

# PHI KAPPA PHI FORUM

Spring 2009

## Starting with Beginnings

### The Outset of Formative Ideas from Evolutionism to Creationism and Beyond:

How did we come to be and why do such topics remain important?

### The Dance of Life, the Image of Humankind and the Metaphysics of Poetry:

Choreography kicks around the conception of things while artwork visualizes it and verse reaches for the stars



### A "Common Experience" for a Campus and a Community:

San Diego State University celebrates the bicentennial of Charles Darwin's birth



Planting a Seed:  
National headquarters  
cultivates its green thumb





The first organizational meeting of what came to be known as The Honor Society of Phi Kappa Phi took place in Coburn Hall (shown at left) at the University of Maine in Orono, Maine, in 1897. The Phi Kappa Phi name was adopted on June 12, 1900. Although the national headquarters have been located in Baton Rouge, La., since 1978, the vast majority of the Society's historical documents are still kept at the founding institution. (Archival photo.)

**P**hi Kappa Phi Forum is the multidisciplinary quarterly magazine of The Honor Society of Phi Kappa Phi. Each issue of the award-winning journal reaches more than 100,000 active members as well as government officials, scholars, educators, university administrators, public and private libraries, leaders of charitable and learned organizations, corporate executives and many other types of subscribers.

It serves as the flagship publication of Phi Kappa Phi, the nation's oldest, largest and most selective all-discipline honor society, with chapters at more than 300 college campuses across the country. Phi Kappa Phi was founded in 1897 at the University of Maine and upwards of one million members spanning the academic disciplines have been initiated since the Society's inception. Notable alumni include former U.S. President Jimmy Carter, former NASA astronaut Wendy Lawrence, The Ohio State University head football coach Jim Tressel, writer John Grisham, YouTube cofounder/CEO Chad Hurley and poet Rita Dove. The Society began publishing what's now called *Phi Kappa Phi Forum* in 1915.

**Spring, summer and fall issues**

The spring, summer and fall issues (usually mailed late February, late May and late August, respectively) feature a variety of timely, relevant articles that offer variations on an overall theme from influential scholars, educators, writers and other authorities, oftentimes active Phi Kappa Phi members.

Notables to have contributed pieces include Ronald Reagan, fortieth President of the United States; Myrlie Evers-Williams, civil rights trailblazer; Warren Burger, the fifteenth Chief Justice of the U.S. Supreme Court; Molefi Kete Asante, African-American studies groundbreaker; Sally Ride, former NASA astronaut; Ernest Gaines, fiction writer; and Geoffrey Gilmore, Director of the Sundance Film Festival.

*Phi Kappa Phi Forum* also encourages movers and shakers to speak for themselves through exclusive interviews. Q & As have run the gamut from public servants such as Lynne Cheney, former Chair of the

National Endowment for the Humanities, to famous artists such as playwright August Wilson to literary critics such as Stanley Fish.

(For other significant contributors, go to [http://www.phikappaphi.org/Web/Publications/Forum/about\\_forum.html](http://www.phikappaphi.org/Web/Publications/Forum/about_forum.html).)

The spring, summer and fall issues further contain columns on fields such as education and academics, science and technology, and arts and pop culture in addition to book reviews, poetry and cartoons. Plus, these issues compile member news, chapter updates and Society happenings, along with letters to the editor, the Phi Kappa Phi bookshelf and general announcements of interest to keep readers abreast of Phi Kappa Phi developments.

Through words and images, Web links and multimedia components, the magazine intends to appeal to the diverse membership of Phi Kappa Phi by providing thoughtful, instructive, helpful – and sometimes provocative – material in smart, engaging ways.

**Winter issue**

The winter issue (mailed late November) celebrates those who win monetary awards from Phi Kappa Phi. The Society distributes more than \$800,000 annually through graduate and undergraduate scholarships, member and chapter awards, and grants for local and national literacy initiatives, and *Phi Kappa Phi Forum* applauds the recipients in this edition, listing them all and spotlighting a few.

(For more information about Phi Kappa Phi monetary awards, go to <http://www.phikappaphi.org/Web/Scholarships/>.)

As an arm of the Society, *Phi Kappa Phi Forum* helps uphold the institution's mission:

“To recognize and promote academic excellence in all fields of higher education and to engage the community of scholars in service to others.” ■

# Spring 2009



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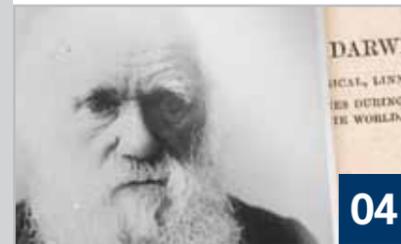
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Front cover, clockwise: Students from Denison University in Granville, Ohio, perform in "Turtles All the Way Down" (photo courtesy of Denison University); Rona Pondick, *Monkeys*, 1998-2001 (detail), stainless steel, edition of 6 + 1 artist's proof, 41 x 66 x 85 inches (courtesy of Sonnabend Gallery); *The Blue Marble* (photo credit: NASA Goddard Space Flight Center image by Reto Stöckli); The Creation Museum (courtesy photo).

This page, from top: Charles Darwin (photo credit: Library of Congress); earth at sunrise (photo credit: Shutterstock); United States Supreme Court (photo credit: Shutterstock); *The Creation of Adam* (photo credit: Getty Images).

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BY ROBERT B. ROGOW



With this issue of the *Phi Kappa Phi Forum*, we welcome its new editor Peter Szatmary. Pete joins the headquarters staff from Southeast Texas. He has many years of experience as both a full-time journalist and freelance writer for print and online publications. As an editor, he has worked for the *Beaumont Enterprise* and the *Longview News-Journal*, among others, and his writing credits include the *Houston Chronicle*, *Houston Press* and *Indianapolis Star*, to name a few.

Through the years, Pete has won several awards for writing and taught writing and literature as an adjunct professor at Lamar University, University of Houston, and Long Island University, among others. He

Editor's Note BY PETER SZATMARY



A theme that unites this spring 2009 issue of *Phi Kappa Phi Forum* is the notion of transformation – of birth and rebirth, of examination and reexamination, of conception and reconception. Starting with beginnings is intentional, not coincidental.

*Phi Kappa Phi Forum* attracts an intelligent and diverse audience, one of whose common denominators might best be summed up as achievement. The readership likes to think, not to mention challenge and be challenged, and these qualities befit the bright, ambitious Society members who are at the top of their class or successful in their careers. In content and presentation, the magazine will continue to make efforts to meet the standards its readers expect – and deserve.

Rest assured, *Phi Kappa Phi Forum* remains committed to honoring its tradition of advocating for learned inquiry and informing Society members of key developments; the publication carries on the dual mission as a type of Renaissance reader and alumni magazine. The hope is to raise the bar of the process and product.

One way to do this is to be timely, to include material that has relevance to current events and member interests. Another way is to be accessible: ideas and visuals need to be appropriate for a bright lay readership (inclusive for all; not exclusive for specialists) whose age ranges from teens to seniors.

The magazine strives for pieces that are compelling in what they say and in how they're designed. A case in point: "Starting with Beginnings" as the theme of the spring 2009 edition.

- Charles Darwin was born 200 years ago this February.
- Campuses across the country are looking anew at his contributions and other aspects of origins as a result – including San Diego State University, a Phi Kappa Phi institution, which contributes an article about its undertaking.
- Readers wrote an unprecedented number of letters to the editor about Laura Lorentzen's summer 2008 Science and Technology column, "Why We Must Teach Evolution in the Science Classroom." The letters, some analytic, others heated, took numerous stands, arguing for and against evolutionism, creationism and intelligent design. Since the topic proved important to readers and members, it made sense not only to continue the conversation but to expand it.
- U.S. courts still hear cases on these subjects.

The Debate over Laura Lorentzen's Summer 2008 Column Evolves

I have not read Dr. Laura Lorentzen's column, "Why We Must Teach Evolution in the Classroom," but have read the rebuttals to it in the fall 2008 edition. I'm not a trained scientist but I'm still appalled at what I'm reading about evolution in these letters.

To those who want intelligent design taught "side by side" with evolution, I would suggest that the two are not scientifically equivalent. Contrary to many assertions in the fall 2008 edition, evolution via natural selection and random variation is in fact scientific in that it has been observed and tested on the basis of evidence, not only in fossil records but even today in the resistance of bacteria to antibiotics, resistance of insects to DDT, and, most currently, resistance of HIV to antiviral drugs.

Darwin's theory is also in keeping with scientific standards in that it has made predictions and is falsifiable. Now, being a historic science, it cannot lend itself to experiments in the lab but as Stephen Jay Gould wrote in *The Panda's Thumb*, to wit: science is an inferential exercise. ... More than reasonable inferences have affirmed Darwin's theory as sound by scientific standards. Therefore, contrary to Joshua Scott's letter to the editor, it belongs in a science class, not in philosophy class.

Furthermore, reconstruction of past events is integral to science. Ever hear of geology? On the other hand, the existence of an intelligent designer cannot be proven or disproven by the scientific method and would be more appropriate for the philosophy class.

In addition, scientists such as Rev. John Polkinghorne and Dr. Kenneth Miller ... are just two examples of religious voices who have no problem with Darwin's theory.

The existence of God is rightly beyond the scope of science.

**Dana Franchitto**  
S. Wellfleet, Mass.

It is just as reasonable to recommend intelligent design as a means to "unify science disciplines and provide students with powerful ideas to help them understand the natural world," to use Lorentzen's quote from the National Science Education Standards, as it is to recommend evolution. It might be better. I can say that as the parent of a child with developmental problems.

For many years, those who assumed natural evolution ignored major segments of DNA, labeling them as junk left over from past evolution. Recent research has stumbled on the realization that they are very important during embryonic development. Someone doing research from an intelligent design assumption would have asked, "What are their functions?" The evolution assumption has set back research in this area by several decades. How much more research is going in the wrong direction because of an assumption of random evolution rather than an assumption of intelligent design?

**Duane A. Steiner**  
Ph.D., physics

Given the reactions ... I am glad to see the note indicating that this topic will be examined in more detail in the spring 2009 issue.

It has been my experience that 98% of well-trained natural scientists rely on the general idea that simpler things changed into more complex things, slowly, and over a very long period of time. Do we have all of the pieces? No, this is just the best logical framework for what happened that we have found so far.

This has nothing to do with questions of who or what caused these changes. My own faith is perfectly content to "see through a glass darkly" for the time being.

**Dr. DeWitt B. Stone, Jr.**  
Special Assistant to the President  
Lander University  
Greenwood, SC

▶ For letters to the editor about other topics, visit <http://phikappaphi.org/Web/Publications/Forum/letters.html>

*Phi Kappa Phi Forum* publishes appropriately written letters to the editor every issue when submitted. Such letters should be no more than 300 words. We reserve the right to edit for content and length.

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I am appalled at the selection of letters to the editor regarding Lorentzen's column on teaching evolution. Not a single letter published demonstrated the slightest understanding of the scientific process. Was this really the best that you had to choose from? I hope that your future "examination" of creationism vs. evolution will at least point out that creationism/intelligent design has every opportunity to develop its own testable hypotheses, test them and submit the subsequent articles for peer review. They don't, at least to date, because these are religious beliefs, not scientific thoughts. While they surely have a place in philosophy classes as well as comparative religious classes, at their current state of development, they have no place in the scientific world and should never be mentioned in any public schools.

**Stanley K. Jackson**

**Editor's note:** To read all letters to the editor about evolution, creationism and related matters, visit <http://www.phikappaphi.org/Web/Publications/Forum/letters-special>

COMING NEXT ISSUE

American pride around the anniversary of the birth of the republic will be explored. Numerous problems plague the United States: The country is mired in a recession; we're fighting two wars; many nations hate the land of liberty; the obesity epidemic continues to jeopardize our citizens; millions of Americans remain without healthcare. Still, July 4 marks an occasion to celebrate the realm and what it means to be American.

The theme of the edition will be analytical, historical, philosophical, sociological, not jingoistic. Articles will span numerous disciplines.

ON

# THE ORIGIN OF SPECIES

BY MEANS OF NATURAL SELECTION,

OR THE

PRESERVATION OF FAVOURED RACES IN THE STRUGGLE  
LIFE.

DARWIN, M.A.,

ICAL, LINNEAN, ETC., SOCIETIES;  
IES DURING H. M. S. BEAGLE'S VOYAGE  
IE WORLD.'

LDON:

LBEMARLE STREET.

359.

nslation is reserved.



Charles Darwin (photo credit: Library of Congress) devised a structure for unfolding existence in *On the Origins of Species* in 1859 (photo credit: Shutterstock).

# Why Evolution Is the Organizing Principle for Biology

**Born 200 years ago, Charles Darwin put humankind in the thick of the biological world**

BY MICHAEL ZIMMERMAN

It is commonly accepted that when Charles Darwin published *On the Origin of Species* in 1859,<sup>1</sup> he did for humankind what Copernicus did for the earth when the astronomer published *De Revolutionibus Orbium Coelestium* (*On the Revolutions of the Celestial Spheres*) in 1543<sup>2</sup>.

Where Copernicus made it clear that our planet was not the center of the universe and, indeed, that the earth revolved around the sun, Darwin articulated a vision that showed humans to be a part of nature rather than above it.

In both cases, we lost what some saw as a privileged status. It was this repositioning that encouraged many opponents, both within the Church and beyond its walls, to attack the ideas promoted by these two great thinkers.

### Darwin consolidated biology

But Darwin, by explaining the role of natural selection in evolution, did something even more important than defining humans as a part of nature and, accordingly, taking away our privileged status.

The scientific genius — born 200 years ago (birth Feb. 12, 1809; death: April 19, 1882) — created the central unifying principle of biology: the construct through which biology became an integrated science rather than a random collection of facts and ideas.

Natural selection, both as outlined by Darwin and as understood today, is simple and noncontroversial. It means that those organisms best able to acquire limited resources and convert them to offspring will leave the most descendents and the genes controlling their behavior will increase in frequency.

When the scientist and philosopher Thomas Huxley first heard about natural selection, he reportedly said, “How extremely stupid not to have thought of that!”

No wonder Huxley became known as Darwin’s Bulldog for his impassioned defense of Darwin’s ideas.

### The evolution of evolution took a winding path

What is essential to remember, however, is that genes had not yet been discovered when Darwin first proposed the concept of natural selection. So it was not at all clear what was being passed along

from successful parent to offspring in response to interactions with the environment. Nonetheless, Darwin’s insightful reasoning and the wealth of data he presented made for a compelling argument that some hereditary factor was being passed along.

Today, natural selection is regularly measured in both the field and the laboratory by assessing the frequency of alternative forms of genes (alleles). In fact, as important as natural selection is, today we realize that it is but one of a number of evolutionary mechanisms biologists measure and understand. Also of critical importance are mutation, migration, nonrandom mating and the effects of population size. Again, the impact of all of these factors is regularly measured in both the field and the laboratory.

Evolution took on much of its modern shape in the first half of the 20th century when it became clear that all of these factors played a role in shaping the diversity of life on Earth. The term accepted for this robust, integrated vision of evolution was the “modern evolutionary synthesis” or neo-Darwinian theory, first articulated by Julian Huxley in his 1942 book entitled *Evolution: The Modern Synthesis*<sup>3</sup>. Through this lens, evolution is defined incredibly simply as a change in allele frequencies in a population over time.

Although there is nothing controversial about this idea, it is a very powerful concept that allows scientists to explain and predict a great deal. In his classic article entitled “Nothing in Biology Makes Sense Except in the Light of Evolution,”<sup>4</sup> the great population geneticist and a primary architect of the modern evolutionary synthesis, Theodosius Dobzhansky, made this point succinctly: “Seen in the light of evolution, biology is, perhaps, intellectually the most satisfying and inspiring science. Without that light it becomes a pile of sundry facts — some of them interesting or curious but making no meaningful picture as a whole.”

Interestingly, Dobzhansky’s use of the evocative phrase “light of evolution” came not from a scientist but from a religious leader, the Jesuit priest, paleontologist, biologist and philosopher Pierre Teilhard de Chardin (1881-1955).

### Evolution is both theory and fact

This discussion raises the question of whether evolution is a fact or a theory. (See a related article on p. 20.) The National Academy of Sciences and the Institute of Medicine has answered this question in no uncertain terms in its 2008 book entitled *Science, Evolution, and Creationism*: “It is both. But that answer requires looking more deeply at the meanings of the words ‘theory’ and ‘fact.’”<sup>5</sup>

As evolutionary biologist T. Ryan Gregory recently pointed out<sup>6</sup>, the meaning of theory is “almost diametrically opposite in scientific vs. vernacular settings. This has been a source of both honest confusion and intentional obfuscation in discussions of science, especially with regard to evolution — which has, with the full thrust of equivocation, been misleadingly labeled as ‘just a theory’ by opponents for decades.”

Within the scientific community, a theory is an idea that has broad explanatory and predictive power that has been well supported by experimental and observational evidence. In common parlance, however, a theory is simply equivalent to a thought, any thought.

Within the scientific community, it takes a huge amount of evidence and documentation to permit an idea to rise to the level of theory. And evolutionary theory has reached this point because of the thousands of peer-reviewed manuscripts published each year testing and extending its framework.

In science, a fact, on the other hand, is an observation or measurement that can be expected to occur in the same manner repeatedly.

The venerable evolutionary biologist Stephen Jay Gould explained the situation straightforwardly:

“[F]acts and theories are different things, not rungs in a hierarchy of increasing certainty. Facts are the world’s data. Theories are structures of ideas that explain and interpret facts. Facts do not go away when scientists debate rival theories to explain them. Einstein’s theory of gravitation replaced Newton’s, but apples did not suspend themselves in mid-air, pending the outcome. And humans evolved from apelike ancestors whether they did so by Darwin’s proposed mechanism or by some other, yet to be discovered.”<sup>7</sup>

#### Analyze species to prove connections among them

The “fact” of evolution is embodied in the phrase “descent with modification.” That populations and species change over time is as well established a scientific fact as any. We know that species have given rise to others: that, over generations, descendants have diverged from, but are still genetically related to, their ancestors. Simply put, there is absolutely no debate in the scientific community over this point.

