly bemoaning the dearth of humor. This little book goes a long way toward correcting the problem, and provides both atheists and religious apologists some digestible food for thought along the way.

Older publications

Innumeracy: Mathematical Illiteracy and Its Consequences

Paperback: 208 pages Publisher: Hill and Wang Pub.

Date (1988) **ISBN-13:** 9780809058402

A Mathematician Plays The Stock Market

Publisher: Perseus Publishing Pub. Date: May 2004 ISBN-

13: 9780465054817 **Paperback**: 216 pages

Beyond Numeracy: Ruminations of a Numbers Man

Publisher: Knopf Publishing Group

Pub. Date: April 1992 ISBN-13: 9780679738077

Paperback: 285 pages

A Mathematician Reads the Newspaper

Publisher: Knopf Publishing Group Pub. Date: March 1996

ISBN-13: 9780385482547 **Paperback** 212pages

Once Upon A Number: The Hidden Mathematical Logic Of

Paperback: 224 pages Publisher: Basic Books Pub. Date: October 1999 ISBN-10: 0465051596

I Think Therefore I Laugh.

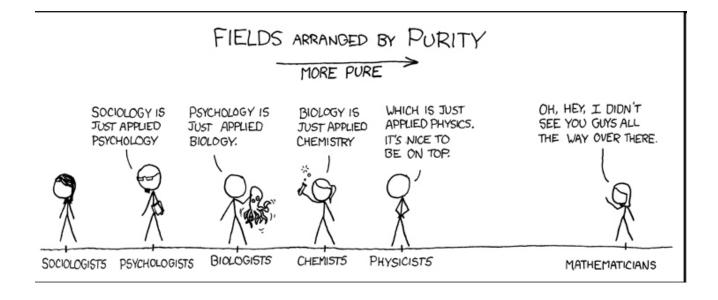
Publisher: Columbia University Press; **Pub. Date** 1985 **ISBN-13:** 978-0231119153 **Paperback**: 192 pages

Mathematics and Humor

Publisher: University of Chicago Press

Pub. Date: November 1982 Paperback: 116 pages

ISBN-13: 9780226650258



Letters

Editor: Here's a source for a gleeful news report in Phactum: www.fuelmaxlitigation.com.

I found the reference in Sunday's Parade. The FTC has

finally gotten a judgment against "International Research and Development" for selling worthless magnetic gas mileage increasing devices. This site has the report and a history of FTC actions and press releases going back to 2004.

I guess the good guys won another one.

Tom Napier North Wales, PA

Editor: Your item on Harold Urey [May/June 2008] left out one of the things he may be most famous for: the experiment he did with Stanley Miller confirming the hypothesis that natural energy sources in the early Earth would cause some inorganic elements and compounds to recombine into simple organic molecules. It's described in this Wikipedia article:

http://en.wikipedia.org/wiki/Miller-Urey experiment.

Eric Hamell Philadelphia THE POST AND A THE PO

Michel de Nostredame (1503 - 1566), usually Latinized to Nostradamus

Editor: At the PhACT Lunch, Elaine Brody expressed concern that I hadn't responded to her clerihew in the March Phactum. Reluctantly I pen:

Elaine Brody Merits odi-Um for contriving "doorhinge" As a rhyme for---oringe?

Reverting to the Editor's original challenge, I now submit:

William of Orange, Planned to climb the Pau Range. As a Dutchman, poor King Billy, Rather thought it would be hilly.

(Pau is a town in the foothills of the Pyrenees which I once visited on business.)

Pusillanimous indeed! Tom Napier North Wales, PA Editors note: Anyone care to devise a clerihew for Long John Silver?

Editor: Those of us who debunk sensationalist papers and the paranormal, may be amused at the wording I found on one of my logic puzzles recently. I subscribe to Dell Logic Puzzles, a bi-monthly magazine unavailable in stores to my

knowledge (but you can go to www.dellmagazines.com to see what's available by subscription). Often the puzzles include punny names or phrases, which add to my enjoyment.

On page 14 of the July 2008 issue of Dell Logic Puzzles, one puzzle entitled "Nothing But the Truth" asks the solver to figure out the order in which 5 "newspaper" (I put that word in quotes because all of the papers are on the order of the National Enquirer) articles were written, and in which publication they appeared.

What cracked me up was that one of the articles in this puzzle, had the title "Mansion Haunted by Ghost Writer." It made me think of PhACT and the Skeptical Inquirer.

Amy Lowenstein Yardley, PA

Editor: Those woo-woos are quick off the mark. Just before Senator Clinton finally abandoned her bid for the Democratic nomination an acquaintance assured me that Nostradamus had named Senator Obama the winner and had, incidentally, revealed him to be a Muslim and the Anti-Christ. I wondered aloud how a process in 2008 could have been predetermined in 1555 and asked why events were always fitted to Nostradamus after they had taken place, never before. There is a simple explanation, I was told. It's all the fault of skeptics such as James Randi who dissuade us from taking the predictions of Nostradamus seriously.

Just think how much money Senator Clinton and her supporters could have saved if they had ignored James Randi and studied Nostradamus. For that matter, why don't we let Nostradamus select the next President and save us the hassle of an election? I must ask my woo-woo friend that the next time I see him!