In contrast, the “theory” of evolution is an attempt to explain the mechanisms responsible for these changes. As pointed out above, the modern synthesis incorporates many factors and scientists are regularly trying to discern the role each plays under various natural conditions. In that manner, evolutionary theory is a dynamic and changing concept.

Evolutionary theory offers a host of testable predictions and time after time new data have confirmed its basic principles. Data in support of evolution have come from every corner of biology, from paleontology to genetics and from developmental biology to molecular biology. As our knowledge expands, so does the evidence for evolution.

Our ability to determine the nucleotide sequence of genes, for example, has demonstrated just how similar different species are at the molecular level, allowing us to see degrees of relatedness. Advances in evolutionary development (evo-devo) also have shown the degree of relatedness of various species while documenting how novel features may arise via slight alterations in the timing of developmental pathways, thus demonstrating that large scale changes may appear without massive genetic shifts.

From an evidentiary perspective, Darwin was most concerned about the fossil record, believing that it was not yet complete enough to support evolution incontrovertibly. He believed, however, that further work would uncover the fossils needed to make the case.

As with so many of his ideas, this one proved to be correct. For example, in 2006, Neil Shubin and colleagues published two papers in *Nature*<sup>8,9</sup> detailing their amazing find in arctic Canada: a fossil, *Tiktaalik rosaea*, that is an almost perfect intermediary between fish and reptiles.

Additionally, a number of feathered dinosaurs unearthed in China since 1999 demonstrate the link between dinosaurs and birds. And the amount of early human and pre-human fossils has increased dramatically.

#### If the case for evolution can be made, why has it been challenged?

Despite the overwhelming evidence in support of evolution and the affirming consensus within the scientific community, evolution still finds itself under attack, and the strategies behind those attacks are illuminating.

Originally, opponents attempted to censure evolutionary ideas. Gould tells the perhaps apocryphal story of the reaction of an aristocratic Victorian woman to the heresy of evolution, “Let us hope that what Mr. Darwin says is not true; but, if it is true, let us hope that it will not become generally known!”

The 1925 Tennessee law that John Scopes broke when he discussed human evolution in a Dayton, Tenn., high school class explicitly prohibited mentioning the topic in any public school.

When it became clear that censorship of scientific ideas was not going to work, creationists — though a catch-all phrase for various kinds of beliefs, creationists, simply put, are those refusing to accept the basic premise of evolutionary change — took the inventive step of attempting to cloak their religious beliefs in scientific language. Thus, in the 1960s, “scientific creationism” was born and in the 1980s various states attempted to mandate the teaching of the subject, typically on the grounds of demanding equal time for alternative views.

When courts repeatedly ruled these laws unconstitutional because they promoted one particular religious worldview, the creationists again attempted to regroup by redefining “creation science” as “intelligent design.”

The latter has been defined in *Of Pandas and People* — a much commented-on high school biology textbook promoting intelligent design — by its proponents as follows: “Intelligent design means that the various forms of life began abruptly through the agency of an intelligent agency, with their distinctive features already intact — fish with fins and scales, birds with feathers, beaks and wings, etc.”<sup>10</sup>

The problem with this strategy, however, was that references to a deity were simply replaced by references to an intelligent designer in the mistaken belief that doing so would no longer be seen as promoting religion.

Federal judge John E. Jones III, in his ruling in the Dover, Pa., lawsuit over the teaching of intelligent design in 2005, was no kinder to the latter, making it clear that the tenets of intelligent design as well as the intentions of its promoters were entirely religious in nature<sup>11</sup>.

(See p. 12 for an article that further explains relevant court cases.)

How could it be otherwise since the basic premises of intelligent design were first set forth by philosopher William Paley in 1802?<sup>12</sup> Paley argued teleologically that just as the existence of a watch implied a watchmaker, the existence of design implied an intelligent designer.

Furthermore, the definition of intelligent design given above in *Of Pandas and People* is an almost exact replica of that given for creationism in an earlier, unpublished version of that text under a different name. The only differences are that “Creation” replaced “Intelligent design” and “intelligent creator” replaced “intelligent agency.”<sup>13,14</sup>

#### Turning to a higher power explains nothing concrete

The latest version of the controversy, most aggressively being pushed by the Discovery Institute — a conservative think tank based in Seattle, Wash. — has two prongs. First, it is revisiting the equal time concept promoted in the 1980s and demanding that all theories be taught. The problem with this view is that there aren’t any credible scientific theories other than evolution to be taught. Second, it is promoting Lehigh University biochemist Michael Behe’s concept of irreducible complexity as the core of intelligent design.<sup>15, 16</sup>

Behe asserts that some biological traits are so complex that they could not have arisen via evolutionary means; instead, he purports, they were created by an intelligent designer in exactly the form we see them today. Rather than saying that there is still much scientists have to learn, he calls for an end to investigation; further investigation, he claims, would be futile.

In fact, however, scientific investigation has demonstrated that his two primary examples of irreducible complexity, blood clotting proteins and the structure of bacterial flagella, have evolutionary explanations.<sup>17-19</sup>

Not surprisingly, Darwin has something insightful to say about those clamoring for an end to additional investigation, such as Behe: “ignorance more frequently begets confidence than does knowledge: it is those who know little, and not those who know much, who so positively assert that this or that problem will never be solved by science.”<sup>20</sup>

By turning to an “intelligent designer,” proponents are doing serious damage to science education that extends far beyond the concept of evolution. The power of science derives from the fact that it has drawn boundaries around its sphere of influence — it only deals with materialistic explanations of natural phenomena. By redefining science to include the supernatural, as the Discovery Institute has said it wants to do<sup>14</sup>, the scientific method and science’s centuries-old reliance on the concept of falsifiability are being jettisoned.

#### Evolutionists can lead a spiritual life

The terribly sad part of the ongoing attack on evolution in the name of religion is that it is utterly unnecessary. Religion and evolution need not be mutually exclusive alternatives as some vocal advocates have asserted.

Indeed, more than 11,000 Christian clergy in the United States have come together in The Clergy Letter Project to make just this case. (Full disclosure: I founded this organization in 2005. To read more about it, visit [www.theclergyletterproject.org](http://www.theclergyletterproject.org).)

## Annotated Reading List BY MICHAEL ZIMMERMAN

The items below represent a partial annotated reading list on evolution and related matters by Michael Zimmerman. For a complete list, visit <http://www.Phikappaphi.org/Web/Publications/Forum/readinglist>.

Darwin, Charles. *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*, J. Murray, 1859 (reprinted in numerous editions ever since). This is the original work that caused all the trouble! Interestingly, the word “evolution” does not appear in the book at all and the only derivative of it that does appear is “evolved,” which is the final word in the book.

Browne, E. Janet. *Charles Darwin: A Biography* (released in two volumes: *Charles Darwin: Voyaging*, Knopf, 1995, reprinted in paperback by Princeton University Press, 1996; and *Charles Darwin: The Power of Place*, Knopf, 2002, reprinted in paperback by Princeton University Press, 2003). The first volume of this amazing work largely focuses on Darwin’s time on the ship Beagle and attempts to explain how his experiences shaped the man and the scientist he became. The second volume begins a year before the publication of *On the Origin of Species* and contextualizes much of his science. It also provides great insight into Darwin’s family life.

Coyne, Jerry A. *Why Evolution Is True*, Viking, 2009. Coyne, a University of Chicago evolutionary biologist, presents compelling evidence for evolution in a fully accessible manner.

The two-paragraph letter endorsed by these Christian leaders ends by saying, “We ask that science remain science and that religion remain religion, two very different, but complementary, forms of truth.”<sup>21</sup>

Similarly, under the auspices of The Clergy Letter Project, more than 400 American rabbis also have signed an analogous letter that concludes by saying, “It is not the role of public schools to indoctrinate students with specific religious beliefs but rather to educate them in the established principles of science and in other subjects of general knowledge.”

The consequences of falsely pitting evolution against religion or a particular philosophical worldview can be great. Indeed, the world has seen what can happen when a society turns its back on evolution. When T.D. Lysenko, Stalin’s biology adviser, outlawed all research on evolution and reliance on any of its applied principles because he believed evolution was too “capitalistic,” the result was the destruction of Soviet agriculture that took decades to overcome<sup>22</sup>.

Evolutionary advances have made a huge difference in agriculture, not to mention medicine, biotechnology and conservation, to name just a few fields. However, science literacy in the United States is already behind most of the rest of the developed world and the attacks on evolution are at the core of this problem.

There’s no need to continue to fight battles and wage arguments that have been long settled. ■

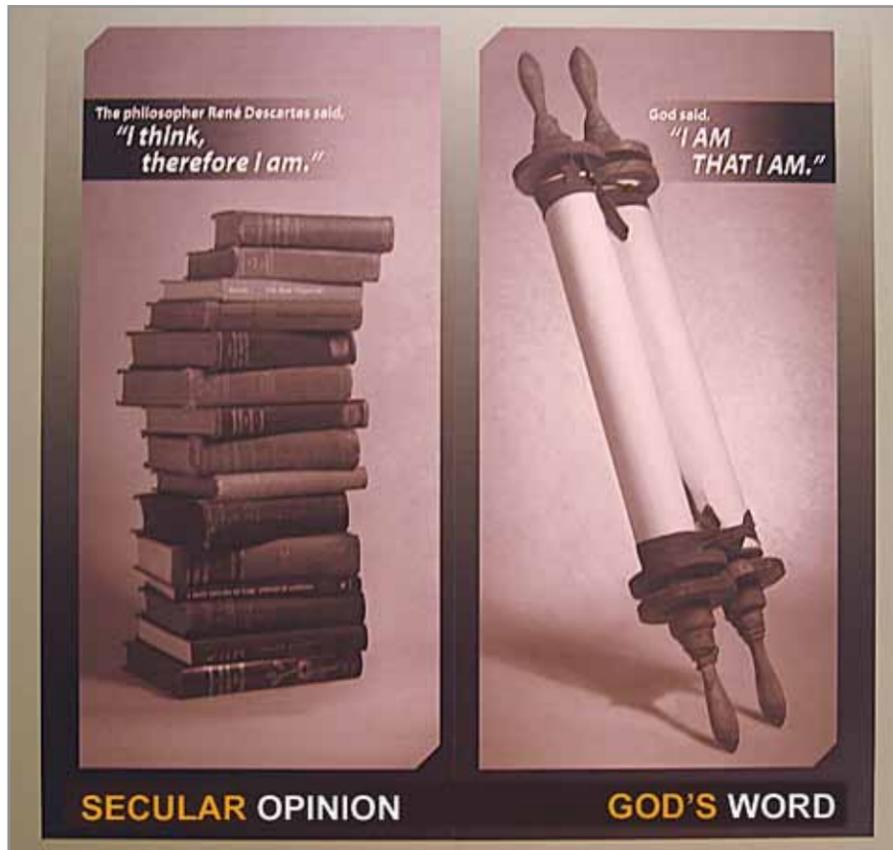
See p. 41 for footnotes.



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# Morality and the Irrationality of an Evolutionary Worldview

BY GEORGIA PURDOM and JASON LISLE



This exhibit in the Starting Points room of the Petersburg, Ky.-based Creation Museum shows that evolutionists and creationists have different ultimate standards by which they evaluate and interpret physical evidence. Evolutionists use secular opinion and biblical creationists use God's Word. (Courtesy photo.)

**M**orality is a very difficult problem for the evolutionary worldview. This is not to say that evolutionists are somehow less moral than biblical creationists — or anyone else. Most evolutionists adhere to a moral code and believe in the concept of right and wrong. But evolutionists have no rational reason for this position. Thus, only creationists have a rational, logical and consistent reason for morality.

## The foundation of morality

Even though most people do not acknowledge it, the morality and rules that most humans adhere to have their basis in

the Bible, specifically in the literal history of Genesis. The Bible claims to be the revealed Word of God (2 Timothy 3:16; 2 Peter 1:21) and that the biblical God is the ultimate authority and foundation for knowledge (Hebrews 6:13; Proverbs 1:7, 2:6; Colossians 2:3). The Bible tells us that God is the Creator of all things and, therefore, all things belong to Him (Genesis 1:1, Psalm 24:1). Thus, God as the Creator has the right to define absolute standards of behavior.

Apart from biblical creation, morality has no justification. Christian philosopher Dr. Greg Bahnsen (1948-95) states, “What does the unbeliever [person who rejects the biblical

God] mean by ‘good,’ or by what standard does the unbeliever determine what counts as ‘good’ (so that ‘evil’ is accordingly defined or identified)? What are the presuppositions in terms of which the unbeliever makes any moral judgments whatsoever?”<sup>1</sup> Although unbelievers may classify actions as good or evil, they do not have an ultimate foundation for defining what is good and evil.

In fact, many evolutionists are quite clear that evolution does not provide a basis for morality. William Provine, evolutionist and biology professor at Cornell University, states in referring to the implications of Darwinism, “No ultimate foundations for ethics exist, no ultimate meaning in life exists, and free will is merely a human myth.”<sup>2</sup> Thus, if evolution is true, then there can be no universal moral code that all people should adhere to.

And Nobel Laureate Steven Weinberg, evolutionist and physics professor at the University of Texas, states, “I think that part of the historical mission of science has been to teach us that we are not the playthings of supernatural intervention, that we can make our own way in the universe, and that we have to find our own sense of morality.”<sup>3</sup> Again, if morality is determined by our own sense, then a universal moral code that all people should follow cannot be justified.

## Why murder is wrong

Murder is an obvious example of immoral behavior. The basis for this comes from Genesis 1:27, which states that human beings are made in God's image and are different from the animals. Murder is condemned in Genesis 4, where God punishes the first murderer, Cain, for killing his brother Abel. God's condemnation of murder is further established in the Ten Commandments (Exodus 20:13). Death and suffering were not part of God's original creation as exhibited by God's command to Adam and Eve and the animals to eat only plants (Genesis 1:29-30). God states in Genesis 1:31 that His creation was “very good.” This terminology is meaningless if it includes death and suffering.



The Creation Museum, built by Answers in Genesis, opened its doors in Petersburg, Ky., in May 2007, and has received more than 600,000 visitors. The museum tells the compelling events of the creation of the universe, earth, and life and proclaims the Bible as the supreme authority in all matters. Visit [www.creationmuseum.org](http://www.creationmuseum.org). (Courtesy photo.)

Evolutionists might say that standards of right and wrong can be created apart from God. However, this thinking is arbitrary and will lead to absurd conclusions. If everyone can create his or her own morality, then no one can judge the morality of others. For example, Jeffrey Dahmer, Hitler, Mussolini and Stalin chose a moral code in which murder was perfectly acceptable.

This might seem upsetting to us, but how could we argue that it is wrong for others to murder if morality is determined by our “own sense” and “no ultimate foundation for ethics” exists?

Moral outrage simply does not make sense in an evolutionary universe. Bahnsen states, “Such indignation requires recourse to the absolute, unchanging, and good character of God in order to make philosophical sense.”<sup>4</sup>

## Majority rule or God's rules?

Some evolutionists have claimed that morality is what the majority decides it to be. This shifts an unjustified opinion from one person to a group of people; it is arbitrary and leads to absurd conclusions. Bahnsen writes:

Perhaps the unbeliever takes “good” to be whatever evokes public approval. However, on that basis the statement,

“The vast majority of the community heartily approved of and willingly joined in the evil deed,” could never make sense. The fact that a large number of people feel a certain way does not (or should not rationally) convince anybody that this feeling (about the goodness or evil of something) is correct.<sup>5</sup>

Hitler was able to convince a majority of his people that his actions were right, but that does not really make them right.

Without the biblical God and literal Genesis, right and wrong become personal preferences such that “murder is wrong” is equivalent to “blue is my favorite color.” Both are personal opinions and provide no basis for arguing with someone who has a different opinion.

But the question, logically speaking, is how the unbeliever can make sense of taking evil seriously — not simply as something inconvenient, or unpleasant, or contrary to his or her desires. What philosophy of value or morality can the unbeliever offer which will render it meaningful to condemn some atrocity as objectively evil? The moral indignation which is expressed by unbelievers when they encounter the wicked things

## Rationally Resolving the Debate

BY GEORGIA PURDOM and JASON LISLE

Evolutionists and creationists have a different ultimate standard by which they evaluate and interpret physical evidence such as stars, fossils and DNA.

The biblical creationist takes the Bible as the ultimate standard — an approach which the Bible itself endorses (Proverbs 1:7, Hebrews 6:13). The evolutionist embraces a competing philosophy instead such as naturalism (the belief that natural causes and laws can explain all phenomena) or empiricism (the belief that experience, especially of the senses, is the source of all knowledge).

How then can people rationally decide which ultimate standard is correct, since each camp interprets all evidence in light of his or her ultimate standard?

In this article, we have employed a “transcendental argument” — an approach that demonstrates the truth of a foundational claim by showing the impossibility of the contrary. In effect, we show the truth of the biblical creation worldview by showing that the alternative is self-defeating. Alternatives to biblical creation undermine human experience and reasoning because such worldviews on their own terms cannot account for the things we take for granted in a consistent and justified way.

We used morality as a particular illustration of the transcendental argument (i.e., morality only makes sense if biblical creation is true). But we could equally well have used other things that people take for granted such as laws of logic, uniformity and science, reliability of senses and memory, human dignity and freedom. Such foundational truths only make sense in a biblical creation worldview.

Christian philosopher and theologian Cornelius Van Til (1895-1987) argued that the God of biblical creation is essential to rationality. He states, “I hold that belief in God is not merely as reasonable as other belief, or even a little or infinitely more probably true than other belief; I hold rather that unless you believe in God you can logically believe in nothing else.”<sup>1</sup>

See p. 41 for footnote.

## Origins: Some Key Belief Systems

BY GEORGIA PURDOM and JASON LISLE

**Evolution:** The belief that all life on earth has come about through descent with modification from a single-celled common ancestor over millions of years.

### **Biblical creation (or young-earth creation):**

The belief that Genesis is literal history based on the literary style used in Genesis. God created everything in six consecutive 24-hour days approximately 6,000 years ago and did not use evolutionary processes to create living things.