Tom Napier North Wales, PA

Various Ruminations

Collected/written by Ray Haupt, editor (with help from others)

Vaccines and Autism

On Thursday, June 5 there was an AOL Poll asking: **Do** you think a link exists between vaccines and autism? The polling results at the time that I looked at that poll and had dutifully responded "No" were rather disturbing.

Yes 43% 4,249 I don't know 30% 2,952 No 27% 2,689 Total Votes: 9,890

Meanwhile another vaccine with the trade name Gardasil is under legal attack for causing a variety of health risks. Gardasil is designed to prevent cervical cancer and for best results should be administered to girls at age 11 or 12. This drug has been certified as safe by the FDA and the CDC and some states now require vaccination in public schools. However, there are reports of adverse reactions and stories have been flowing to main stream media outlets and lawyers and plaintiffs are flocking to the courts.

I certainly do not have an informed opinion on this matter, but the pattern does seem to be the same as the vaccine/autism legal cases. If any Phactum readers would care to respond to this question it would be appreciated. There is little doubt in my mind that there will be experts on both sides of the question.

Politics - "Thrown under the bus"

Am I alone in being sick of that hackneyed cliché? This dismal and endless election is bound to produce more equally annoying overused phrases. I invite readers to submit other current clichés that annoy. "Throne under the bus" elicits more interesting mental images.

Creation/Evolution - The Creation Museum

Early in May, on a motor trip, my wife and I had the situation of being near Cincinnati, Ohio and near there, south of the Ohio River, in Kentucky is the Creation Museum. It seemed like a good idea to visit, especially since Phactum has on a few occasions been critical of Creationism. Why not listen?

Our first impressions of the museum were quite favorable. The building and grounds of this operation are attractive, well maintained, and parking is abundant and well secured. The ticket booth was efficient and the staff was cheerful and polite. Other patrons appeared normal in their demeanor and I myself had made a point to not wear a Darwin tee shirt.

And that was the tone of the entire experience. This was a fun science museum, well planned and executed, and it did do a good job of presenting the Creation view of the universe.

The museum has many audio/visual exhibitions and small theatre exhibits. One short presentation featured two wise-cracking angels who humorously and with twisted logic explained to a girl sitting at a campfire how it is that scientists just have it wrong about God's Magnificent Creation. Another exhibit featured two paleontologists digging old bones in the desert. Both clearly said the bones were from the Jurassic period but disagreed on the matter of age, 150,000,000 million years BC or ~2,348 BC, take your pick. The planetarium show was quite good with lots of gee whiz facts about the Universe that was created by you know who.

The exhibition about Noah's Ark was interesting and the model builders did a superb job. The Ark, by the way was 450 feet long, much longer than the schooner Wyoming which at 329 feet was the largest wooden ship built in modern times. Wyoming and similar large wooden vessels had problems with leaking and hull separation. Perhaps Noah was a better naval architect then modern engineers.

The Ark was a craft of about one half the displacement of the Titanic and had room for two of every species including 50 kinds of dinosaurs. A plaque at the museum states: "The dinosaurs that did not enter Noah's Ark were drowned in the Flood (about 4,350 years ago), and many were buried and preserved as fossils". Thus, the Flood occurred ~2342 BC and was a Jurassic event.

Dr. David Cattell asked me after I had returned home whether Adam and Eve had belly buttons. I didn't know and had not thought to check out that fact while at the museum. Eve was pretty cute, of course, and here is a picture of Adam and Eve in a lily pond.



After touring the museum we had a decent and affordable lunch at Noah's Cafe. Our last few minutes at Creation Museum were to go through the Bookstore. The store offers a large selection of books and audio visual materials much of which appears geared toward home schooling. Interestingly,

but not surprising, some educational materials are written at the college level.

All in all this was a fun tour.

Modern Medicine - the meaning hits home

About two weeks after retuning from vacation this May my wife was diagnosed with a relapse of leukemia. This was terrifying news. A few days later she was admitted to HUP, the Hospital of the University of Pennsylvania, for chemotherapy. This is a serious and rigorous procedure with an abundance of possible adverse complications, some of which happened. Needless to say, Phactum and all other interests and responsibilities in my life had been set aside for nearly two months.

HUP is a state of the art teaching and research institution and fortunately is geographically close to our home thus eliminating the need for extensive travel to secure first class modern medical treatment.

Unfortunately, Dr. Leonard McCoy has not yet been born



and his tricorder not yet invented, but doctors and other researchers at science based institutions such as HUP are clever and step by step are devising treatments and cures for many diseases at an accelerating rate. Perhaps one day modern

medicine will have some resemblance to Dr. McCoy's techniques.

Meanwhile, in the Real McCoy world of this fine hospital, it was not lost on me that not a single doctor, technician, or nurse appeared in a loin cloth with rattle in hand. No one burned curative incense, performed mystical chants, prescribed all-natural healing teas and juices from the tropics, or suggested therapeutic touch. Homeopathy was not discussed, pyramids, crystals, and copper lined rooms were not present, and magic supplements were not part of the protocol. What really was employed was powerful chemicals developed by scientists and proven to have therapeutic merits.