### **Progressive creation and day-age creation:**

The belief that God's act of creating the universe and life on earth lasted billions of years. The days of creation mentioned in Genesis are interpreted as being vast (and possibly overlapping) ages. Some supporters believe that God may have used evolutionary processes to create living things; others deny this.

**Gap theory:** The belief that there is a great gap in time (billions of years) between Genesis 1:1 and Genesis 1:2. Billions of years ago, God created the heavens, earth and living things (interpreted from Genesis 1:1 and sources outside of the Bible) that were subsequently destroyed by a catastrophic event and then re-created by God as described beginning in Genesis 1:2. God did not use evolutionary processes to create living things.

**Framework hypothesis:** The belief that the days in Genesis 1 are "a literary framework intended to present God's creative activity in a topical, nonsequential manner, rather than a literal, sequential one."<sup>1</sup> God used evolutionary processes to create living things over millions of years.

**Theistic evolution:** The general belief that God used evolutionary processes to create living things over millions of years.

**Intelligent design:** The belief that "certain features of the universe and living things are best explained by an intelligent cause, not an undirected process such as natural selection."<sup>2</sup> The identity of the intelligent designer, the age of the earth and the role of evolutionary processes are not addressed in this belief system.

See p. 41 for footnotes.



How was the world created? What is "right" in the world? (Photo credit: NASA Goddard Space Flight Center image by Reto Stöckli.)

which transpire in this world does not comport with theories of ethics which unbelievers espouse, theories which prove to be arbitrary or subjective or merely utilitarian or relativistic in character. On the unbeliever's worldview, there is no good reason for saying that anything is evil in nature, but only by personal choice or feeling.<sup>6</sup>

Thus, when evolutionists talk about morality as if it is a real standard, they are being inconsistent with their own worldview.

Genesis not only justifies the existence of the moral code but also explains people's inability to fully live up to that same code. The first violation of the moral code by humanity was Adam and Eve's disobedience to God by eating from the Tree of Knowledge of Good and Evil (Genesis 2:17; 3:6). The Bible teaches that the rebellious (sinful) nature is inherited; it is passed from parents to descendants. Thus, all people have in their nature a tendency to sin (a tendency to rebel against God) because they are descendants of Adam and Eve who committed the first sin (Romans 5:12; Galatians 5:17). Adam's sin resulted in the curse of all things and all creation has been suffering the effects of the curse since that time (Romans 8:22-23). Thus, a literal Genesis can account for

why people are immoral in the first place as well as the "natural evils" we see in the world. A Christian worldview regarding Genesis as literal history is necessary for understanding (1) why there is a moral code; (2) why everyone knows about it; and (3) why no one can live up to it completely. This provides a rational, logical, and consistent foundation for morality that has led to modern laws that prohibit and punish immorality.

### **Inconsistency in the evolutionary worldview**

Consider those evolutionists who are concerned about children being taught creation. The well-known atheist Richard Dawkins, professor at Oxford University, states concerning teaching creation in schools, "Evolution is supported by mountains of scientific evidence. These children are being deliberately and wantonly misled (about the origins of living things)."<sup>7</sup>

It is commendable that Dawkins is concerned about the welfare of children: that they should only be taught the truth. But does such concern make sense if children are simply the result of random evolutionary processes?

Dawkins argues that creation should not be taught since he believes it is false. Now, this

begs the question, since the truth or falsity of creation is the issue: as biblical creationists we are convinced that creation is true, and evolution is false. But the truly absurd thing about such evolutionary arguments is that they are contrary to evolution! That is, in an evolutionary worldview why is it wrong to lie — particularly if it benefits our survival value?

Now, certainly in a Christian worldview it is wrong to lie and the Christian has a reason for this. God has indicated in His Word that lying is contrary to His nature (Numbers 23:19) and that people are not to engage in it (Exodus 20:16). But apart from the Christian worldview, why should people tell the truth? For that matter, why should people do anything at all? Words like "should" and "ought" only make sense if there is an absolute standard given by one who has authority over everyone.

If human beings are merely the inevitable result of the laws of physics and chemistry acting over time, then how can people have any genuine choice in what they do? If the decisions people make are simply the deterministic outworking of electrochemical reactions in a brain — which is itself allegedly the mindless outworking of billions of random chance copying errors in our DNA — then how would it make sense to hold people responsible for their "decisions"?

After all, we do not attempt to punish the planet Venus for spinning backwards. And we do not get angry at baking soda for reacting with vinegar. This is just what necessarily happens in the universe given the laws of nature. So why would an evolutionist be angry at anything one human being does to another (such as creationists supposedly "lying" to children), if we are all nothing more than complex chemical reactions? If we are simply evolved animals, why should we hold to a code of conduct in this "dog-eat-dog" world? After all, what one animal does to another is morally irrelevant.

### **The evolutionary worldview borrows from the Christian worldview**

When evolutionists attempt to be moral, they are "borrowing" from the Christian worldview.

The Christian worldview accounts not only for morality but also for why evolutionists behave the way they do. Even those who have no basis for morality within their own professed worldview nonetheless hold to a moral code; this is because in their heart of hearts they really do know the God of creation, despite their profession to the contrary. Scripture tells us that everyone knows the biblical God, but that they suppress the truth about God (Romans 1:18-21).

### **Why would anyone do this?**

We have an inherited sin nature from Adam (Romans 5:12) who rebelled against God in the Garden of Eden. John 3:19 indicates that people would rather remain in spiritual darkness than have their evil deeds exposed. Just as Adam tried to hide from God's presence (Genesis 3:8) so his descendants do the same. But the solution to sin is not suppression; it is confession and repentance (1 John 1:9). Christ is faithful to forgive anyone who calls on His name (Romans 10:13).

Nearly everyone believes that people ought to behave in a certain way: that there is a moral code. Yet in order for morality to be meaningful, the Bible and a literal Genesis must be true. Since God created human beings, He determines what is right and wrong, and we are responsible to Him for our actions.

We must therefore conclude that evolutionists are being inconsistent (irrational) when they talk about right and wrong, since such concepts are meaningless within their professed worldview. Like so many things that we often take for granted, the existence of morality confirms that biblical creation is true. ■

See p. 41 for footnotes.



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**Jason Lisle** is a practicing astronomer and astrophysicist who also serves as a speaker and researcher for AiG. He graduated summa cum laude from Ohio Wesleyan University with a double-major in physics and astronomy, along with a minor in mathematics. He did graduate work at the University of Colorado, where he earned a master's degree and a Ph.D. in Astrophysics. He has authored a number of papers in both secular and creationist literature. Email him at [jlisle@creationmuseumnews.com](mailto:jlisle@creationmuseumnews.com).

## Annotated Reading List

BY GEORGIA PURDOM and JASON LISLE

Bahnsen, Greg. *Always Ready*, Covenant Media Press, 1996. A masterful defense of the Christian worldview, showing that all arguments against Christianity are actually based on Christianity and are thus self-refuting.

Lisle, Jason. *The Ultimate Proof of Creation*, (in press), Master Books, 2009. A scientific and philosophical examination of the creation-evolution debate. The biblical creation worldview is found to be the only one that stands up to rational scrutiny.

Lisle, Jason. "Atheism: An Irrational Worldview," <http://www.answersingenesis.org/articles/aid/v2/n1/atheism-irrational>. Materialistic atheism does not provide a basis for the laws of logic. The atheist's view is not rational because he must borrow from a Christian worldview in his use of logic to reason against the Christian worldview.

Lisle, Jason. "Evolution: The Anti-Science," <http://www.answersingenesis.org/articles/aid/v3/n1/evolution-anti-science>. If evolution were true, the concept of science would not make sense. Science requires a biblical creation framework in order to be possible.

Mortenson, Terry, and Than H. Ury (eds.). *Coming to Grips with Genesis*, Master Books, 2008. Fourteen scholars address key topics related to the age of the earth. A substantial historical, theological, and exegetical defense of the biblical account of creation.

Purdum, Georgia. "Is Natural Selection the Same Thing as Evolution?" <http://www.answersingenesis.org/articles/nab/is-natural-selection-evolution>. The terms natural selection and evolution are often used interchangeably but they are two different concepts. Natural selection cannot be a mechanism for evolution.

"Creation scientists and other biographies of interest," <http://www.answersingenesis.org/home/area/bios/default.asp>. List of creationists both past and present.



# When Evolution and Creationism Are on the American Docket, the Verdict Winds up Far from Unanimous

The appropriateness of the subjects in the classroom has fueled an ongoing legal battle in our country for generations

BY PERRY A. ZIRKEL

The American dilemma over church-state issues and the more specific quandary over the role of evolution in public education are reflected in the crucible of the courts.

The story starts with the legal equivalent of the Bible: the Constitution. The first of the constitutional commandments, or the First of the Amendments, is the mandate that the government not establish a national religion and yet not infringe on either the free exercise of religion or freedom of expression. These First Amendment directives — the Establishment Clause, the Free Exercise Clause, and Freedom of Expression — initially applied to the federal government and, after the Fourteenth Amendment, to state governments and, thereby, the public schools.

The subsequent chapters of the story moved from 1) a famous Tennessee trial court that put the general issue on the map; to 2) a pair of successive U.S. Supreme Court decisions specific to the role of evolution in public schools; to 3) the culminating application of these constitutional precedents in a series of recent lower court decisions.

During the 90 or so years from the opening chapter to the latest developments, various other related Supreme Court precedents also marked the transforming application of the three pertinent parts of the Constitution. For example, a long but fluctuating line of Supreme Court decisions continued to redefine the height of the metaphorical “wall of separation” between church and state that some use to symbolize the Establishment Clause.

Since its crystallization in *Lemon v. Kurtzman* (1971)<sup>1</sup>, the primary but not exclusive set of legal criteria that the courts have used in Establishment Clause cases has been the “tripartite test,” which examines, in flowchart-like fashion:

1) Whether the purpose of the challenged governmental policy or practice is secular

2) If so, whether its primary effect is religious

3) And if not, whether it represents excessive entanglement between church and state

In recent years, the second criterion has predominated in terms of whether the challenged government action appears to a reasonable observer to be governmental endorsement of religion; the first criterion has proven to be relatively easy to hurdle; and the third has largely withered away.

## The well-known beginnings: the Scopes trial from the 1920s

The first chapter was at the lowest legal level and not based on the Constitution, but it marked the first major judicial recognition of the conflict between the secular scientific view represented by evolution and the equally entrenched religious view opposed to teaching evolution in the public schools.

As recited and analyzed in a multiplicity of other sources in the literature,<sup>2</sup> this case arose when high school science teacher and football coach John Scopes taught evolution in his biology class despite the prohibition in Tennessee’s “Monkey Law.”

In a well-publicized trial in 1926 pitting Clarence Darrow (representing the defense) against William Jennings Bryant (representing the prosecution), the jury convicted the 24-year-old Scopes of violating this criminal law, and the judge fined him \$100.

The publicity did not accompany the decision, on appeal, a year later. The state’s highest court rejected Darrow’s challenges based on the state’s constitution but reversed Scopes’ conviction on the grounds that the jury, not the judge, should have assessed the fine of \$100; however, since Scopes was no longer in the state’s employ,<sup>3</sup> the court’s remedy was limited to nullifying his prosecution, reasoning that there was “nothing to be gained by prolonging the life of this bizarre case.”<sup>4</sup>



John Scopes (photo credit: Library of Congress).

Although the Court’s opinion was without dissent, three of the nine Justices wrote separate concurrences that showed disagreement with the majority’s reasoning.

The strongly held religious views of another segment of the Bible belt — the state of Louisiana — responded to *Epperson* in 1981 by enacting the “Balanced Treatment for Creation-Science and Evolution-Science in Pubic School Instruction” Act, which required that if a public school provided instruction in either theory, it must also provide instruction in the other one.

In *Aguillard v. Edwards* (1987),<sup>9</sup> the Supreme Court rejected the legislature’s avowed intent of protecting academic freedom,<sup>10</sup> concluding instead that the purpose of the Act was religious, specifically “to restructure the science curriculum to conform with a particular religious viewpoint.”<sup>11</sup> The Court viewed the Act as part of the history of anti-evolution statutes recited and rejected in *Epperson*.

In dicta, which amount to side comments, the majority clarified: “We do not imply that a legislature could never require that scientific critiques of prevailing scientific theories be taught.”<sup>12</sup> Moreover, the growing lack of unanimity was evident.<sup>13</sup>

#### Recent lower court cases

The first of the subsequent lower court cases amounted to a corollary to the Supreme Court’s *Edwards* decision. In this 2001 case, an appellate court in Georgia ruled that a high school biology text that briefly and cautiously mentioned both evolution and creationism did not violate the Establishment or Free Exercise Clauses.<sup>14</sup>

The other relatively recent relevant cases fit into two clusters. One was a group of cases that focused on school district limitations on teachers’ promotion of creationist views. The other was a trio of decisions that focused on school district disclaimers of the evolutionist view.

#### 1. Teacher cases

In a cluster of decisions, various lower courts upheld the constitutionality of a school district’s directive to a recalcitrant biology teacher requiring him to teach the evolutionist theory and to refrain from promoting the creationist view. The plaintiff-teachers relied, without success, on the Establishment, Free Speech, and/or Free Exercise Clauses.<sup>15</sup>

#### 2. Disclaimer cases

The pertinent disclaimer cases started at about the same time as the teacher cases. In the first such case, the Fifth Circuit Court of Appeals, which covers various states in the Southwest, ruled in 2000 that a school board policy that required teachers to read aloud a disclaimer immediately before teaching evolution violated the Establishment Clause because the disclaimer’s wording was not sufficiently neutral.<sup>16</sup>

In the next and most widely publicized of this pair of cases, a federal trial court in Pennsylvania held in 2005 that a school district policy requiring biology teachers to read a disclaimer about evolution and intelligent design violated the Establishment Clause.<sup>17</sup> In a detailed analysis of the language and history of the disclaimer, the court concluded that the policy violated both the purpose and effect prongs of the tripartite test and, alternatively applied as a separate test, served as a governmental endorsement of religion in the eyes of an objective observer. The case did not proceed to the federal appellate court because a newly elected school board agreed to discontinue the disclaimer.

Finally, in a less well-known and anticlimactic 2006 decision that did reach the next judicial level, the Eleventh Circuit Court of Appeals in Atlanta, Ga., vacated a similar ruling by a federal trial court in Georgia, remanding the matter for further factual findings.<sup>18</sup> The parties’ subsequent settlement of the case precluded a definitive federal appellate decision on this modern issue.

#### Conclusion: continuing controversy

The end of this article is not the end of the controversy. For example, Louisiana recently passed a Science Education Act that permits teachers to use “supplemental textbooks and other instructional materials to help students understand, analyze, critique, and review scientific theories in an objective manner.”<sup>19</sup> Although seemingly innocuous on the surface, the 2008 Act’s legislative history suggests that it represents the latest chapter in the interaction between state legislatures, representing a majoritarian process, and the courts, representing the individual protections in the Constitution. Critics of the Act have reportedly characterized it as “an attempt to inject religious doctrine into the classroom under the red herring of academic freedom,” whereas “[p]roponents of creationism and its ideological successor, intelligent design, are hailing the decision as a ‘victory.’”<sup>20</sup>

The current state of the law in terms of the constitutional boundaries of the Establishment, Free Exercise, and Free Speech Clauses appears to be that 1) state or local governmental authorities may not ban evolution or endorse creationism, and 2) teachers do not have the “academic freedom” to denigrate evolution or promote creationism.

However, these conclusions are conditional because the decisions to date depend to a significant extent on the particular facts of each case and the changing doctrine for these First Amendment clauses.

The successive approaches of governmental authorities, ranging thus far from banning evolution to disclaiming it for the purported purpose of balanced treatment or academic freedom, reflect the irrepressible id of the religionist, predominantly Christian majority, led by the Fundamentalists. The gradually fluctuating composition of the Supreme Court, currently seemingly shifting from a separationist to an accommodationist view, also reflects the tension in the super ego of our society.

Everyone appears to agree on the principle of neutrality, but the applications of this principle to the teaching of evolution and to the competing role of creationism defy objectivity and stability, which are desired but not always achieved features of the judiciary. The American ambivalence about the interrelationship of government and religion inevitably means an evolving legal status of evolution that — depending on your perspective — may be an intelligent design. ■

See pp. 41-42 for footnotes.



Supreme Court precedents impact how public schools teach evolution. (Photo credit: Shutterstock.)

“The end of this article is not the end of the controversy. For example, Louisiana recently passed a Science Education Act that permits teachers to use ‘supplemental textbooks and other instructional materials to help students understand, analyze, critique, and review scientific theories in an objective manner.’”



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# Envisioning Origins An artful look at our formation

BY JOE HOUSTON

Of the perennial themes in art, the body ranks among the most enduring. Whether depicted as Cycladic figurines or manipulated in contemporary performance art, the human form offers a direct means of expression across cultures. It seems we humans have always been compelled to represent ourselves, perhaps as a means to understand better who we are and where we came from.

The riddle of our origins has inspired a number of visionary works of art, including interpretations as diverse as William Blake's illustration of the cosmological designer Urizen in *The Ancient of*

*Days* (1794) and Auguste Rodin's marble sculpture of primordial man issuing from the outstretched palm of *The Hand of God* (1898).

Perhaps most iconic of all is Michelangelo Buonarroti's Sistine Chapel fresco, *The Creation of Adam* from the early 1500s. This depicted gesture of the Biblical divination has upstaged the other major compositions adorning the Sistine ceiling in Vatican City, Italy. Now essential to the art historical canon, it is often quoted in art and advertising and has been reimagined as an alien gesture in Steven Spielberg's smash 1982 sci-fi movie *E.T.: The Extra-Terrestrial*.

In the 21st century, the theme of creation has increased urgency for artists now that genetic engineering is adding a new chapter to the story of human origins. Among the most provocative images of the post-digital evolution is Rona Pondick's sculptural group, *Monkeys*. Considered within the context of evolution, Pondick's restless chimeras provide a fascinating counterpoint to Michelangelo's classically ordered view of creation.