In the course of this misadventure well meaning friends and acquaintances suggested other hospitals and other treatments. Some did suggest some very capable hospitals and as things worked out a specialist affiliated with one of those hospitals had indeed referred us to HUP. I applaud that specialist for his honesty to refer a patient to a more suitable situation

Others folks suggested vitamin supplements to strengthen the body. In fact we were advised to drop all vitamins and supplements as there will be more than enough chemicals assaulting the body and the supplements might be detrimental in their own right. If supplements strengthen the bodies cells will they not also strengthen cancer cells? We were told yes. And in the matter of taking self prescribed vitamins

very few of us really know what we are talking about anyway.

One friend suggested acupuncture. "Acupuncture"? I questioned. "What will that do"? "Well", he replied, "it is useful to relieve backache". I did not do what I was thinking and did not have a heavy blunt object in hand anyway. Acupuncture indeed.

Meanwhile, there is an abundance of quacks vigorously peddling their wares, eager to prey on unsuspecting people seeking cures for minor and major diseases and even non-existent ones. If one were to listen to any of several AM radio stations in the Philadelphia area on weekends there is near non-stop babble of snake oil salesmen pushing miracle herbs and concoctions. Many of these phony practitioners masquerade as doctors yet have no serious training in any medical discipline and can claim nothing more than a mail order diploma. I have long been skeptical of this kind of medical advertising but I must say that my skepticism has recently taken sharper focus and much greater anger even though we had no dealings whatsoever with quack practitioners. Those people are but killers and should be exposed, stopped, and jailed.

Fortunately, there are responsible physicians and laymen who work to educate the public against falling for bogus health claims. PhACT has done some of that by way of having speakers address medical issues at our monthly meetings. The most recent was Dr. Paul Offit, a vaccine expert at Children's Hospital of Philadelphian whose topic was autism induced in children by mercury in vaccinations. There is no doubt that the fear is real, but the reality is that the danger of the vaccines causing autism is minimal or even non-existent.

I am proud to say that we have, at least in a small way, addressed medical abuse in many editions of Phactum, mainly by way of reporting issues exposed by Dr. Steven Barrett, the dean of Quack Busters, who operates Quackwatch, an internet site dedicated to exposing fraud in healthcare. Dr. Barrett is also editor of Consumer Health Digest, a free weekly e-mail newsletter which you may subscribe by going to the Quackwatch website at:



http://www.quackwatch.org

Dr. Harriet Hall, otherwise known as the SkepDoc, has contributed to Phactum as a letter writer. Dr. Hall, by the way, has a certain resemblance to Dr. McCoy in that she was a US Air Force flight surgeon and certified B-52 pilot. A B-52 does not quite compare to Starship Enterprise but is still rather impressive. Dr. Hall has a recent book about her exploits which is further described on page 4 of this newsletter.

Dr. Hall, is a frequent contributor to Skeptical Inquirer

and Skeptic Magazine. She, along with several other physicians participates in a website called Science Based Medicine and may be found on the internet at:

http://www.sciencebasedmedicine.org

Still another voice for critical thinking about medical matters and other issues is the London based organization Sense About Science whose website may be found at:

http://www.senseaboutscience.org.uk

Phactum is hardly a single issue or single point of view newsletter and never will be, but do not be surprised that more ink be given to medical matters in future editions.

Politics - The High Cost of Gasoline

Americans have been wringing their hands lately about the matter of escalating motor fuel prices. Politicians, reflecting the woes of their constituents, are pointing fingers at the oil companies, speculators, and the other party. No one it seems has an idea how to quickly reduce motor fuel usage or cost. Enter Senator John Warner of Virginia who, on July 4th, suggested that a national speed limit of 55 MPH be declared on all major highways. The benefit declares Warner is that daily crude oil purchases could then be reduced by about 160,000 barrels, about 2 percent. That is not a trivial amount of oil or money, about \$22,400,000, daily not to mention highway mayhem reduction. Speed reduction worked in the 1970's, reasoned Warner, so why not now? Furthermore it can be accomplished quickly and at a very low cost.

AOL polling on July 4th, and also a recent poll by Radio and TV political pundit Bill O'Reilly, indicated that 70% of respondents to the question "Are you in favor of a 55 MPH speed limit" are opposed to speed limit reduction. intrusion by government into personal affairs some people say. That is probably true but speed limits are already a generally accepted intrusion so this can hardly be counted as Big Brother control of our lives. Kudos to Warner, BOO to that 70 percent. Why did it take so long for any significant political figure to suggest such an idea?

Dr. Park's What's New Column

Dr. Robert Park had this little item in the July 11, 2008 edition of What's New.

GASOLINE SCAMS: ABOUT THOSE VOODOO FUEL **SAVINGS**

Last week we called attention to the Hydro Assist Fuel Cell and the Pre-Ignition Catalytic Converter advertised in mainstream magazines by the same company. Where to send your money was clear from the ads, but who was getting your money was not. Eric Krieg, www.phact.org/hafc.htm, perhaps the world's top debunker of perpetual motion and free energy scams, has tracked it down and tells me it was none other than Dennis Lee, who now uses the company name of Dutchman Industries. WN has followed Lee and his perpetual motion machines for eleven years.

http://bobpark.physics.umd.edu/WN97/wn071897.htm

Politics - Change

A hot topic of discussion during the upcoming Presidential Election of 2008, and every other election, is The great American writer Washington Irving (1783 - 1859) had a few words to say about change.



Washington Irving (1783 - 1859)

"There is a certain relief in change, even though it be from bad to worse! As I have often found in traveling in a stagecoach, that it is often a comfort to shift one's position, and be bruised in a new place."