While these pivotal works reflect the individuality of each artist, they will both likely stand the test of time as vivid documents of the cultures in which they were conceived. These works also may well serve as touchstones to larger philosophical issues for future generations as they continue to grapple with what it means to be human.

Read below for analysis of these two intriguing pieces.



**Joe Houston** is Curator of the Hallmark Art Collection in Kansas City, Mo. Previously, he served as Associate Curator of Contemporary Art at the Columbus Museum of Art in Columbus, Ohio, where he guided an exhibition program and the collection of contemporary painting, sculpture and new media. His other experience includes Curator of Exhibitions at the Cranbrook Art Museum, Bloomfield Hills, Mich.; Curator of the Rockford Art Museum, Rockford, Ill.; and Director of the Indiana State University Art Gallery, Terre Haute, Ind. Recent publications are *OPTIC NERVE: Perceptual Art of the 1960s* (Merrell Publishers, 2006); *In Monet's Garden: The Lure of Giverny* (Scala Books, 2007); and Rona Pondick: *Works, 1986-2008* (Internationale Sommerakademie für Bildende Kunst, Salzburg, 2008). He also has written for *American Art Review*, among other publications. Houston received an MFA in Painting and Criticism from Northwestern University and has taught at Northwestern University College in Evanston, Ill.; DePaul University in Chicago, Ill.; and the Center for Creative Studies in Detroit, Mich.



Michelangelo Buonarroti, *The Creation of Adam*, 1508-12, fresco on the ceiling of the Sistine Chapel, Vatican City, Italy, 224.4 x 110.2 inches. (Photo credit: Getty Images)



Rona Pondick, *Monkeys*, 1998-2001, stainless steel, edition of 6 + 1 artist's proof, 41 x 66 x 85 inches. Courtesy of Sonnabend Gallery.

## Training and career

Born in Caprese in what's now known as Italy, Michelangelo apprenticed with fresco artist Domenico Ghirlandaio and rose to fame during the High Renaissance period, an era in which painting and sculpture — based on Greek prototypes — reached their greatest degree of naturalism. Michelangelo's work, of both sacred and secular subjects, was commissioned by Roman Catholic clergy, particularly Pope Julius II, the artist's greatest benefactor. Michelangelo was primarily a sculptor and architect; only a few early and unfinished paintings survive in addition to his famous Sistine Chapel decorations. *The Creation of Adam* (1508-12) is a focal point of the Biblical narrative of Genesis he brought to life on the Sistine ceiling.

## The Subject

Michelangelo interprets the Biblical story of Genesis recounting the moment at which God made Adam on the seventh day of Creation. The artist depicts a brief passage in elaborate detail: "And God said, 'Let us make man in our image,

after our likeness'" (King James version), giving human faces to man and God alike, both of whom are depicted as powerful, masculine figures. A gap between their outstretched fingers implies the spark of life passing between them. It is one of nine fresco panels that line the central vault of the chapel's ceiling.

## Composition and perspective

Michelangelo chose a symmetrical organization of forms split diagonally across the fresco's composition, with God's outstretched arm as the center point. The symmetrical division implies a divine order to the universe. The ultimate effect is a balance of two forces — one heavenly and one earthly. Michelangelo positions the figures frontally against an uncluttered backdrop, allowing for clarity and decisiveness.

## Material and process

Fresco, a medium that already was centuries old when Michelangelo created his masterwork, allows for brilliant color and must be applied in discreet sections, one area at a time. A durable

material, it is prone to damage from structural settling, seismic disturbance, ultraviolet light and pollution. The material absorbs light, which in turn provides color luminance, an apt effect given the subject matter of the piece. The most recent restoration (1980-92) took place to remove centuries of accumulated smoke and pollution. Vibrant color was revealed from the beneath the grime, causing a reconsideration of Michelangelo's influence on subsequent painters.

## Viewing experience

Because the painting is on the ceiling of the Sistine Chapel, viewers must raise their heads to take in the ethereal subjects of the fresco. In other words, *The Creation of Adam* is a heavenly spectacle that unfolds above, on a higher plane of existence. Placed within the Papal chapel, the setting further defines our experience as a sacred event. To reinforce the spiritual allusions, the work is given dimension and animation through vibrant color, now visible after its controversial restoration.

## Training and career

The Brooklyn, N.Y.-born sculptor studied at Yale under Minimalist artists such as sculptor Richard Serra. Her early works were "scatter" installations of raw materials casually poured or strewn about the gallery space. These Post-Minimal sculptures forced the viewer's physical interaction, sometimes to an uncomfortable degree. Her recent human/animal hybrids hearken to ancient world mythology while simultaneously invoking a nightmarish vision of genetic engineering. Her art is in many public collections including the National Gallery of Art in Washington, D.C. and the Whitney Museum of American Art in New York. *Monkeys* (1998-2001) is the culmination of years of research into new computer techniques that she married with traditional hand-modeling. The result: fantastic — and plausible — chimerical forms integrating her own body.

## The Subject

The artist's own visage, limbs and hands emerge from the mercurial tangle of simian forms. Such startling details hint at our primordial selves. The complex grouping was inspired by the animated

forms of Gianlorenzo Bernini's *Ecstasy of St. Theresa* (1647-52) in the Santa Maria della Vittoria in Rome, Italy. One can read *Monkeys* as an embrace of evolutionary theory (meaning that, like the artist herself, we are constituted of the same matter and energy of our sister species). The piece also may be seen as a warning of the nightmarish effects of genetic experimentation.

## Composition and perspective

Pondick's chaotic sprawl is decentered, implying uncertainty and doubt about our place in the world. It also suggests the indefinite hierarchy of the human species within the evolutionary chain. We strain to find a beginning and end to the mercurial mass of human/animal fragments. Therefore, she includes no vanishing point; instead, all forms twist in an undifferentiated mass of competing actions. As with all three-dimensional work, it is meant to be viewed from various angles.

## Material and process

Pondick used high-grade stainless steel, a thoroughly modern, industrial material that is impervious to oxidation and extremely difficult to

damage. She applied casting techniques that date to ancient Greece; her sculpture is poured molten into numerous mold parts, welded together, then precisely tooled and polished by hand. It is the first instance in which the artist used computer scanning and rapid prototyping as part of her technical process. Pondick created *Monkeys* in two sections to allow for portability. The polished surface reflects the environment around it, including the viewer, whose own body can be seen in the many twisting facets, forcing personal interaction with the artwork.

## Viewing experience

Because the sculpture is placed on the ground, on the same level as the viewer, one must cast one's eyes downward to see it. Viewers must bend down to inspect the details, often leading them to crouch on all fours, taking the simian or animalistic posture, a physical permutation that could hearken to biological ancestors. One of the existing casts is outside the New Orleans Museum of Art, where it miraculously weathered Hurricane Katrina in 2005 without blemish. ■



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Mentor Match is facilitated by Experience, Inc., the same company that powers Phi Kappa Phi's Career Center. Experience uses a Web-based platform to match mentors and mentees based on criteria provided by the individuals. As a mentor, you will receive requests from potential mentees via the contact method of your choice. As a mentee, you will be able to search for and reach out to potential mentors who may match your needs. If you think you'd be a good fit, simply accept the request(s) and start connecting on mutually agreeable terms. How mentors and mentees communicate is completely up to them!

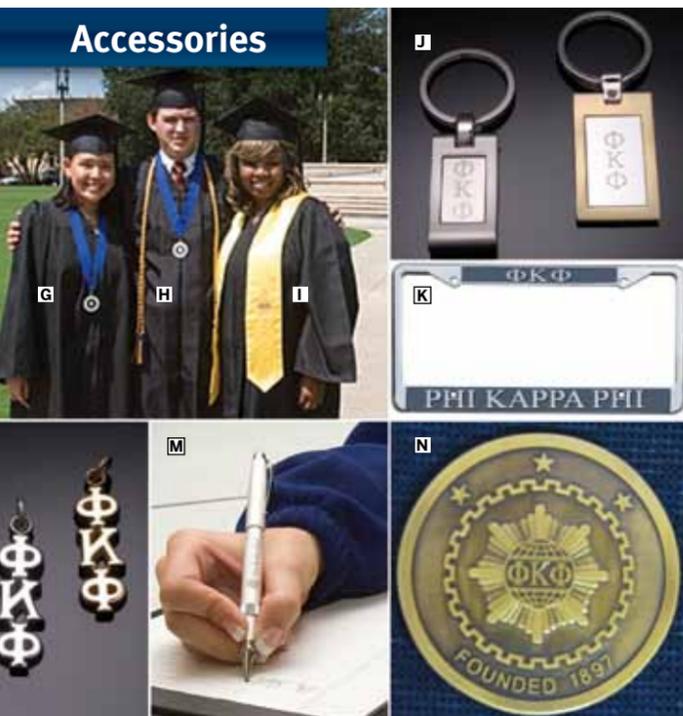
Wisdom knows no age limit, and experience comes in all sorts of forms. What do you have to offer as a mentor and what do you want as a mentee? Phi Kappa Phi wants to help forge these relationships and provide active members with a mechanism to explore educational, work and life milestones!

Our membership pool is wide and deep, and the Mentor Match allows active members to tap into it in mutually beneficial ways. Some members might have a lot they'd like to give back; others might have a lot they'd like to learn.

To get started as a mentor or mentee, or if you have questions, visit [http://phikappaphi/experience.com/alumnus/branded\\_login](http://phikappaphi/experience.com/alumnus/branded_login) or contact Maria Davis, National Marketing Development Manager, by email at [mdavis@phikappaphi.org](mailto:mdavis@phikappaphi.org) or by phone at 1-800-804-9880, ext. 35.

The roster of the 100,000-plus active members of Phi Kappa Phi boasts doctors, lawyers, politicians and soldiers, plus educators, administrators, scientists and researchers, not to mention athletes and coaches, bankers and

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# Evolution Is a Theory ... and That Is Saying a Lot

Know your terms when pursuing science

BY LAURA LORENTZEN



Scientists scrupulously determine what becomes a theory. (Photo credit: Shutterstock.)

"I have a theory," is a statement that most people have made at one time or another as they postulate, at best, their educated guess or, at worst, their hunch.

To the scientist, however, a theory has a definition different from the term's common usage. What is the nature of a scientific theory? What is and what is not a theory?

These questions are especially important when considering evolution.

**A theory must be verified and supported**

An explanation does not become a theory unless it is a means of

explaining a *why* or *how* that is the result of multiple lines of scientific evidence and that is the consensus of the scientific community.

Certainly, a theory may be modified as additional evidence is validated by peer review, and such a practice is the nature of science. As our techniques, technologies and knowledge expand, so too does our ability to gather evidence and facts. So a theory may be modified, revised or discarded because it is not an absolute truth; rather, a theory is the best representation of the truth according to available evidence collected independently by multiple researchers and validated by the consensus of the scientific community.

**There's a difference between scientific theories and scientific laws**

Scientific theories are not statements awaiting proof that advances them into scientific laws. Rather, scientific laws are generalizations describing how something behaves under a set of conditions. For example, Newton's laws of motion and gravitation were correct in certain conditions but did not hold at high velocities or strong gravitational fields as per Einstein's theories of relativity.

Simply put, to name an explanation a theory is distinct from naming something a scientific law because "theories do not mature into laws." (Lederman and Lederman, 2004, in *The Science Teacher* 71 (9): 36-9.)

**Evolutionary theory has been proven**

In the case of evolution, misconceptions as well as misrepresentations may contribute to an incorrect sense about how to assess the matter. Michael Le Page, a science writer for *New Scientist*, says, "Evolution must be the best-known yet worst-understood of all scientific theories" (*New Scientist* 16 April 2008, "Evolution: 24 myths and misconceptions." <http://www.newscientist.com/article/dn13620-evolution-24-myths-and-misconceptions.html>).

The origin of species — the thought that life has existed for billions of years in a dynamic, rather than static fashion — is a focal point of the theory of evolution. Life forms evolve and the mechanisms by which they do so include natural selection, genetic drift and genetic mutation. The ongoing discussion among scientists is limited to how evolution occurs, not whether it has occurred or continues to occur.

This position is further explained by The National Academy of Sciences and The Institute of Medicine of the National Academies coauthored 2008 book titled *Science, Evolution and Creationism*, which states that arguments suggesting that "there are fundamental weaknesses in the science of evolution are unwarranted based on the overwhelming evidence that supports the theory."

It is my opinion that a misunderstanding of evolution undermines what the scientific community of researchers and teachers hold to be the foundation of scientific evidence. And a misrepresentation of what a theory is — such as the theory of evolution — is an injustice to science education. ■



Theories like evolution get tested and otherwise verified. (Photo credit: Shutterstock.)

**Some Common Misconceptions about Evolution** BY LAURA LORENTZEN

**Misconception:** Homo sapiens evolved from apes.

**Correction:** Humans share a common ancestor with modern African apes.

**Misconception:** Accepting evolution means you can't believe in God.

**Correction:** Science and religion seek answers to different questions.

**Misconception:** Many scientists do not accept the evidence for evolution.

**Correction:** Scientists have established evolution as a natural process.

**Misconception:** The absence of transitional fossils undermines the support of evolution.

**Correction:** "But paleontologists have discovered several superb examples of intermediary forms and sequences, more than enough to convince any fair-minded skeptic about the reality of life's physical genealogy." (Stephen Jay Gould, "Hooking Leviathan by Its Past," 1994; Reprinted in *Dinosaur in a Haystack: Reflections in Natural History*.)



Laura Lorentzen, Ph.D., is associate professor and chairperson at the New Jersey Center for Science, Technology & Mathematics Education at Kean University, Union, N.J. She also serves as president of the New Jersey Academy of Science. While her doctorate is in the biomedical sciences, her master's degree research was determining the molecular evolutionary relationship among lower metazoan animals. Email her at [llorentzen@hotmail.com](mailto:llorentzen@hotmail.com).

# Opt to Take an Active Role in Your Child's Education

Concerned about what is taught in the classroom? Then get involved.

BY MARY ANN MANOS

Many people are not aware that the No Child Left Behind Act empowers parents to inspect schoolbooks and other classroom materials, and that most local school board policies allow parents to opt their children out of K-12 public-school curriculum that gives them pause, such as evolutionary and creationism theory.

The No Child Left Behind Act (NCLB), signed into federal law in 2002, considers parents full partners in their child's education. Parents can be included in curriculum decision-making, serve on related advisory committees, or advise in the selection of supplemental

educational services. Parents, in other words, are encouraged to take an active role in what and how their children are taught.

Greater choice for parents is one of the mainstays of NCLB. The others are accountability for results, more local control and flexibility, and an emphasis on doing what works based on scientific research, according to the NCLB Web site, <http://www.ed.gov/nclb>. The component of parental choice involves hot-button topics that families and public school districts may disagree on.



The classroom dynamic, typically understood as what happens between teachers and students, should also include parents, who can ask about subject matter. (Photo credit: Shutterstock.)

Other potentially contentious subjects besides the origins of existence include:

- Sex education
- Gender identification
- Marriage and family law
- Freedom of expression in student publications
- Race relations
- Unfettered Internet access
- Uncensored literature
- Politics

Although public school districts and parents continue to square off in the press and in court on areas that may seem to defy compromise, general guidelines about how to handle such controversies exist:

**1) Parents have the right at any time to review and comment on the curriculum that public school boards have adopted.**

Being proactive in the process of curriculum review is essential. Waiting until problematic topics become volatile issues is unproductive for parents, school administrators and the school board, not to mention the students.

Parents only have to give written notice to the board that they would like to view specific curriculum. (Written notification should be sent via certified mail to the school superintendent or school board president.) The school board is an elected body — an arm of state government — and, therefore, must conduct all official business within the parameters of open public meetings; it will respond in a timely manner to a written request by providing essential curriculum documents for parental input.

Parents can ask for the “big picture” of the entire school curriculum — required subjects as well as electives. Understanding the grand scheme helps parents know where, potentially, to suggest revisions to the blueprint.

All school offerings, from subjects to assignments, happen in a planned, sequential manner that is documented in a “curriculum map.” Parents also can ask to view a curriculum map of each subject and grade level to determine if they agree with the route and destination. These maps correlate with the learning goals set by the state and often are so precise that the approximate instructional date and supplemental resources for each course assignment are given.

Parents then have the opportunity to respond with written comments to school administration about suggested modifications in the course material. School officials then decide what changes, if any, to incorporate. If parents are not satisfied with the results, they can take steps to have their child opt out of the problematic study and tackle a suitable alternative instead.

**2) Parents may ask that their child be “opted out” of a specific unit of study they object to and the school may accommodate the request.**



Students benefit when parents participate in the learning process. (Photo credit: Shutterstock.)

If a lesson plan offends parents, they can request an alternative assignment, topic, presentation, assembly, etc. Either parents or schools can come up with alternatives. School officials may already have an alternate assignment in mind — perhaps one that has been successful in the past. Parents also may have an idea for the replacements. Regardless, both parties will need to communicate and compromise.

Schools do not necessarily have to approve a substitute. So in identifying an alternative assignment, parents should explain how the student will meet state requirements for learning mastery as well as benefit in other ways, if applicable. Parents also may want to make sure that no additional school resources are required and that an alternative meets school timelines. This productive approach may help the local school administration agree to the proposed swap.

Note that if the course is a state-required subject (i.e., health, American history and the sciences), the path of opting out becomes steeper to take. States place high accountability levels, as well as legal stipulations, on schools to deliver the state-selected subjects for grades K-12. In fact, public school teachers are tightly bound by case law and state mandates not to deviate from the adopted curriculum. Opting out of a state-required subject or course requires parents to devise learning experiences that are credible, legally sound and state-approved, for example, replacing a high school science course with a course from a community college or private school.

Nonetheless, sometimes the only solution may be to find another school for the child, a campus more in line with parental thinking. Before taking that path, parents should understand that school organizations would prefer to resolve disputes locally and peacefully. Both sides need to work together for the student's benefit. ■

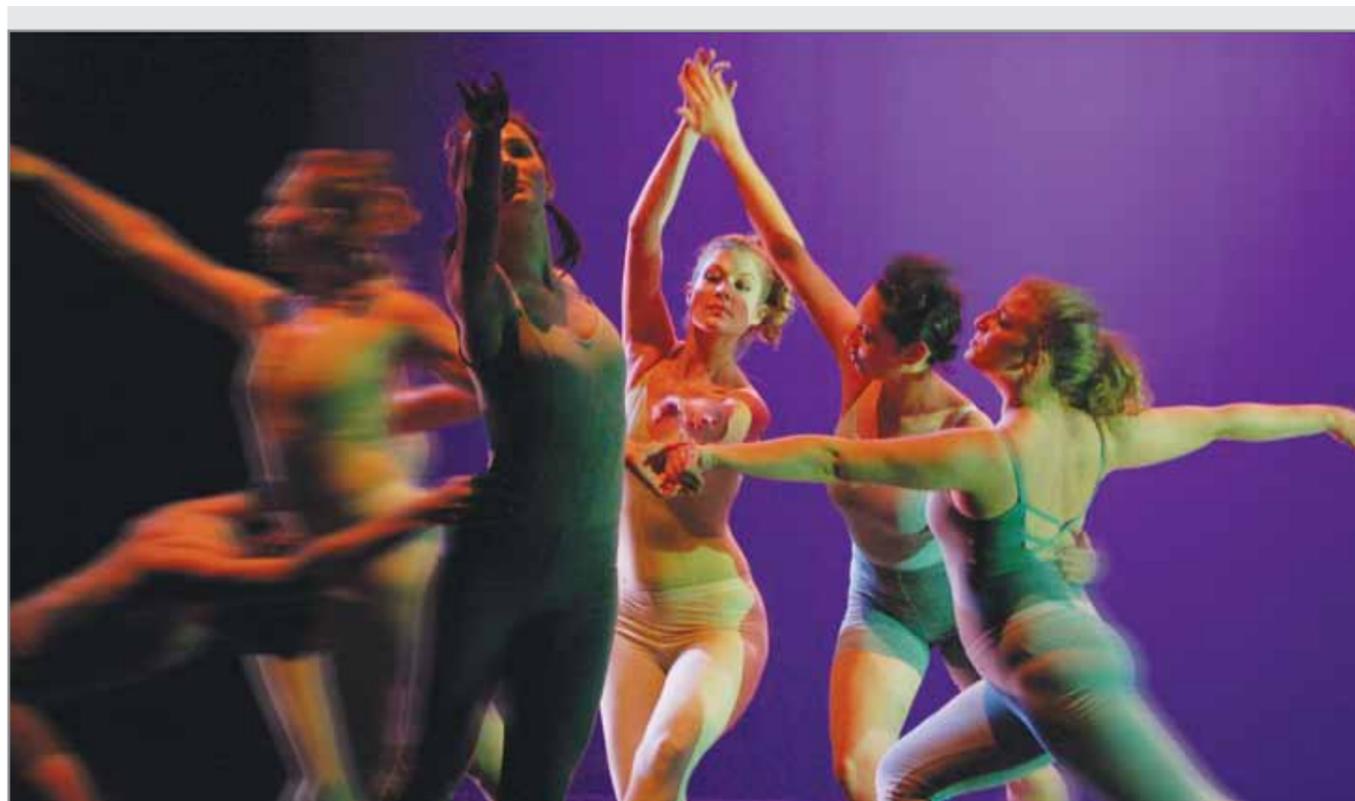


Mary Ann Manos is a 30-year veteran of the classroom. She holds a Ph.D. in Curriculum and Instruction from the University of Texas at Austin. Manos is a 2001 National Board for Professional Teaching Standards certified teacher in Early Adolescent English/Language Arts. She serves as Assistant Superintendent of Eureka Public Schools in Eureka, Ill. Email her at [manosm@district140.org](mailto:manosm@district140.org).

# Tripping the Light Fantastic in the Profoundest of Ways

Wherever dance comes from, it has attempted to explain how existence got started

BY SYBIL HUSKEY



Students from Denison University in Granville, Ohio, intertwine at numerous angles and levels to depict the formation of North America in "Turtles All the Way Down," a piece based on an Iroquois legend, in which mud from the reptile's back becomes the terrain of the land. The dance, by visiting artist Amalia Schelhorn, who teaches at the Canadian College of Performing Arts in Victoria, British Columbia, debuted at Denison in November 2008. (Photo courtesy of Denison University.)

Though ancient cave paintings, archeological artifacts and temple reliefs suggest that humans danced as early as 12,000 B.C., we have no conclusive way of knowing how, when or why dance came into being.

Western dance historians speculate about the origin of dance by examining disciplines such as biology (mating rituals), psychology (emotional expressions), anthropology (spiritual identities), contemporary cultural anthropology (movement behaviors) and archeology (visual objects).

But for eons many non-Western cultures have framed the origins of dance in traditional creation myths and used dance to illuminate other creation stories.

In fact, towards the end of last year, a San Francisco, Calif.-based company, Dance Monks, along with Samavesha, a collective of

world musicians, produced a contemporary dance based on creation myths from Mexico, China and New Zealand. The interdisciplinary arts show called "Origins" included stories in their original tongue and live music by international players.

Around that same time, guest artist Amalia Schelhorn, at Denison University in Granville, Ohio, premiered her Iroquois-based myth, "Turtles All the Way Down," a retelling of the birth of North America from the mud off a turtle's back. What's more, as 2008 was coming to a close, Kaha:wi Dance Theatre at Brock University in St. Catharines, Ontario, Canada, offered Santee Smith's "A Story Before Time," a celebration of the Mohawk notion of dance being a gift from the creator.

Here are other dance creation myths that are ripe for choreographers' interpretations:

- **Greek** mythology traces the beginnings of dance to the Titan Rhea, wife of Cronus, who taught the art of the dance to the Curetes who lived in Crete.

To avoid Cronus's habit of devouring his children at birth, Rhea fled to Crete to deliver her son, the god Zeus. She hid him in a cave and gave Cronus a stone wrapped in swaddling clothes in place of the child.

Rhea gave the baby to the Curetes for safekeeping and they "danced over him a wild, noisy, leaping dance," as Lillian B. Lawler says in her definitive 1964 text, *The Dance in Ancient Greece*, to prevent Cronus from hearing his cries. The Curetes later became priests of Zeus, and they danced the saga as did their descendants for centuries.

- In **Japan**, the Dance of the Eight Thousand Gods is credited with saving the world.

Legend has it that the angered sun goddess, Amaterasu Omikami, sequestered herself in a celestial cave, thus depriving the world of light and heat. The other gods, realizing that life would end without the sun, united in a divine dance that resulted in the goddess emerging and shedding her light once again.

- The ancient dance form of the **New Zealand** haka was derived from the union of the sun god Ra and his wife, Hine-raumati, that produced their son, Tanerore. Maori tribal members believe that the reflected light seen "dancing" on hot summer days actually is Tanerore performing for his mother.

This trembling shimmer is reflected today in the vibrations of the performer's hands, an effect known as wiriwiri. Because all haka comes from this incident, Maori say they see their ancestors coming alive when they watch the haka.

- Thirty centuries ago, Brahma, **Indian** Lord of Creation, communicated the rules governing human expressive movement to the sage Bharata Muni who wrote them down as the *Natya Sastra*. He then formed a group of Apsarases — heavenly dancers — who gave a performance in the presence of Lord Shiva, Hindu god of creation and destruction.

Afterwards, Shiva taught the dance to Bharata Muni, who then taught the other sages, thus spreading dance throughout the world.

Shiva, Lord of the Dance, is the symbol of the rhythmic creation of order out of chaos. Represented as a four-armed deity ringed by fire, he crushes the demon of ignorance with his right leg, while his left leg, swung across his body, signifies the release from worldly cares that is one of the blessings dance bestows on its devotees the world over.

The premise of the Roman historian Sallust that "myths are things which never happened but always are" confirms why stories of divine inspiration and creation are so prevalent.

The idea that gods/goddesses gave dance as a precious gift to humans to gladden hearts, lift spirits and inspire generations resonates with the body-mind-spirit nature of dance as it is experienced today. ■



Rodrigo Esteva executes a maneuver in "Origins," an experimental, interdisciplinary dance and music performance that is about various sources of life and that was inspired by legends from ancient cultures. Presented by Dance Monks, plus a group of world musicians called Samavesha, it premiered in November 2008 in San Francisco. "In this modern world of immigrants, there is a longing in the human heart for home, a sense of place, human connection and identity," Mirah Kellec Moriarty, Esteva's partner in work and life, wrote in an email. "'Origins' is a modern way to connect with our ancestral homes." (Photo credit: Dance Monks dancer Rodrigo Esteva; photographer Matt Haber.)



Ringed by fire, Shiva, the Hindu Lord of the Dance, symbolizes life and death in his cosmic movements. (Photo credit: stock.xchng.)



**Sybil Huskey, MFA**, professor of dance at the University of North Carolina at Charlotte, is the recipient of two Fulbright Senior Scholar Awards and a past president of the American College Dance Festival Association. She has worked internationally as a choreographer/performer/teacher and most recently was an exchange professor at Kingston University in London. Email her at [sdhuskey@uncc.edu](mailto:sdhuskey@uncc.edu).

# How to Land a Job in an Economic Downturn

Work hard at making yourself seem like the perfect fit for the opening

BY KIMBERLY THOMPSON



Finding a job in a recession requires thinking about employer needs. (Photo credit: Shutterstock.)

One of your first steps in landing a job, especially in a recession, is identifying what strengths you have that can benefit your potential employer.

No matter your education, age, income or employment history, you had better start thinking about this — about how to promote what you offer in order to get what you want.

Employers have to act quickly in an economic crisis. So they often reduce the workforce to offset their financial woes. In fact, experts forecast that considerable job reductions loom in 2009 in popular sectors such as finance, retail, manufacturing and construction.

Therefore, you need to make yourself seem indispensable in a tight market.

How do you do this?

Partly by identifying your transferable talents that can be moved easily from one job or industry to the next — in other words, by highlighting the skill sets, your unique combination of abilities and experience, that you bring to an employer. And since you own your

capabilities, you can cater them to fit the bill. (What's more, they're stable factors in a crisis-orientated job market.)

### Stand out by fitting in

So don't merely list titles and responsibilities on a catch-all résumé. Instead, mold your strengths and background to fit the requirements of the job you're hoping to land.

And realize that doing this — paying scrupulous attention to the demands of each posting — often means tweaking or even making wholesale changes to your résumé for every position you're applying for.

Not too long ago at a job fair, I met with a couple of job seekers who, despite being at different stations in life, both came in with a plan that didn't keep employers in mind. That made finding a position all the more difficult since the market is saturated with candidates just like them.

One had a 25-year career in sales in the consumer goods industry and wanted another job like the one he recently had left, but he

was doubtful about his prospects. His approach was to send out a one-size-fits-all résumé to all prospects in the same industry.

But he was frustrated that his résumé, though backed up with result-oriented accomplishments, was not doing the job for him.

His greatest barrier was his mindset: taking his skills for granted, generating a generic résumé, waiting for it to bring him opportunities and overlooking employer considerations. While he might have paid attention to his own needs, he ignored the prospective employer's.

### Formulaic résumés are a recipe for disaster

He probably will be faced with presenting himself to a younger hiring manager, one with whom he'll have to build rapport focusing on the employer. So his next step was to understand the marketplace and develop a new way to communicate his value. No longer can job seekers rest on their laurels and expect their background to speak for them. Employers want to know what you can do for them right now to help solve their problems and meet their needs.

I encouraged him to take a hard look at his job search. How much time was he spending on his interests versus his worth to the employer? Was he applying the same way for every job that surfaced and expecting results to follow automatically? Did he tailor his credentials to the employer?

He left appreciating the imperative to modify his résumé on a case-by-case basis and prepare a list of constructive talking points for hiring decision makers. Also, he learned that he had to concentrate on the employers as much as on himself.

The second job seeker, a recent college graduate, was applying for consulting positions in the healthcare industry. She considered consulting jobs to be "hot": in demand and with potential for growth.

No doubt the need for healthcare consulting will continue to grow; however, she lacked fundamentals — hands-on business applications — needed in order to be successful in the consulting field.

While it is tempting to go for the trendiest jobs, young employees should not overlook the need to gain experience through traditional entry-level positions and develop skills in areas they might not have thought of, such as starting out by assisting project managers or taking on a support role in an industry that interests them. After all, a recent college graduate can't be the surgeon but can be the one to handle the instruments the surgeon operates.

That's how most people get started: with the basics. After all, employers tend to shy away from candidates new to the workplace who overstep.

### The more realistic job candidates are, the better

So I encouraged her to keep an open mind rather than try to land the ideal job. What she really needed to do was focus on building essential skill sets as a prerequisite for dream positions down the pike.

Her next step, I suggested, would be to reconnect with her university's career service office to identify potential employers and recruiters.

She also could reach out to her school about contacts. She believed her networking skills were limited because she knew only students and professors. We discussed how many other contacts could be included on her networking lists such as alumni, guest speakers and connections made during her internships.

Once she came up with a short list of potential positions to apply for, she could craft résumés around the specs that the jobs asked for.

### Be attentive and resourceful

It's understandable to struggle in this job market. But it's vital that you adjust your search as more information becomes available. Thriving in a tight job market requires that you be proactive and take responsibility of your career.

Whether you're looking for your first job or you're in mid-career, you do not have to try for the perfect job because the perfect job will change many times over. Be flexible. Understand how you fit into the scheme of things. ■

**"No longer can job seekers rest on their laurels and expect their background to speak for them. Employers want to know what you can do for them right now to help solve their problems and meet their needs."**



In a recession, rise above other job candidates by customizing your résumé and interview around what the employer is looking for. (Photo credit: Shutterstock.)



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# Study up on How to Teach in a Data-Driven Classroom

Schools need to let classroom educators, not outside experts and universal tests, figure out what's best for students

BY HELEN COLLINS SITLER



Analyzing students' abilities provides educators with invaluable research in the preparation of lessons. (Photo credit: stock.xchng.)

In today's classrooms, teachers are expected to base many of their lessons on data that indicate the learning each student still needs to master. Expectations for data-driven teaching begin early in the fall and culminate each spring when public school teachers and students grapple with standardized tests.

This data-driven approach sounds reasonable because it purports to directly link teaching with learning. But it becomes problematic

when test makers far removed from daily classroom routines create the tools that judge whether teaching has impacted learning.

The result, as one expert puts it, is "both an overabundance of data and a scarcity of information that educators can readily use to make better decisions" (Reeves 89).

What if, instead of relying solely on testing instruments derived from afar, there was, according to another authority, "faith that

local understandings, observations, and insights can accumulate knowledge of critical importance to the challenges and problems at hand" (Lytle 375)?

Said another way, what if teachers could develop their own data-gathering instruments and test context-based hypotheses about learning?

### Generate material that serves specific classroom needs

Teacher research offers this possibility. As the term suggests, teacher research is conducted at the classroom level with the goal of improving student learning by gaining insight into why learning does or does not occur.

"Teachers who conduct classroom-based research develop more complex views of classroom life and student learning," one classroom specialist concludes. "Their inquiries heighten their awareness of what makes learning difficult for students and often make visible the beliefs and assumptions that inform their pedagogy" (Waff 33).

Teacher research offers the local, contextualized insights that are more likely than top-down mandates and assessments to lead teachers toward positive changes in their classrooms.

### Turn writing assignments into epiphanies

Teachers who conduct teacher research in order to understand better their students' learning make significant discoveries about the teaching process and its impact. For example, an elementary guidance counselor I've taught asked this research question: What happens when third graders and parents participate in a joint journal-writing experience?

She found multiple positive effects in the "Family Message Journal." The quality of writing improved. In fact, quality writing occurred more often when students were free-writing about their school day in the "Family Message Journal" than when contributing to their regular classroom journal writing. And the third graders came to utilize better sentence structure, punctuation and spelling, despite not having been directly taught these writing features for the "Family Message Journal."

These discoveries can guide the teaching of writing in her school.

### Experiment with the science of learning

In another example, a high school chemistry teacher I have worked with instituted learning logs in his classes because he wanted to move students beyond memorization and into greater engagement in chemistry. He posed this research question: Will the use of think-book/journals in chemistry class increase student achievement through greater interaction in the course?

He found that the students who regularly posted lengthy, meaningful journal entries seemed more likely to seek clarification on material they didn't understand and seemed to produce more organized answers to essay questions on tests.



While standardized testing serves a purpose, an attentive teacher can go a long way in helping students succeed. (Photo credit: Shutterstock.)

These realizations caused the teacher to raise another question: Had he simply tapped the skills of more verbal students or were the think-books successful with all students? A second look at the data indicated that even students who wrote journal entries that suggested less engagement with the chemistry concepts had improved their test scores. In short, the think-books broadly aided conceptual understanding.

This teacher, too, through targeted interaction with and assessment of his students, made important discoveries about how best to help them learn.

The standardized data-gathering instruments in place in each of these schools could not have yielded this rich information that directly connected teaching and learning. Instead, in the local contexts of an elementary school's third grade classes and a high school chemistry classroom, data derived from teacher research did.

And in the process, the data gathering honored both the expertise of the teachers and the capabilities, rather than the deficits, of the students.

### Stop making educators always instruct from the outside in

Kylene Beers, president-elect of the National Council of Teachers of English, says, "Testing does not improve learning. Teachers improve learning."

Indeed, from the first day of class through standardized testing in the spring, teachers need to regain agency in their classrooms. Teacher research is a powerful way of doing that. ■

See p. 42 for bibliography.



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# Calculating the Spread of Technology

Some theories diagnose proliferation like a disease; others treat the causes behind the buildup

BY JURGEN BRAUER



The wheels of industry move in numerous ways after invention. (Photo credit: Shutterstock.)

Technology, we all know, improves productivity — at home and in the workplace — and makes for healthier, longer, and more convenient lives. So, exactly where does it spring from and how does it diffuse within and across economies?

Actually, economists still much debate the “where does it come from?” question.

But with regard to how technology spreads, once a new invention comes along, one view is borrowed from medicine.

### The epidemic model: a type of multiplication

Technology spreads like a contagious disease, an epidemic.