Opera – Wretched Recitative

It has been announced that La Scala, Italy's most famous opera house, has commissioned post-modernist composer Giorgio Battistelli to write an opera based on Vice President

Al Gore's book and documentary film, An Inconvenient Truth. Battistelli's atonal style is as well suited for this story as it was in his 2002 opera, The Embalmer, the fascinating melodrama of the embalming of Vladimir Ilyich Lenin in 1924. No aria was sung in that production giving whole new meaning to opera. The new production is scheduled for its world premiere on May



11, 2011. Will the vice president be cast in a part? Will the tenor be eaten by a hungry polar bear as the final curtain falls? Will anyone even sing? Stay tuned.

Socrates Café: Asking "The Good Question"

By Sam Frederick, Facilitator Socrates Café at Springfield Township Library

What? The evening's discussion of "Are we too materialistic?" was coalescing into a group rant against how Americans consume too much. Then Tom, who works in a wholesale bookstore and once volunteered—too modestly-- "I don't know anything," spoke passionately: "But my materi-

alism could be that I'm *proud* of how many material things I've *given up*!" No one spoke. Beth, a retired social worker who had spent some career days working in prisons, emailed her Socrates Café facilitator: "So this is the beauty of Socrates Cafe. A person never stops learning and growing. I always come away with a new perspective!"

Let's rewind. Danish philosopher Soren Kierkegaard (1813-1855) said: "Life can only be understood backwards; but it must be lived for-

ward." And isn't that the real challenge of the human condition? Kierkegaard's inspiration far predated him: a stout middle-aged ancient Greek with a fluffy beard. He lived on the charity of others and made it the mission of his life to learn wisdom. He did this by walking slowly about his beloved city, Athens, asking questions of others he met. His name: *Socrates*.

At Socrates Café in Springfield Township Library, people who have been young parents, grandparents, a house painter, a Ph.D. physicist, a single mom, a lawyer, a home caregiver, a teacher, war veterans, homemakers, and many other things, ask questions and suggest answers. The real topic—which hasn't changed since people began debating it a hundred thousand years ago when we learned to talk-- is always *What is good in how to live life*?"

Why? Alessandra, the Springfield Township Reference Librarian, started a Socrates Cafe in February 2008 because she saw a sign for one in another library and was, well, curious. She went to the Web and found that a young professor of philosophy, Chris Phillips, had thought his subject had become too much the possession of academics like him. He reflected on its origins among ordinary people in the streets of ancient Athens. There, philosophers would launch discussions on the street, in the park, in the marketplace. So Phillips decided "to bring philosophy back to the people." He began, in his spare time, visiting libraries, coffee shops, schools, offices and prisons, and starting discussions with everyday people—people like you and me. For more information about this modest but fascinating individual, see Chris Phillips' Website, www.christopherphillips.com

Phillips' sessions became hugely popular, and participants came back again and again. Phillips himself even fell in love with a participant who just showed up one day, and they later married. He published his first book, *Socrates Café: A*

Fresh Taste of Philosophy, a best-seller which is always in print and in libraries. It started a national movement. You can go to the movement's simple Website, www. philosopher.org, and see how it works. Searching the Web, we have found Socrates Café guidelines (very simple) and a wealth of questions worth discussing. Or you can think up your own questions and bring them yourself; our participants do.

Therefore, in our everyday lives, we Americans of today are people as ordinary as our ancient Athenian fellow participants who were bakers, parents, merchants, local volunteer workers, shoemakers, priests, grandparents, black-

smiths, veterans too. At our Springfield Socrates Café, we don't have "experts" who lecture. We have the opposite: citizens who discuss. We are all experts-- in our own lives, though we are modest and want to learn more about what we can understand from what we have experienced.

How we've grown. In Springfield Township Library, the Socrates Café meetings started every two weeks. The first meeting had two people. After a month or so, six times that

many were coming. Then several members asked that meetings be increased to every week. Now, every Monday night at 7:00 p.m., eight, ten or twelve people come to ask, answer, show passion, laugh, grow reflective, offer reason and compassion and understand more the meanings of our lives and how we might live them better. It's intimate, friendly and safe. (Maybe that's because, when I started facilitating, I threatened everyone with my can of Lysol "Fresh Air" spray if anything got nasty!—but I've never had to use it, ever.) Friendships have formed, and when the session is over there is always a knot of people—who were strangers before-- talking, waving their hands and laughing in the darkened parking lot.

I seek new participants all the time—again, not as experts in anything except in their own lives. A local clergyman says he wants to come. So does a Philadelphia policewoman. I met earlier this month with Ron Cuie, Director of Philadelphia Mayor Mike Nutter's Office for the Reentry of Ex-Offenders (M.O.R.E.). I talked to some of the M.O.R.E. clients. One said the program really helps people; the whole setting exuded order, caring, positivity. Ron admired what we do and will try to identify participants for us among M.O.R.E. clients who are capable and making a real effort to better themselves.

PhACT members: you're naturally prepared, by curiosity and interest in learning, for Socrates Café. Give it a try!

Where and when? The Springfield Township Library is in eastern Montgomery County, just outside Chestnut Hill, Philadelphia, at 1600 Paper Mill Road and Hawthorne Lane, Wyndmoor, PA 19038. It is one-eighth of a mile from the Paper Road Exit on PA Route 309. By member demand, our Socrates Café meets every Monday night (except holidays) at 7:00 p.m.

May 2008 Meeting Report By Becky Strickland

The highlight of our annual May banquet was a panel discussion among 3 well known, science friendly, local media professionals.

- ► <u>Faye Flamm</u>, science writer for the Philadelphia Inquirer, decided to be a science writer early in college.
- ► <u>Tony Romeo</u> of KYW radio was riveted by the MLK and RFK assignations (at age 8) and dumbfounded that his friends were oblivious to these events. Tony covered the Three Mile Island meltdown early in his career.
- ► <u>Bruce Gordon's</u> (FOX News) interest in current events began with Watergate.

The discussion revealed the similarities and differences among print, TV and radio reporting. Discussion questions, designed by Eric Kreig, included 'What makes something newsworthy?', 'What does it take to be a journalist?', 'Who decides what gets reported?', 'How has media consolidation changed your industry?', and 'Do "story suppressing' conspiracies exist?'.

Tony, who has worked for several small privately owned radio station before coming to KYW more than 20 years ago, addressed the issue of media consolidation. He pointed out the current situation is similar to 40 years ago when there were only 3 major TV networks in the country. In his years in a variety of radio stations he saw no correlation between the size of the station and concern for accurate reporting.

None of the 3 panelists felt they had been censored or even discouraged from pursuing a particular story. They agreed the business is still dominated by middle aged white males but there is a concerted push to appeal to a younger audience.

It is impossible to convey on paper the energy, intelligence and integrity these panelists projected. I was very sorry to see the discussion end.

Ω Ω Ω

The basis of our governments being the opinion of the people, the very first object should be to keep that right; and were it left to me to decide whether we should have a government without newspapers or newspapers without a government, I should not hesitate a moment to prefer the latter.

-- Thomas Jefferson, letter to Edward Carrington, 1787.

Soundbites

Compiled by Becky Strickland

Nobel laureate David Baltimore of the American Association for the Advancement of Science, on US officials who have questioned the science of evolution. He spoke at the first World Science Festival, where experts agreed that the US is losing stature in science partly for this reason. (The Washington Post, May 29, 2007)



NO WAY MAN ... YOU KNOW I DON'T WAIT IN LONG LINES

Copyright Gospel Communications International, Inc - www.reverendfun.com

- * "The theory of intelligent design states that an omnipotent being created the universe and everything in it for reasons we cannot, and are not meant to, comprehend. There is no quantifiable evidence to support this theory, there are no hypotheses that can be proven or disproven using this theory, and it offers no predictive ability for any past present or future events. OK, now let's move on to the theory of evolution." Ken Lignar of Chester, Connecticut, offers a sample lesson on intelligent design in a letter to the editor, New Scientist, June 2008.
- The creationists are resilient, and they have regrouped." Glenn Branch, deputy director of the National Council for Science Education, says many religious groups are now arguing that teachers should have the freedom to teach critiques of evolution in science classrooms if they so wish. the New York Times, June 23, 2008.
- It's like trying to become a gardener without touching the dirt." Christopher Perillo, a science teacher in Kenosha, Wisconsin, on why he is against proposals that biology students should carry out virtual dissections instead of cutting up real animals. Students are already allowed to opt out of dissections in 14 US states without affecting their grades." (Associated Press, May 31, 2007)



Radiation: Myths and misunderstandings by Tom Napier

Part II: Isotopes and particles

There's a common belief that material exposed to nuclear radiation somehow becomes radioactive. This leads people to worry about the safety of food that has been irradiated to kill harmful bacteria. While irradiation may cause possibly harmful chemical changes, the treated food isn't radioactive. It takes bombardment with neutrons, for example in a nuclear reactor, to convert elements to a radioactive form.

Such artificial radioactive isotopes can be prepared on demand and are widely used for medical and research purposes. Many are short-lived isotopes which do not exist in nature. These have two advantages, they provide intense radiation from a small amount of material and they don't linger. Many elements are preferentially absorbed by certain body tissues. If they have a suitable radioactive isotope it is possible to trace the functioning of that tissue by measuring the emitted radiation.

Another common medical use of artificial radioactive isotopes is to treat cancer. They apply a strong dose to a limited area of the body, killing a tumor while doing minimal damage to the surrounding tissue.

Alpha particles

Each radioactive isotope emits a unique combination of radiation which can be used to identify what is present in a given mixture. Heavy isotopes emit alpha particles. These contain two protons and two neutrons and are identical to helium nuclei. Because they are highly charged they react with any matter they encounter and stop quickly. Once stopped

they become helium gas, indeed the Earth's dwindling helium supply comes from the radioactivity of its crust. A sheet of paper or three inches of air is enough to stop an alpha particle. The dead outer layer of your skin protects you from external alpha radiation.

Only those alphas emitted close to a sample's surface can escape so a large chunk of an alpha emitter is not much more dangerous than a small chunk. The alphas emitted in the interior merely heat up the sample. A golf-ball sized lump of bomb-grade plutonium (Pu-239) generates about ten watts and is warm to the touch. A similar-sized chunk of an alpha-emitting isotope with a shorter half-life gets dangerously hot. Pu-238, with a 90-year half-life, is used in deep-space probes to generate electricity and to keep things warm when far from the sun.