A central source, the inventor, transmits knowledge. The inventor is in touch with, say, 100 people but the 100 people, in turn, are in touch with another 100 people each. That amounts to 10,000 people already and accounts for explosive growth in the spread or diffusion of a new technology.

Of course, since there are a limited number of people on earth, the growth must stop. At some point, people who are unaware of the new technology are harder to find (everyone assumes that everyone already knows) and so, after an explosive phase of knowledge diffusion, a phase of slow growth follows, as the market is saturated with general knowledge about the invention.

Relatively simple technology will spread faster than more complex technology; likewise, technology will spread faster where there is greater density of population so that “infection rates” take place faster. Technology also will spread faster in environments that consist of fairly homogenous populations in terms of background knowledge and experience; inversely, technology will spread less fast when it has to jump from one community to another. For example, certain technologies will spread very fast among “techies” in the computer world but more slowly, maybe much more slowly, among “nontechies.”

The epidemic model is useful but has its limitations. It assumes that people are willing and able to receive information and then simply adopt the technology. In practice, people often need to be persuaded to do so because adopting new technology can be costly and needs to be set against benefits to be reaped.

### The probit model: a look at rationales

Models that focus on the adoption decision of an individual firm or person are called probit models.

Probit refers to the probability that a firm or person either adopts or does not adopt a given new technology, and probit models trace the determinants by which people arrive at a “no” or “yes” adoption decision as well as the speed with which people switch from one to the other.

Understanding the determinants of the decision is of obvious importance for government policy. If technology improves lives, then we will want to know how to mitigate the “no” determinants and, conversely, how to make the “yes” determinants obtain more weight in the decision-making process. Larger firms, for instance, can spread the cost of a new technology over larger production runs or over larger numbers of customers to which they supply services.

But in many contrary instances it also has been found that smaller firms adopt new technology more quickly because either they are more nimble in their decision-making or the new technology is the brainchild of an inventor who then starts up a new, and necessarily small, firm. For example, there were no big companies that wanted to deal with the newfangled personal computer technology of the 1980s.

Changing from one technology to another involves search, learning, and switching costs that may be considerable. Potential suppliers should be glad to ease those costs — but these potential suppliers also need to beware of inadvertently undercutting old technology from which they can still earn a revenue stream. Why push the envelope if there is still money to be made from business as usual?

Whereas epidemic models are good at telling us something about the cumulative spread of certain technology over time (the “when”), probit models are better at informing us about individual adoption decisions (the “who” and “why”). Neither model is very good at the “where,” that is, the spread of technology across geographical space, either within or across countries. To understand this is an area of continuing research. ■



Computer-savvy people help expand technology's reach. (Photo credit: Shutterstock.)



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# For Some Athletes, the Name of the Game Is Telling a Good Story

The autobiographies of sports stars reveal much more than play-by-play commentary

BY RICK SHALE

Sports autobiographies often are dismissed on the grounds that they usually are written by someone other than the athlete. NBA star Charles Barkley, for example, complained of being misquoted in his autobiography but admitted, “That was my fault. I should have read it before it came out.”

However, James Pipkin (Phi Kappa Phi inductee at the University of Houston) argues that these books — ghostwritten or not — deserve careful examination. In *Sporting Lives: Metaphor and Myth in American Sports Autobiographies*, he finds thematic and linguistic patterns in these texts that will interest both the scholar and the sports fan.

“In the best sports autobiographies,” Pipkin writes, “there is a clear selection process that tells a fuller and richer story offering not just facts and statistics but an interpretation.”

He adds, “The factual accuracy — the historical truth — of an autobiography is important, but it is less interesting and usually less significant than the different — and deeper — kind of truth athletes reveal in telling about their experiences.”

### Some professional athletes seem never to grow up

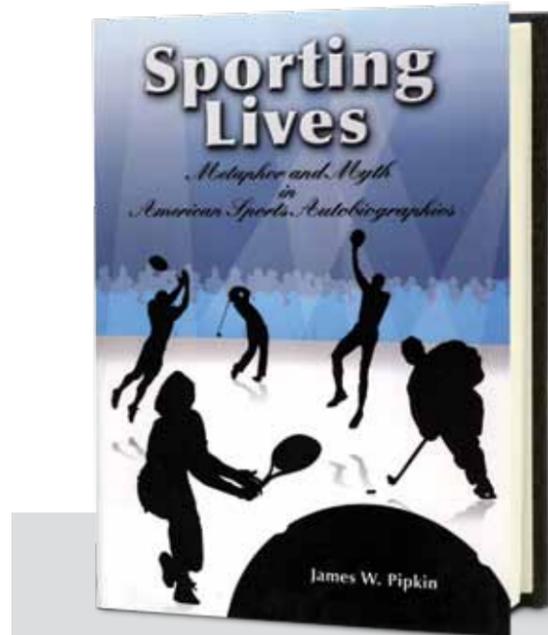
A frequent theme is that childhood sports represent an innocence prior to the rigid and sometimes corrupt world of professional competition. “The world of sports,” Pipkin notes, “is in certain key respects a sanctuary, a womblike pod that shelters and protects the athletes but also keeps them dependent.” Coaches, agents, and owners often become surrogate parents who shelter the athlete from the adult world of decision-making and, sometimes, the consequences of misbehavior.

Many of these professional athletes, he suggests, are more like the Lost Boys than Peter Pan. As former major league pitcher Jim Bouton admits in his celebrated memoir *Ball Four*, “Being a professional athlete allows you to postpone your adulthood.”

### All athletes must confront the limits of their bodies

Injuries and their consequences form an almost obligatory part of most sports autobiographies. Fear of getting hurt and the pressure to play through pain are common refrains of the athletes’ body songs, especially in football. Former Dallas Cowboy wide receiver Pete Gent, who drew on his experiences in his acclaimed novel *North Dallas Forty*, describes his fellow NFL players as “a brotherhood of mutilation.”

Athletes often must face issues of body image, and women athletes are particularly vulnerable to questions regarding their femininity (along with gender orientation). Pipkin cites tennis great Billie Jean



**Sporting Lives: Metaphor and Myth in American Sports Autobiographies**  
by James W. Pipkin  
161 pages. University of Missouri Press (2008).  
\$29.95 cloth.

King, all-around athlete Babe Didrikson Zaharias and many others who address this problem of being in shape versus being shapely.

### Sports figures battle with the realization that they’ll ultimately end up in the stands

Perhaps the most interesting chapter is “The End of Autumn” in which the author explores how athletes confront the end of their careers. Retirement (often a euphemism for being cut or released) does not come easily to elite athletes. But the body inevitably fails, and the competition offers no sympathy. As Billie Jean King writes, “You take scalps on the way up and lose your own on the way down.”

Sometimes, however, even before retirement, the sense of isolation or loss comes when a superstar outlasts his or her peers. Home run king Hank Aaron observed, “So many of my old friends and teammates had been sent away that I felt cut off from my past and out of place, almost like my class had graduated and I was still sitting at my desk as the new kids arrived in the fall.”

Pipkin also explores the phenomenon of the celebrity athlete in a postmodern world, focusing on former NBA star Dennis Rodman, who, astonishingly, has co-written not one but four autobiographies. Rodman’s athletic skills landed him seven times on the NBA All-Defensive First Team, but his place in the celebrity culture was earned by cross-dressing and dyeing his hair every shade of the rainbow. “It’s a show,” he argues about basketball’s role in society, “and if everybody’s watching, I might as well be an actor.”

**The book loses sight of a few opportunities but overall is a winner**  
After reading *Sporting Lives*, I had a better understanding of the inner game — the emotional and psychological journeys that all athletes go through — and new respect for this category of sports literature. But I wish Pipkin had indicated which books he feels are the best sports autobiographies. He clearly has regard for the works

of former athletes such as basketball star Bill Bradley, marathon swimmer Diana Nyad, and NFL guard (and later English professor) Michael Oriard, as well as *A False Spring* and *After the Sundown* by Pat Jordan, a promising pitcher who never made it to the big leagues. But one must read between the lines to discover his favorites.

Photographs would have been a welcome addition, too. And why are more than three-fourths of the 81 books in the bibliography from 1970 to 1998? He lists only one book published after 1998; one wonders if he could find no recent autobiographies worthy of study.

But these are minor quibbles. Overall, Pipkin, an associate professor of English at the University of Houston, has packed this slim volume with information, anecdotes, and insight. He succeeds in being both entertaining and scholarly. ■



**Rick Shale** is a professor of English at Youngstown State University in Youngstown, Ohio, and a member of Phi Kappa Phi’s national board. He is a diehard University of Michigan football fan and also confesses a fondness for NASCAR. With degrees from Ohio Wesleyan University (B.A. in Humanities) and University of Michigan (M.A. and Ph.D. in American Culture), Shale has written six books, including three on the Academy Awards and one on the Disney Studio. Email him at rshale@ysu.edu.

## Phi Kappa Phi Bookshelf Compiled by Editor Peter Szatmary



**Posters, Propaganda and Persuasion in Election Campaigns around the World and through History**



By Steven A. Seidman  
360 pages. Peter Lang Publishing (September 2008).  
\$33.95 paperback.

Still have a case of presidential-election fever? Then you might want to check out this analysis of campaign material — from posters to billboards — over the past two centuries in the U.S. as well as other countries such as France, Germany, Japan and Mexico. Author Steven A. Seidman, who was inducted into Phi Kappa Phi at Ithaca College in Ithaca, N.Y., where he serves as associate professor and chair of the Department of Strategic Communication at the Roy H. Park School of Communications, offers a political history through an analysis of these partisan tools of persuasive communication. He covers tactics for figures such as Franklin Delano Roosevelt, Nelson Mandela and Salvador Allende. “Steven A. Seidman has written an exemplary study of the political poster as a medium of propaganda in different societies and eras. The historical sweep is monumental,” declares scholar David Welch, professor of modern history and director of the Centre for the Study of Propaganda and War, University of Kent, England, in a blurb on the back of the book.



**Fire Ants and Other Stories**



By Gerald Duff  
332 pages. NewSouth Books (spring 2007).  
\$27.95 hardcover.

Venerable writer Lee Smith raves about this collection: “Gerald Duff’s great characters are all astonishing storytellers, with true and compelling voices that will ring in my head forever. *Fire Ants* is an American classic.” Esteemed wordsmith Roy Blount, Jr., offers similar praise on the back cover: “These stories are richly observed, keen-witted and tellingly sympathetic to a wide range of characters. . . .” No wonder, then, that Duff (Phi Kappa Phi inductee at McKendree University in Lebanon, Ill.) won the Cohen Prize from *Ploughshares* magazine for the title story and was named a finalist for the Jesse Jones Award for the Best Book of Fiction published in 2007. In these serio-comic tales, the writer — who also has published numerous novels and some books of poetry — imagines a clutch of hurting people needing to feel better, from a middle-aged loner who kidnaps a cheerleader to watch her dance to a mother deciding the lengths she will go to in order to raise her son’s bail. To dip into the book, visit [www.newsouthbooks.com/fireants](http://www.newsouthbooks.com/fireants).

# Campus Members and Neighbors Share a “Common Experience”

San Diego State University calls 2009 the year of “Darwin’s Voyage, Humanity’s Journey”

BY CHRISTOPHER FROST

Three years ago, San Diego State University launched a sustained, intentional conversation dubbed the “Common Experience.” The goal of this type of dialogical voyage was to promote a sense of intellectual connection across the campus and into the community. In 2009, San Diego State expands the initiative and embarks on a worldwide discussion. The global discourse springs from shared perceptions regarding the logic of celebrating the bicentennial of Charles Darwin’s birth (1809) and the sesquicentennial of the publication of his *On the Origin of Species* (1859).

Darwin links together the natural world, as *On the Origin of Species* attests, and subsequently maps humanity within that natural order. Just as Darwin searches for a unifying principle behind the seemingly unrelated, complicated and diverse elements of nature, so too does the Common Experience model — and 2009 as the “Year of Darwin” — seek to unite the seemingly unrelated, diverse contingents that comprise many a college campus.

### Why a common experience?

A number of colleges and universities have migrated to a similar Common Experience model for 2009. Cambridge University, the University of Pennsylvania, Boston University, St. Ambrose University, Northwestern University and Phi Kappa Phi fellow chapter Butler University are just a few of the institutions along with San Diego State to be involved in sustained conversations on Darwin.

One reason (besides the Darwin anniversaries) is this: Our colleges and universities resemble “multi-versities” more than “universities,” possessed of campus cultures defined more by a collage of multiple and, at times, competing interests than by a common sense and sensibility of purpose. Manifold voices and variant songs provide rich and unlimited choices, but at a cost: a fractured sense of community and the sense of residing in a silo.

Many of the interests that compete for students’ attention are defined not by how these interests further a pursuit of wisdom. Some interests even sound a tone of anti-intellectualism. The allures of tailgating, partying and popular culture at one end of this continuum, and the need to work while attending school at the other end, detract student attention from the life of the mind and matters of the heart.

Does the presence of anti-intellectualism and competing demands on student attention weaken the core mission of a campus? Does a lack of a true curricular “core” and infrequent integration of coursework matter? Does the tendency of universities to bypass the enduring “big questions” of life including meaning and values, both within and beyond the curriculum, shortchange students?



Yes, according to an emerging literature on student engagement, deep learning and assessment of student learning (see, for example, George Kuh’s “High-Impact Educational Practices,” a 2008 report issued by the Association of American Colleges and Universities). We all benefit from mutual points of reference, a common intellectual foundation and a communal historical context. Indeed, a shared experience allows us to carry on an intelligent conversation, a deliberate dialogue on big and difficult questions, and perhaps anticipate and avoid the barriers that ensue from having nothing in common.

“Personal interaction invigorates the educational process. With our Common Experience, dialogical learning flows seamlessly wherever faculty and students come together — in traditional campus settings, in the community and even in the international arena,” said Stephen L. Weber, President of San Diego State.

### The rationale behind San Diego State’s Common Experience

San Diego State started a Common Experience in 2007:

- To imagine a scenario in which students, faculty, staff, and community members read the same book and engage in an ongoing conversation bounded by a common theme
- To facilitate a conversation within the classroom that spills across the campus and into the community
- To continue the discussion for months in an age characterized by information packaged as 30-second sound bites, and to do so over a number of platforms, from discussions with authors and academic panels to artistic interpretations and outdoor films

### Key components of San Diego State’s inaugural Common Experience

The inaugural program featured two one-year, thematic conversations bound by this theme: “Mapping the Future, Sharing the World.” That is, San Diego State introduced a different book and related slate of events each year, but continued the theme for two years because the school identified two compelling books that supported an identical theme.



Tracy Kidder

The program began with Tracy Kidder’s *Mountains beyond Mountains* in summer 2007 and continued through spring 2008. In spring 2008, San Diego State introduced an additional text, Greg Mortenson and David Oliver Relin’s *Three Cups of Tea: One Man’s Mission to Promote Peace... One School at a Time*. The books were

selected because they overlapped themes such as making a difference in the lives of those who reside at the bottom of the social scale, because the protagonists are making that impact on an international scale, and because the authors were available for and supportive of multiple events on campus.

For each year of the Common Experience, students are asked during summer orientation to read the book and hear a brief presentation about it at the new student convocation. During the subsequent fall and spring semesters, both entering and continuing students are engaged in discussion of the book in first-year experience classes, selected writing classes, in residence hall discussions (led by resident advisors who have had some training on teaching the book) and in upper-level courses. Teaching of the book is facilitated by way of a curriculum prepared by a faculty member. (See [commonexperience.sdsu.edu](http://commonexperience.sdsu.edu).)

The conversation that begins with a discussion of a book then spills over the campus and into the community by putting together a slate of thematically relevant activities. Student journals, films, theater, creative writing, original music and dance performances, art exhibitions, panel discussions, renowned guest speakers, service learning experiences — and more — all enrich the process and expand inclusiveness.

These enrichment opportunities can be further spurred by introducing a “contest” element. For example, given San Diego State’s commitment to sending students abroad (more than 1,500 students a year from a student body upwards of 30,000), the school helps them integrate their international experience by showcasing an international photography contest as part of its annual Family Weekend. Students who have already studied abroad submit photographs, together with 100-word narratives that describe the photograph as it connects to that year’s Common Experience theme.

The fall 2007 semester featured a film series, including “Sicko,” since that Michael Moore documentary, like Kidder’s book, is concerned with healthcare at both a national and international level. Other events included an International Peace Village and an essay contest, both of which align with the social justice dimensions of the Kidder book. San Diego State also co-sponsored with the University of California-San Diego an open community lecture featuring Nobel Peace Laureate Muhammad Yunus, the founder of the Grameen Bank of Bangladesh and a pioneer of using microcredit as a pathway from poverty.



First Place Photo, 2007, by San Diego State University International Security and Conflict Resolution senior, Lauren Merrit

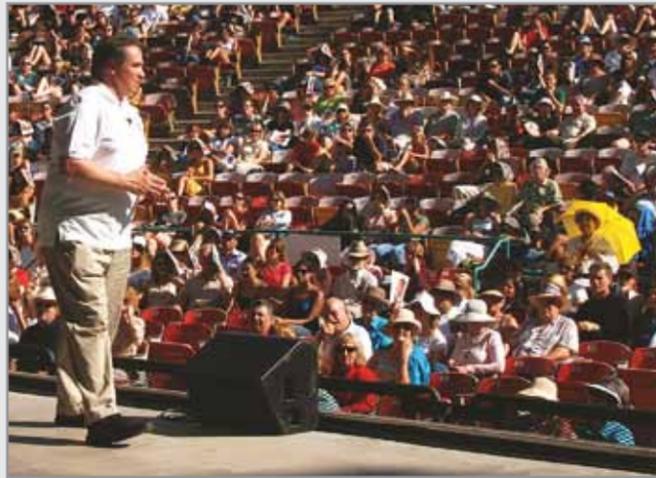
Arusha, Tanzania — “As I stood over dry, orange dirt at the Sister Rachele’s Rehabilitation Center in Uganda, I held Christine’s hand,” said Merrit. “She is the daughter of a child soldier, a young woman who was kidnapped and raped by the Lord’s Resistance Army. But today she was just a child playing and singing with a funny-looking visitor, me.” (Courtesy photo.)