The danger from alpha-emitting materials arises if you get them inside you. If you breathe in or swallow a tiny piece of an alpha emitter and it gets stuck somewhere it applies an intense dose to the cells immediately surrounding it. This has a high probability of triggering cancer. This risk lies behind the legend that plutonium is "the most poisonous substance known." As far as I know, plutonium is no more poisonous in the ordinary sense than any other heavy metal. If you ingest a piece and if it isn't excreted and if it causes cancer and if you ultimately die then the tiny piece was the cause of your death. I doubt that this classifies plutonium as a poison. That's like the movie cliché about the outlaw with a bullet through him who died of lead poisoning. Still, if someone offers you some plutonium to see how warm it is, you'd better wear latex gloves.

Beta particles

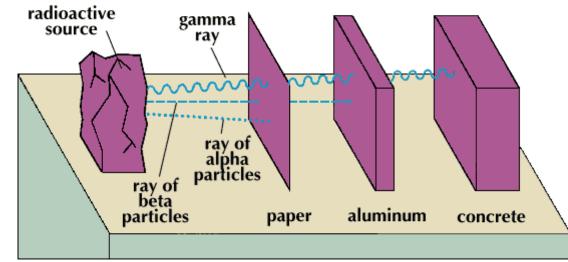
Unstable light isotopes tend to emit beta particles. These are simply fast moving electrons. How far they travel depends on their energy. Half a inch of plexiglass or a few feet of air will stop them. One hazard of betas is that they can bounce round corners. Just because you can't see

the source doesn't mean they can't get to you. They also generate X-rays if stopped suddenly which is why plexiglass rather than lead is used as a beta shield. Betas of a controlled energy and direction are readily generated on demand by accelerating electrons with a high voltage. The tube in an analog TV set uses a beam of beta particles to paint the picture.

Gammas and X-rays

When they emit alpha or beta particles radioactive isotopes also tend to emit gamma rays. These are electromagnetic





radiation like X-rays, light or radio waves. The distinction is that the energy carried by each photon is much higher. This has a major effect on its behavior. Radio waves jiggle atoms about but leave them intact. Microwave ovens heat food but have no other effect. Despite this, some people won't use microwave ovens because of the "radiation" scare-word. Photons of visible light can break bonds within some molecules; this is why we can see. Ultraviolet light can knock electrons out of atoms, triggering a chemical reaction.

Once we get to X-ray energies, a single photon can ionize (remove electrons from) many atoms, losing a little energy each time. An X-ray or a gamma ray passing through matter leaves a trail of ionized atoms, indeed this is how we detect such particles. Higher-energy gamma rays have other reactions, for example, they can lose energy by creating an electron-positron pair, that is a negative and a positively charged beta particle.

X-rays and gamma rays have similar properties and the dividing line between them is often drawn on the basis of how they are generated rather than on mineral, potassium uranyl sulfate, in photheir energy. Rays emitted by radioactive materials are usually called gamma rays unless they have an unusually low energy; rays generated by high-voltage machines are called X-rays whatever their energy.

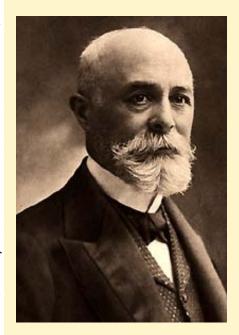
The intensity of radiation inherently falls as the inverse square of the distance from the source; doubling the distance quarters the dose rate. Gamma rays most nearly follow this rule. The intensity of Prize for Physics with Pierre Curie and alpha and beta particles falls faster as they Marie Curie, née Sklodowska. are more readily stopped by the air.

Unwanted isotopes

Our present nuclear power reactors are incredibly wasteful since they burn only a fraction of the rare U-235 uranium isotope. When uranium fissions it creates a wide range of daughter elements. These are in highly unstable isotopic forms and have a huge range of half-lives.

There's a common misapprehension that fission products having long half-lives are the most dangerous. Pluto-

Professor Antoine-Henri Becquerel (1852 - 1908)



While investigating phosphorescence in uranium salts one day in 1896, Becquerel accidentally discovered radioactivity. Investigating the work of Wilhelm Conrad Röntgen, Becquerel wrapped a fluorescent tographic plates and black material in preparation for an experiment requiring bright sunlight. However, prior to actually performing the experiment, Becquerel found that the photographic plates were fully exposed. This discovery led Becquerel to investigate the spontaneous emission of nuclear radiation.

In 1903 Bequerel shared the Nobel

nium has a 22,000 year half-life and people get panicky about having to store it for millennia. Plutonium and the common U-238 isotope are currently treated as waste products although both are valuable fuels and are worth extracting. If we recycled it, as other countries do, plutonium wouldn't be a problem. Future generations may mine our nuclear waste dumps to recover the precious milk from which we have taken only the cream.

Short-lived isotopes generate much more intense radiation. It should be clear why this is so, a given mass of material has only so many atoms in it. If these all decay in a short time the result is a high level of radiation. When spread over thousands of years the intensity is much lower.

The nice thing about short half-life products is that you need take care of them for only a short period of time. Used fuel rods are extremely dangerous immediately after being removed from a reactor but become much less so within weeks. After a vear of storage their radioactivity has dropped to 2% of its original level. The high activity, short-lived isotopes are gone and what remains can be handled, from a safe distance, with normal industrial equipment.

One common myth is that a nuclear reactor is an atomic bomb waiting to go off. While accidental overheating might burst a reactor's pressure vessel, a power reactor is physically incapable of a nuclear explosion. I'd much rather live downwind from a nuclear reactor than from the equivalent coal-fired power station.

In the next Phactum I'll reveal real "cold fusion" and say something about the effects of radiation, natural and otherwise.

Editors note: I too shared that common belief that material exposed to nuclear radiation somehow becomes radioactive. I am wiser now. Thanks, Tom.

 $\Omega \Omega \Omega$

An atom walks into the Police Station and says, "I need to report a missing Electron". Police officer asks, "Are you sure?" Atom replies, "Yes. I'm Positive."

A neutron walks into a bar. "I'd like a beer" he says. The bartender promptly serves up a beer. "How much will that be?" asks the neutron. "For you?" replies the bartender, "no charge."

What Was the **Evesham Jersey Devil?**

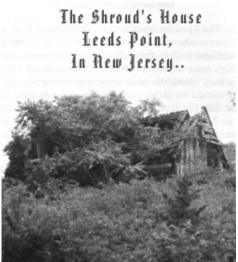
By Don Nigroni

By the second half of the 20th century, the leading

legend of the Jersev Devil was that a monster was born to a Mother Leeds. who was a witch that had already had twelve children and wanted no more, at Leeds Point, New Jersey in 1735. The monster was depicted either as a horse-headed creature with bat's wings, a serpent's tail, perhaps forked and pointed and ridged, and with various combinations of other body parts from various kinds of creatures or as a traditional devil with horns, bat's wings and a pointed serpent's tail. The creature was now thought to be due to a mother's curse on her thirteenth child.

However, this late story is really a conflation of earlier stories. Nonetheless, one of the two early traditions, which can at least be traced

back to 1887, contends that the Jersey Devil, then known as the Leeds devil, was born in 1787 in Evesham, New Jersey. The Evesham Jersey Devil was the offspring of a young man



Reputed birthplace of The Jersey Devil

named Leeds, perhaps a Robert Leeds who was a school-teacher, and a young woman who was the life of the party, perhaps Ann Archer. Mother Leeds felt that having children would interfere with her partying lifestyle and cursed her first child who was then born a monster.

Fortunately, we have an early detailed description of this terrifying monster. Under the heading ABOUT THE BUGABOO BIRD. A DESCRIPTION OF

"THE LEEDS DEVIL." in the November 24, 1887 issue of *The Galveston Daily News* from Galveston, Texas, we read:

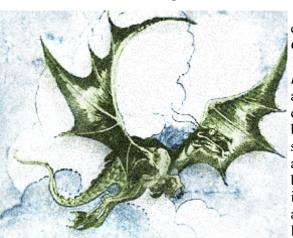
It has the head of the owl, with tremendous black eyes. Its face looked like a monkey's, with white cheeks and a black streak over each eye, the rest of the head inclined to gray, with black dots near the end of each feather. The body was covered with a beautiful plumage. Whenever he went near it it would give a most unearthly yell that frightened the dogs.

J. A. Singley in a letter dated December 13 which appeared in The Galveston Daily News on December 18, 1887 under the heading The Leeds Devil stated that, "I was somewhat amused by the description of the wonderful (?) bugaboo bird in a late number of THE NEWS." He goes on the say that the "bugaboo bird is simply and only the very common American barn owl". And he concludes by noting, "The bird has an uncanny appearance generally, and this, aided by a lively imagination, has probably originated the bloodcurdling story of the Leed's (sic) devil."

The Barn Owl (Tyto alba) is not a member of the Typical Owl family (Strigidae) and is our sole represen-

tative of the Barn Owl family (Tytonidae). The Barn Owl is a year-round resident of South Jersey and has an eerie hissing and screeching call, not a typical hooting owl sound, hence, is sometimes called the Devil's Owl, and has a face that looks like a monkey, hence, is sometimes referred to as the Monkey-faced Owl. The Barn Owl is over a foot tall with a wingspan of about 3 ½ feet and flies somewhat like a moth. Although it is not uncommon for the historical core of a folkloric legend to get lost in the mists of time, I think in this case we do have enough information about the Evesham Jersey Devil to be reasonably confident that what was seen in the Evesham woods long, long ago was a Barn Owl. It is also likely that this weird bird is still up to his old tricks and that what was seen in November 1966 by two young couples in the TNT area near Point Pleasant, West Virginia, which led to the Mothman hysteria, was also a Barn Owl. Sudden, unexpected glimpses of an eerie looking Barn Owl, perhaps hissing and screeching in the dark, are probably at the root of many folkloric legends of the distant and recent past and will also most likely be the cause of many more to come.

Don Nigroni received a BS in economics in 1971 from St. Joseph's University and a MA in philosophy from Notre Dame in 1973. He retired last year after working 32 years as an economist for the US Bureau of Labor Statistics and now has much more time to enjoy hiking, mountain biking, kayaking and bird watching.



The Jersey Devil (Diabolos caesariensis)

I support the aims of PhACT and	would like to join/rejoin for th	e next year. The	e annual membership is \$15 and
\$10 for students. I have enclose	ed a check payable to PhACT	•	
Membership dues of \$	_enclosed to pay for	years of	Mail checks to:
membership.			PhACT 639 W. Ellet Street
			639 W. Ellet Street
Donation of \$	enclosed for additional suppo	rt	Philadelphia, PA 19119
Name [.]		Phone:	
Turne.		1 110110	
Address:			
		E_mail	
Please indicate if you	ı wish delivery of Phactum by	e_mail only, by	US Mail only, or Both

Some Notes About Phactum and the usual plea for HELP!!