The spring 2008 semester incorporated a strategic alignment with a community-based common reading program, One Book, One San Diego, which is co-sponsored by KPBS public television and the San Diego Public Library. (See a video clip at [commonexperience.sdsu.edu](http://commonexperience.sdsu.edu).)

In alignment with San Diego State, the One Book, One San Diego program also selected *Three Cups of Tea*. One Book, One San Diego events kicked off with an open community lecture held in San Diego’s Old Globe theater. *Three Cups of Tea* co-author Mortenson made several visits to San Diego, and the venues ranged from a public school and bookstores to Point Loma Nazarene University and Camp Pendleton, a Marine Corps base.

During this same semester, *Mountains beyond Mountains* author Kidder spent two days on the San Diego State campus, offering a free public lecture, conducting a KPBS interview, holding a book signing in the campus bookstore, and engaging in Q & A in several small student seminars.

During summer 2008 orientation, the cycle began anew, with San Diego State students being assigned *Three Cups of Tea*, followed in the fall by many enrichment activities. In particular, Mortenson gave an outdoor public lecture on campus as part of Family Weekend, with almost 3,000 persons participating. In addition, he led several smaller seminars with college students and high school students and with Waldorf School of San Diego third- to ninth-graders, who had begun collecting pennies months in advance of Mortenson’s visit to benefit the Pennies for Peace program (<http://www.penniesforpeace.org/home.html>) — and continue to do so.



Greg Mortenson spoke in an open lecture to nearly 3,000 people at the San Diego State University Outdoor Amphitheater in September 2008 as part the school's Common Experience. (Courtesy photo.)



Greg Mortenson motivated third- through ninth-graders at the Waldorf School of San Diego in September 2008 in conjunction with San Diego State University's Common Experience. (Courtesy photo.)

**The "Year of Darwin" as an international Common Experience**

The theme of the 2009 Common Experience is "Darwin's Voyage, Humanity's Journey," once again in alignment with the One Book, One San Diego program. The conversation began in early February with Diane Ackerman's *The Zookeeper's Wife*, a text with a more subtle connection to Darwin, because it focuses on humanity's relationship to nature as that relatedness connects to how we treat each other. (Hear the author discuss this connection at [commonexperience.sdsu.edu](http://commonexperience.sdsu.edu).)

Frans de Waal's *The Ape and the Sushi Master: Cultural Reflections of a Primatologist* will be introduced as the summer reading book in June. It also explores the relationship of humans and animals, particularly in light of the concept of culture, and connects to Darwin's reframing of humanity within the natural order.

Also, San Diego State will put together an edited compilation of readings (essays) in the hope that faculty members who cannot integrate a book into existing courses might find an appropriate shorter reading selection to include that connects to the conversation.

To expand the impact and capitalize on San Diego State's international mission, the 2009 Common Experience also will feature an integrated, interdisciplinary study abroad program housed at Oxford University (St. Hilda's College) for honors students from San Diego State, Texas State University and Virginia Commonwealth University. One of the team-taught courses, "Science, Religion and the Quest for Meaning," includes original works by evolutionary biologist, ethologist and popular science

writer Richard Dawkins, who will meet with the program's students. (See <http://www-rohan.sdsu.edu/~honors/oxford/>)

For the complete lineup of the 2009 Common Experience, visit [commonexperience.sdsu.edu](http://commonexperience.sdsu.edu).

In *What Matters in College* (1993), higher education scholar Alexander Astin argues that whether or not "content had been commonly experienced by all students" was a significant factor in the educational process. In an online discussion (First Year Experience List-Serv), educational psychology expert Joe Cuseo links that quote with one from philosopher George Santayana, who "when asked about what 'great books' young people should read ... replied: 'It doesn't matter, as long as they read the same ones.'"

Those thoughts, juxtaposed with an insight from philosopher Allan Bloom's *The Closing of the American Mind*, capture the power of the Common Experience and contribute to the "Darwin's Voyage, Humanity's Journey" theme: "The failure to read good books both enfeebles the vision and strengthens our most fatal tendency — the belief that the here and now is all there is."

Or to put it in Darwin's own words from *On the Origin of Species*: "There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or one ... from so simple a beginning endless forms most beautiful and wonderful have been, and are being evolved."

The journey continues. ■



**Christopher Frost** (President, San Diego State University chapter of Phi Kappa Phi) is Associate Dean, Division of Undergraduate Studies, at San Diego State University. After earning a B.A. from Baylor University and a M.A. and Ph.D. in Psychological and Interdisciplinary Studies at Boston University, Frost developed a Common Experience model at Texas State University, where he also served as director of the school's honors program and professor of psychology. He is a Fulbright Scholar (Romania) and his books include *Religious Melancholy or Psychological Depression?*, *Simon Weil: On Politics, Religion and Society* and *Moral Cruelty: A meaning and the Justification of Harm* — the latter two of which he coauthored. His scholarly articles have been published in academic journals including *Bulletin of the Menninger Clinic*, *Journal of Loss and Trauma*, *Journal of Cross-Cultural Psychology*, *International Journal for the Psychology of Religion, Humanity and Society*, and *Janus Head: Journal of Interdisciplinary Studies*. Email him at [cfrost@mail.sdsu.edu](mailto:cfrost@mail.sdsu.edu)

**Phi Kappa Phi Members Made News in Many Sectors**  
Since the Publication of the Fall 2008 Issue of the Magazine.

**President Barack Obama named two Phi Kappa Phi members to his Cabinet:**

- **HILLARY RODHAM CLINTON** (*University of Arkansas-Little Rock*), Secretary of State
- **ROBERT M. GATES** (*Texas A & M University*), continuing as Defense Secretary

**Two of the 25 2008 MacArthur Fellows were Phi Kappa Phi members:**

- **REGINA M. BENJAMIN** (*Iowa State University*), a rural family physician and founder and chief executive of Bayou La Batre Rural Health Clinic in the underserved region of the Gulf Coast fishing community of Bayou La Batre, Ala.
- **DIANE MEIER** (*Ithaca College*), a geriatrician whose work, at the Mount Sinai School of Medicine in New York, focuses on improving palliative care for the seriously ill.



John D. and Catherine T. MacArthur Foundation Fellowships (commonly called "genius grants") recognize creativity and originality and encourage exploration and ingenuity. Fellows receive \$500,000 over five years to use as they wish. Nominations are accepted only from invited nominators. Including the class of 2008, 781 people have been named MacArthur Fellows since the program began in 1981. (Source: [www.macfound.org](http://www.macfound.org))

**LYNN J. BODI** (*University of Wisconsin-Madison*), cofounder of The Law Center for Children and Families in Madison, Wis., was elected vice president of the American Academy of Adoption Attorneys. The Academy is a national organization with more than 330 invited members who are experts in adoption law.

**RACHEL BULLOCK** (*University of Southern Mississippi*), a graduate student speech-language pathology major, is serving as a College of Health Ambassador for the 2008-09 academic year at the University of Southern Mississippi. Ambassadors are chosen by academic achievement and leadership qualities. She also was selected as secretary for the organization.

**Laurie Cannady** (*Indiana University of Pennsylvania*), assistant professor of English at Lock Haven University, in Lock Haven, Pa., was one of six graduates of Indiana University of Pennsylvania (IUP) to win a Young Alumni Achievement Award; it's eligible to outstanding IUP graduates of fewer than 15 years. Deans of the colleges pick the winners, who are invited to make presentations and hold seminars for current IUP students.

**NICOLE CARAVELLA** (*Youngstown State University*) served as student speaker at Youngstown State University's fall commencement. The double major in advertising and public relations and marketing management made the dean's list every semester and was in the honors college.

**Four of the 62 winners of 2008 Jack Kent Cooke Foundation Graduate Scholarships were from Phi Kappa Phi:**



• **KAREN ARTER** (*San Diego State University*), attending Johns Hopkins University for international business



• **AMANDA BRYANT** (*Arizona State University*), attending Bowling Green State University for student affairs administration



• **KRISTEN DOWNS** (*University of Florida*), attending Johns Hopkins University for public health and environmental engineering

• **SARAH PULLEN** (*University of Central Florida*), attending University of South Florida to become a family practice physician

The Jack Kent Cooke Foundation Graduate Scholarships provide awards of up to \$50,000 per year for up to six years of study to deserving low-income college seniors and college graduates who graduated within the past five years. Roughly 1,000 students are nominated annually by a Jack Kent Cooke Foundation faculty representative at their undergraduate school. Approximately 400 graduate scholarships have been awarded since the inception of the program in 2002. (Source: [www.jkcf.org](http://www.jkcf.org))

**MICHAEL COLE** (*University of Southern California*) has been promoted to Group President, Technology Industry Group, of the Bank of Ann Arbor. With some 25 years in related experience, Cole earned the promotion because he "has extended the bank's products and services to help local investors, venture capitalists, entrepreneurs, and seasoned technology sector businesses," according to a press release.

**CYNTHIA JANE COLLINS** (*University of Evansville*), M.Div., M.S., has been named Cherry Hill Seminary Academic Dean. She holds a master's of divinity, cum laude, from Christian Theological Seminary and a master's in Counseling from Evansville University. She is a Clinical Member of the American Association for Marriage and Family Therapy. She serves on the boards of Interfaith Maine, Maine Pagan Clergy Association, Habitat for Humanity's Interfaith Build and EarthTides Pagan Network. She is the author of *Building a Magical Relationship* with Jane Raeburn and *The Recovery Spiral: 12 Steps for Pagans*, both published by Citadel/Kensington Press.



**BREANNA CARRIE DETWILER** (*Elon University*) is the first Elon student to be named a George H. Mitchell Scholar, a Truman Scholar and a Udall Scholar. Mitchell Scholars do a year of postgraduate work in Ireland. Truman Scholars are cited for leadership abilities. Udall Scholars are dedicated to protecting the environment, among other principles. The senior environmental studies major intends to pursue her education in law. Detwiler is involved in

**Numerous Phi Kappa Phi members assumed new academic duties:**



• **DR. CHERYL ACHTERBERG** (*California Polytechnic State University*), Dean of the College of Education and Human Ecology, The Ohio State University

• **DR. MARK P. BECKER** (*University of Michigan*), Georgia State University  
• **DR. JIMMY G. CHEEK** (*Texas A & M University*), Chancellor, University of Tennessee- Knoxville

• **DR. DEE HOPKINS** (*South Dakota State University*), Dean of the College of Human Resources and Education, West Virginia University



• **DR. IKRAM KHAWAJA** (*Youngstown State University*), Provost and Vice President for Academic Affairs, Youngstown State University

• **DR. TIMOTHY S. MESCON** (*Kennesaw State University*), President, Columbus State University

• **DR. LAWRENCE R. RODGERS** (*Kansas State University*), Dean of the College of Liberal Arts, Oregon State University

• **DR. ROGER L. SERR** (*Shippensburg University*), Vice President for Student Affairs, Shippensburg University

• **DR. JERRY THOMAS** (*Louisiana State University*), Dean of the College of Education, University of North Texas

several campus organizations, including Students for Peace and Justice and the Student Environmental Sustainability Council, serves as student coordinator of the Elon Academy and manages the Elon Community Garden.

**DEBORAH M. DICROCE** (*Old Dominion University*), president of Tidewater Community College (Va.) was one of seven community-college leaders profiled in a special issue of the Oct. 31, 2008, edition of *The Chronicle of Higher Education* on community colleges. The cover story was titled "Presidents Who Make a Real Difference: Successful Community-College Leaders Showcase Innovation and Strong Local Ties." In the profile on DiCroce, reporter Katherine Mangan called the school one of the nation's fastest-growing community colleges, with enrollment increasing about 50 percent — to some 39,000 annually — since DiCroce became president in 1998. What's more, "her influence extends well beyond the college's four campuses," Mangan wrote. "She has also created a bridge to the state's flagship institution, the University of Virginia, and helped revitalize downtown Norfolk through a series of partnerships that are a hallmark of her presidency."

**JOAN EASTERLING** (*University of Southern Mississippi*) earned a Specialist Degree in Special Education Curriculum and Instruction from the University of Southern Mississippi. She also became a National Board Certified Teacher in the area of Early Childhood through Young Adulthood/Exceptional Needs. Easterling is an inclusion/resource teacher at Mount Olive Elementary School, Mount Olive, Miss.

**DANIEL MARCELO FEIGE** (*University of Texas at Austin*) was named Director, Latin America, of TCG Consulting, a business travel consulting company headquartered in Charlotte, N.C. He supports clients who build travel, payment and expense management programs in Latin America. Fluent in Spanish, English, Portuguese and French, the native Argentine has been a travel manager and senior consultant for more than 12 years and is a veteran speaker on travel management practices.



**BRIAN FREEMAN** (*Carnegie Mellon University*) was one of 15 finalists for the Draddy Trophy, "one of college football's most sought after and competitive awards, recognizing an individual as the absolute best in the country for his combined academic success, football performance and exemplary community leadership," according to a press release. It was established in 1990. The 6'5" senior offensive tackle picked up an \$18,000 scholarship for his post-graduate education; the scholar-athlete and team co-captain is a chemical and biomedical engineering major with a 3.95 grade-point average and a three-time *ESPN The Magazine* Academic All-America selection.

**CANDACE GONZALES** (*Georgia State University*) was named to the CoSIDA (College Sports Information Directors of America) Academic All-District third team. The senior captain and midfielder is the first Georgia State women's soccer player to earn such recognition. "Candace has been a great player to coach. She goes above and beyond our expectations on the field and, especially, in the classroom," said head coach Domenic Martelli in a press release. Sporting a 3.8 grade-point average, the journalism major is president of the Student Athletic Advisory Board and Public Relations Student Society of America.



**MORTON P. HYMAN** (*Cornell University*) became the chairman of the Sabin Vaccine Institute, a biomedical organization, founded in 1993, that's dedicated to reducing human suffering from infectious and neglected tropical diseases; it provides greater access to vaccines and essential medicines and creates programs of vaccine research, development and advocacy. The leader in philanthropic, public health, business and governmental organizations succeeds founding president Philip K. Russell.



**WAYNE C. INGLE** (*University of Maryland*) assumed the position of director of The Defense Finance and Accounting Service (DFAS), Limestone, in Maine, after serving as acting director there for a spell and as the director of the DFAS Japan site for eight years. He has spent more than two decades in federal civil service. Before that, he was in the U.S. Army, serving overseas in Turkey, Japan, Korea and Vietnam; earning the Legion of Merit, Bronze Star, Meritorious Service Medal with three oak leaf clusters, Purple Heart, Army Commendation Medal with three oak leaf clusters and Army Achievement Medal; and retiring in 1985 as a sergeant major. He holds numerous military and professional memberships.

**ROBIN KISTLER** (*Louisiana State University*) has been named director of Louisiana State University's Executive Education in the E. J. Ourso College of Business; the mission of Executive Education is to provide mid- and senior-level managers and executives

with current business theories and applications through non-credit open-enrollment courses and workshops and through developing custom programs at a company's location. Previously, she worked for the school's Public Affairs office for eight years as a marketing strategist and marketing director.

**SUZANNE LYNN MATTHEWS** (*Campbell University*), an assistant district attorney for Harnett County, N.C., was named a Distinguished Government Alumna of Campbell University at the homecoming festivities on Nov. 1, 2008. She completed her undergraduate degree in government from Campbell with a 4.00 grade point average in her major and a 3.98 overall average and won one of the school's highest honors, the 2003 Algernon Sydney Sullivan Award, given to a graduating senior who exemplifies excellence in academics, character, integrity and community responsibility. She earned a law degree from Seton Hall University School of Law.

**DWIGHT H. MERRIAM** (*University of Massachusetts*), a partner in Robinson & Cole's Land Use Practice Group, was elected to the Anglo American Real Property Institute, a not-for-profit organization whose members are involved with real property in the United States and the United Kingdom. Membership is limited to 50 lawyers in each participating country. Merriam represents developers, local governments, landowners and advocacy groups in land development and conservation issues and has published more than 200 articles on land use law and co-edited a number of relevant texts. He is a fellow and past president of the American Institute of Certified Planners, a former director of the American Planning Association (APA) and a previous chair of APA's Planning & Law Division. He also is a fellow of the Royal Institution of Chartered Surveyors and a member of the American College of Real Estate Lawyers and The Counselors of Real Estate. He teaches land use law at Vermont Law School.



**JENNA NEUMANN** (*University of Wisconsin-Green Bay*) expressed herself in two significant ways. First, the double major in Art and Social Change and Development displayed her photography project, "100 Faces of Green Bay," to illustrate

the diversity of humanity in the Green Bay region; it combined pictures, statistics and interviews to provide a snapshot of the community. (See examples at <http://blog.uwgb.edu/inside/index.php/featured/leading-learning/12/02/100faces/>.) "I hope to push both my own and others' understanding of the true diversity in Green Bay, Wisconsin," she said in an artist statement. Second, Neumann was the class speaker at the fall 2008 commencement. "Questions of whether or not we see ourselves as ready for this next step weigh heavily on our minds," she is reported to have said. "Skepticism is good, but now is not the time for self-doubt. 'Change' is the word that echoes through our nation. We yearn for new solutions to old problems."



**JAMES NEWTON** (*University of Maryland*) expanded his duties at University of Maryland by becoming its first Undergraduate Student Ombudsperson. His other titles include Assistant Dean for Undergraduate Studies (in the Office of the Associate Provost and Dean for Undergraduate Studies) and Equity Administrator for the Office of Undergraduate Studies. He also serves on the chapter's scholarship committee.



**DAVID NORTINGTON** (*Phi Kappa Phi Chapter Treasurer, University of Tennessee-Knoxville*), classical pianist, gave a concert at Louisiana State University on Nov. 11, 2008, paying tribute to Aaron Copland. Other gigs include Carnegie Recital

Hall and tours of the United States, Europe, Canada, China and Russia. He has won first prizes in the Concert Artists Guild Competition, the American Music Scholarship Association's International Competition and the unanimous Judges Prize at the Fourth Gina Bachauer International Piano Competition, plus selection to the Artistic Ambassador Program sponsored by the United States Information Agency. He earned degrees at the University of Cincinnati College-Conservatory of Music and the Yale University School of Music.