Beginning with this edition of Phactum we have the ability to send our newsletter electronically by way of a computer document transformed to a Portable Document Format, or in computer chat, a PDF. The PDF which is attached to an e-mail message. A PDF is a format developed by the Adobe Software company that facilitates the ability of a vast number of print formats to be readable on a computer that does not have the software that was used to create the document. If you are an online computer user you probably have Adobe Reader installed. If you do not you may obtain that software free at http://www.adobe.com. Download and install the Adobe Reader product.

A few members had suggested they prefer getting newsletters such as Phactum in an electronic format rather than a printed document. Personally I prefer the printed document, but this software does give the option to do either or both. We did not have the ability to do this until one generous PhACT member did donate the software needed.

One advantage to this distribution method is that printing and postage costs will be reduced. Still another is that delivery is nearly instantaneous and requires very little effort to do

politician needs the ability to foretell what is going to happen tomorrow, next week, next month, and next year. And to have the ability afterwards to explain why it didn't happen.

Sir Winston Churchill (1874 - 1965)



the mailing beyond the list maintenance required to send email.

Members have the option to have Phactum delivered by US Mail, email, or both. Some others on the mailing list will be receiving Phactum electronically only. We must do this as a cost saving measure. Hopefully a large percentage of email addresses in the database are still functional and emails that do get through do not filter into the email spam file.

As always, your opinions are important to us. Please help by sending constructive criticism of Phactum, correction of errors, an article about some topic that might be of interest to skeptics. We are open to almost any topic but please, no heavy religion bashing or partisan politics and we are not likely to take much interest in what Britney did at the beach. Do not hesitate to express opinions contrary to what is written in Phactum. Well reasoned dissent is valuable, especially if the dissenting opinion is the more scientific one, and it eliminates the appearance of preaching to the choir. A single member of the choir can stand out if that member is the one singing the tune correctly. There are few fysigunkus among Phactum readers so I expect a barrage of response.

We encourage poetry and reviews of books written by members, speakers, and others who have contributed in some way to PhACT and Phactum. **Send more clerihews!!**

Please address all electronic correspondence about Phactum to this email address:

phactpublicity@aol.com

As always, financial donations are needed and very appreciated. In the words of Lorenzo de Medici, "Be magnificent".

PHACT

Phila. Assoc. for Critical Thinking 639 W. Ellet Street Philadelphia, PA 19119



The March 1944 eruption of Vesuvius, by Jack Reinhardt, B24 tail gunner in the USAAF during WWII

USS Philadelphia in World War II - The "Galloping Ghost"

The fifth warship in the US Navy named *Philadelphia* was a light cruiser built at the Philadelphia Navy Yard and commissioned in Philadelphia September 1937. During 1938 *Philadelphia* cruised Caribbean waters and was host to President Roosevelt for a week in May of that year. In 1939 she transited the Panama Canal and joined Cruiser Division 8 at San Pedro, California, and engaged in coastal operations.

Philadelphia departed Los Angeles April 1940 for Pearl Harbor where she joined fleet operations until May 1941.

Cruiser *Philadelphia* stood out of Pearl Harbor May 1941 to resume Atlantic operations, where she commenced Neutrality Patrol operations, steaming as far south as Bermuda and

as far north as Halifax, Nova Scotia. She entered Boston Navy Yard 25 November for upkeep and was in repair status there when the Japanese attacked Pearl Harbor.

A few days after the Japanese attack, *Philadelphia* steamed for exercises in Casco Bay, after which she performed various convoy escort and anti-submarine warfare duties as far south as the Panama Canal.

From September 1942 until the end of the war, *Philadel-phia* participated in convoy duty and then in heavy action in the Mediterranean. *Philadelphia* participated in every major amphibious action in the Mediterranean campaigns including General Patton's invasion of North Africa at Safi, Morocco,

and the invasions of Sicily, Salerno, Anzio, and Southern France.

Philadelphia was affectionately nicknamed the "Galloping Ghost" during blazing action at Sicily because of her seeming invincibility. She was awarded 5 Battle Stars and from her first action under fire at Safi to Southern France had fired over 9,000 rounds at enemy positions from her main battery of 6

inch guns. *Philadelphia* had survived two torpedo attacks and thirty five bombing raids yet not a single crew member was killed or seriously injured, although four fliers who operated from her were lost in action.

ated from her were lost in action.

On one occasion *Philadelphia* did turn tail and ran, not from the enemy

but from Mount Vesuvius which erupted on March 18, 1944. *Philadelphia* was anchored at Torre Annunziato, 15 miles away at the time of eruption. Red and gray ash covered her decks two feet deep. The crew spent the night shoveling before the cruiser raised anchor and sailed away.

Philadelphia was decommissioned in the Philadelphia Navy Yard February 1947, struck from the Navy List January 1951, and was sold to the government of Brazil under terms of the Mutual Defense Assistance Program. She served in the Brazilian Navy under the name *Barroso* until scrapped in 1973.



USS Philadelphia at Halifax, NS 9 April 1942