**JOE ORENSTEIN** (*Lynchburg College*) was named the Richard Clarke Sommerville Scholar at Lynchburg College for his commitment to academics and extracurricular activities. The senior double major in Spanish and Business

Administration is president of the Westover Honors Society and vice-president of both the pre-law society and investment club.



**RIO GRACE OTARA** (*University of the Philippines*) passed the Social Work Licensure Examination. According to The Professional Regulation Commission of the Philippines, 616 out of 1,154 passed the Social Worker Licensure Examination given

by the Board for Social Workers.



**ROBERT K. PITTMAN JR.** (*California State University-Dominguez Hills*) was appointed Chief Information Security Officer by the County of Los Angeles Board of Supervisors. "This position will support the numerous County departments' business initiatives (i.e., social services, legal and law enforcement, health services, general government, etc.) in preventing and mitigating personal identity theft, Web site compromises, data breaches and intrusions, to name a few of the threats that provides risk to our organization, as well as other governmental agencies," according to Pittman. "Identifying appropriate enterprise-wide computer security technologies is also my responsibility, along with keeping apprised of new federal, state and local legislations and regulations as they relate to information security and privacy issues."

**RANDY RACINE** (*Louisiana State University-Shreveport*) joined the Transactions section of the law firm of Jackson Walker L.L.P. He received his J.D./B.C.L. degree, cum laude, from the Paul M. Hebert Law Center, Louisiana State University. Founded in 1887, Jackson Walker totals more than 300 attorneys throughout Texas.



**TONY HILLERMAN** (*University of New Mexico*), 83, the acclaimed Navajo mystery novelist, "blazed innovative trails in the American detective story," according to a *New York Times* obituary. He wrote 18 detective stories set on Southwest Indian reservations, including his 1970 breakthrough *The Blessing Way*. The protagonists of the series were Navajo police officers, the grizzled skeptic Joe Leaphorn and the younger idealist Jim Chee, characters who expanded the traditional genre hero. "They struggled daily to bridge the cultural divide between the dominant Anglo society and the impoverished people who call themselves the Dineh," as a story from *The Associated Press* put it. He first paired the two in the same tale in 1986 in *Skinwalkers*, his initial commercial success.

More member news available online at [www.PhiKappaPhi.org/Web/News/members](http://www.PhiKappaPhi.org/Web/News/members)

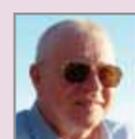


Compiled by Editor Peter Szatmary

**MERCEDES BONNER** (*University of Houston-Victoria*) based her professional life on English education. Voted the first African-American Teacher of the Year in Texas, the language arts specialist worked with thousands of students, instructors and interns and served as president of the West Houston Area Council of Teachers of English. Bonner died on May 26, 2008.

**ANN BARRON CARROLL** (*University of Tennessee*), 87, loved to learn and teach history. She earned an undergraduate degree from the then Randolph-Macon Woman's College (now Randolph College) and a master's degree in history from the University of Tennessee. Carroll also studied history in a Ph.D. program at the University of Chicago before beginning her venerable teaching career. She spent the bulk of her time — more than 30 years — at the Stuart Hall School, a college-preparatory institution in the Shenandoah Valley of Virginia, and received numerous awards, including Distinguished Honorary Alumna. Carroll, who passed away on Sept. 10, 2008, enjoyed her field of inquiry so much that she served as a civil historian at the Elgin Air Force Base in Florida for a spell and in 1987 picked up a commendation by the Virginia Association of Independent Schools for excellence in teaching.

**STEWART ELLERY ENSIGN** (*Westmont College*), 82, committed himself to science and education faithfully. After training in radar technology in the Navy, he earned a B.S. from Bob Jones University, an M.A. from the University of Wyoming and a Ph.D. in biology from the University of Nebraska, then went on to post-doctoral fellowships at Yale University and the University of California at San Diego. He taught at Westmont College for 27 years, serving as chair of the biology department and advising students in a pre-med program that he devised. Ensign died on April 12, 2008.



**LAWRENCE T. FITZGERALD** (*University of Florida*) overcame obstacles to pursue medical physics as an educator at the University of Florida, Gainesville. A paraplegic from age 16, he was twice honored by the Florida

Chapter of the American Association of Physicists in Medicine. In 1991, Fitzgerald shared a patent for a radiation teletherapy imaging system. After retiring from university teaching in 1992, he took a position as medical physicist with Robert Boissoneault Oncology Institute in Ocala, Fla., and the Villages Regional Hospital, Lady Lake, Fla., for a few years. He died on Feb. 15, 2008.



**LARRY THOMAS MCGEHEE** (*University of Tennessee-Martin*), 72, excelled at teaching, administration and writing. As a student, he earned an undergraduate degree from Transylvania University in Lexington, Ky., then a bachelor's of divinity, master's and doctorate from Yale University. He began his career at the University of Alabama, moving from director and assistant vice president of university relations to, eventually, executive vice president. At University of Tennessee-Martin, he was chancellor. Then McGehee served as special assistant to the president at University of Tennessee-Knoxville.

Other well-known works include *Talking God* and *Coyote Waits*; he produced more than 30 books and contributed to a dozen more. Hillerman, who died on Oct. 27, 2008, of pulmonary failure, grew up poor in Sacred Heart, Okla., in the Dust Bowl, on territorial lands of the Potawatomi Tribe. He interrupted his college education to serve in the Army in World War II, seeing action on D-Day and in Alsace, France, and earning the Silver Star, Bronze Star and Purple Heart. Eventually, he picked up a degree from the University of Oklahoma and began a career in journalism. Then he moved to Albuquerque and obtained a master's degree in journalism from the University of New Mexico, at which he wound up teaching. Honors include the Mystery Writers of America's Best Mystery Novel (for *Dance Hall of the Dead*) and Western Writers of America's Golden Spur Award (for *Skinwalkers*), along with, in 1991, the Mystery Writers of America's highest kudos, its Grandmaster Award. The Navajo Nation also named him a Special Friend of the Dineh in 1987.

**NEIL CHARLES LEHNHART** (*The Ohio State University*), 56, taught agriculture education at Teays Valley High School in Ashville, Ohio, for 34 years before passing away on Oct. 7, 2008. He further demonstrated a commitment to his field through memberships in agricultural organizations such as Young Farmers and Future Farmers of America.

**WILLIAM BOYDEN MATTHEWS JR.** (*Virginia Polytechnic Institute and State University*), 73, knew how to win. He graduated valedictorian of his high school class, was a standout athlete in baseball and basketball and won several contests sponsored by the Future Farmers of America (FFA) including The Virginia State Star Farmer and the FFA's highest degree, American Farmer. His accolades continued on the Virginia Tech basketball team as a four-year starter who set records in scoring and rebounding; what's more, the All-State athlete was named captain for three years and in his senior year was cited as Virginia's state basketball player of the year. Matthews graduated with a degree in agricultural education and, while working on a master's degree in animal nutrition, became a graduate assistant coach on the basketball team. In 1962, he moved up to head coach and in his first game at the helm defeated powerhouse University of Kentucky on its home court, the only time in famed Wildcats coach Adolph Rupp's tenure that his team lost a home opener. Matthews went on to coach the golf team and freshman baseball and served in administrative capacities for the athletic department. A member of the Virginia Tech Athletic Hall of Fame, he remained a farmer at heart by keeping a herd of beef cattle until health problems got in the way. He died on Oct. 6, 2008.

**JANE D. CLARK NORTHRUP** (*University of Wyoming*), 91, savored politics. While living in Lovell, Wyo., she served as the first female town council member and ventured to Washington, D.C., to pick up an award for the town. She liked attending legislative sessions in Cheyenne with her husband, L. Donald Northrup, who served in the state legislature as a senator and in the House of Representatives for a total of 24 years. The deceased, a math major in school, spent the 1950s and 60s as an accountant and in later life participated in community causes. She died on Dec. 5, 2008.

**DEAN F. PACHOLL** (*Minnesota State University, Mankato*) spent 36 years in education and devoted innumerable time to his church before passing away at age 75 on Sept. 24, 2008. Educated at Mankato State and the University of Iowa, he taught at numerous places before logging 29 years in the Austin, Minn. public school district in positions ranging from media specialist to teacher to principal. At his church, Pacholl assumed many roles: Sunday school teacher and participant in adult Bible classes, as might be expected, along with choir member and soloist, president, vice president and secretary of the church council. The firm believer in service also volunteered with an adult literacy program.

**CHARLES D. NESBIT** (*Kansas State University*) served his country as a Lt. Col. in the Army Air Corps during World War II and his community as a Rotary Club member, Shriner, and 32 degree Mason of the Ancient and Accepted Scottish Rite of Free Masonry. He had been president of Patterson Enterprises. His industry involvement included past chair of the International Association of Refrigerated Warehouses and past president of The Refrigeration Research and Education Foundation, now the World Food Logistics Organization. He died at age 90 on Sept. 14, 2008.

**JARET MINAMI** (*California State University-Dominguez Hills*) was born on Jan. 31, 1983, and passed away on Aug. 3, 2008, at Torrance Memorial Hospital after suffering from a sudden neurological disorder. He graduated with honors in 2006 from Cal State-Dominguez Hills with a B.A. in Business and Marketing and was the recipient of the 2006 Dr. Hal Charnofsky Male Scholar Athlete of the Year Award. The soccer player made 47 starts in 61 games played and was crowned with 1st-team NSCAA All-Region and 2nd-team All-CCAA honors during his senior season. He helped his Toros to the NCAA Division II West Region title and the NCAA D-II quarterfinals. Minami was working at Lexus in Torrance at the time of his passing.

After that, he was vice president of planning, marketing and evaluation at Wofford College in Spartanburg, where the ordained minister also taught religion before retiring. His weekly column about regional books and culture, "Southern Seen," ran in upwards of 100 newspapers; he offered it free of charge. McGehee died on Oct. 25, 2008.



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# Phi Kappa Phi Continues to Grow its Garden, Thanks to a Generous Donor

BY EDITOR PETER SZATMARY



Wolfe Gardens, donated by William J. Wolfe, beautifies Phi Kappa Phi's national headquarters. (Photo credit: Jeremy Garland, The Honor Society of Phi Kappa Phi.)

Phi Kappa Phi enhanced the grounds of its national headquarters in November 2008 with the addition of the Wolfe Gardens, a 2,500 square-foot spread that includes annuals and perennials and other greenery. The undertaking was made possible by the largesse of the late William J. Wolfe of Tucson, Ariz.

The gardens are the latest example of money at work from funds contributed to Phi Kappa Phi's first capital campaign.

"I'm sure he was proud to be a member of Phi Kappa Phi. The whole educational thing he liked being a part of, especially being a teacher and a librarian for decades," said his son Lundin on the phone from Benson, Ariz. The senior Wolfe passed away at age 80 on July 30, 2007; he spent the bulk of his career in public middle and high schools, first in Chicago, Ill., and then in Tucson.



William J. Wolfe

In fact, William J. Wolfe (University of Arizona) felt so strongly about Phi Kappa Phi that the gardens marked his second major gift to the Society. The first, in 2004, endowed a fellowship in memory of his paternal grandfather, Alfred M. Wolfe. Wolfe Gardens honor his parents, Fred and Helen Wolfe.

"I think it was a nice way to remember his mother and father," said his son. "And I

certainly understand his bond to the Society and I feel good about how he honored that intention."

"For Bill Wolfe, giving back was a way of life," seconded Phi Kappa Phi Executive Director Perry Snyder. "He not only understood the joy of giving, he also savored the experience."

Wolfe Gardens include crape myrtles and azaleas because the designer of Phi Kappa Phi's building, renowned Southern architect A. Hays Town, favored them. The azaleas bloom February through May and the crape myrtles May through July.

Fountain grass adds a cascading effect, additional color in summer (cream blooms), and a fine texture against the azaleas. Seasonal flowers will be planted throughout the year: purple petunias and white snapdragons, caladium and impatiens, as complements to the plantings in front of the Society's national headquarters.

Wolfe Gardens replaced a previously unused area. The gardens took four workmen less than a day to install. (A landscape architect who prefers to remain anonymous donated the plans.)

That refurbishment turned out to be a walk in the park, relatively speaking. The roughly \$33,000 in renovations to the Society's national headquarters took four months in 2008; additions included two offices on the second floor for *Phi Kappa Phi Forum* staff, a

first-floor storage room and the remodeling of the shipping room.

Phi Kappa Phi took occupancy of the building on Goodwood Boulevard in December 2006 after purchasing it in May 2006 for \$800,000. Phi Kappa Phi headquarters previously had been at Louisiana State University since 1978. The Goodwood location doubled the usable space that had been available at LSU — to approximately 6,100 square feet for the staff of 21.

The \$1 million capital campaign was launched at the (August) 2007 Triennial Convention in Orlando, Fla. As of press deadline, the campaign has reached upwards of \$500,000 of the goal. ■

Donations are tax deductible and qualify for corporate matching gifts. To find out more about donations, contact Phi Kappa Phi Executive Director Perry Snyder at (800) 804-9880 ext. 21 or email him at [psnyder@phikappaphi.org](mailto:psnyder@phikappaphi.org).

#### Wolfe Gardens by the numbers:

- 1 plaque
- 6 crape myrtles (red)
- 16 fountain grass plants
- 25 George Tabor azaleas (light pink petal with purple throat in the center of the flower)
- 180 feet of aluminum fencing
- 2,500 square feet for the garden
- Innumerable seasonal flowers to be planted throughout the year

#### Many naming opportunities remain in the capital campaign:

- The building: \$500,000
- Executive conference room: \$75,000
- Furniture and furnishings: \$50,000
- Five suites: \$30,000 each
- Individual offices (16 total; 6 claimed): \$10,000 apiece
- Library collection: \$7,500
- Board conference table and chairs: \$7,500
- Trees (5 trees; 2 claimed): \$1,000 each
- Crape myrtles (8 total; 7 claimed): \$1,000
- Large commemorative brick (8" x 8"): \$500
- Small commemorative brick (4" x 8"): \$250

#### Why Evolution Is the Organizing Principle for Biology, p. 4

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- <sup>6</sup> Gregory, T. Ryan. 2008. "Evolution as Fact, Theory, and Path." *Evolution: Education and Outreach* 1: 46-52.
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- <sup>10</sup> Davis, P.W. and Kenyon, D.H. 1989. *Of Pandas and People: The Central Question of Biological Origins*, Foundation for Thought and Ethics, Dallas.
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- <sup>15</sup> Behe, Michael. 1996. *Darwin's Black Box: The Biochemical Challenge to Evolution*, Free Press, New York.
- <sup>16</sup> Behe, Michael. 2008. *The Edge of Evolution: The Search for the Limits of Darwinism*, Free Press, New York.
- <sup>17</sup> Doolittle, R.F., Jiang, Y. and Nand, J. 2008. "Genomic Evidence for a Simpler Clotting Scheme in Jawless Vertebrates." *Journal of Molecular Evolution* 66: 185-196.
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#### Morality and the Irrationality of an Evolutionary Worldview, p. 8

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- <sup>4</sup> Bahnsen, Always Ready, p. 170.
- <sup>5</sup> Ibid, p. 168.
- <sup>6</sup> Ibid, pp. 169-170.
- <sup>7</sup> Ekklesia, "Darwin Attacks Creationist Plans on Theology and Politics from a Christian Perspective," April 29, 2003. [http://www.ekkleisia.co.uk/content/news\\_syndication/article\\_2003\\_04\\_29\\_dawkins.shtml](http://www.ekkleisia.co.uk/content/news_syndication/article_2003_04_29_dawkins.shtml).

#### Rationally Resolving the Debate

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#### Origins: Some Key Belief Systems

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- <sup>2</sup> "Top Questions," Discovery Institute Center for Science and Culture, <http://www.discovery.org/csc/topQuestions.php>

#### When Evolution and Creationism Are on the American Docket, the Verdict Winds up Far from Unanimous, p. 12

- <sup>1</sup> 403 U.S. 602 (1971).
- <sup>2</sup> See, e.g., Fenwick, English and Perry A. Zirkel, "The Great Monkey Trial: Scopes in Perspective," *National Forum of Applied Educational Research*, 1989, v. 2, pp. 2-17.
- <sup>3</sup> Declining offers of quick money based on the notoriety of the case, Scopes had taken a position in South America with the Gulf Oil Company. *Id.* at 8.
- <sup>4</sup> *Scopes v. State of Tennessee*, 289 S.W. 363, 367 (Tenn. 1927).
- <sup>5</sup> In the immediate aftermath of the first of these two Supreme Court decisions, lower courts had struck down other anti-evolution statutes. *Daniel v. Waters*, 515 F.2d 486 (6th Cir. 1975); *Smith v. State*, 242 So.2d 693 (Miss. 1970). Also during these first few years, a lower court reinstated a student teacher who had been discharged for expressing his approval of Darwinian rather than Biblical theory incidental to a prescribed lesson. *Moore v. Gaston County Bd. of Educ.*, 357 F. Supp. 1037 (W.D.N.C. 1973). Later in the interim and serving as a harbinger of the second Supreme Court decision, a federal trial court ruled that Arkansas' subsequent statute, which required public schools to give balanced treatment to creation science and to evolution science, violated the Establishment Clause based on the first prong of the tripartite test. *McLean v. Arkansas Bd. of Educ.*, 529 F. Supp. 1255 (E.D. Ark. 1982), *further proceedings*, 723 F.2d 45 (8th Cir. 1983) (awarding attorney's fees).

<sup>6</sup> 393 U.S. 97 (1968).

<sup>7</sup> *Id.* at 103.

<sup>8</sup> *Id.* at 109. Although not relying on them, the Court cited in footnotes various secondary sources, including Clarence Darrow's biography, various scholarly books and articles on academic freedom, and selected items in Little Rock's newspaper showing the state's political climate leading to the Act.

<sup>9</sup> 482 U.S. 578 (1987).

<sup>10</sup> The Court reasoned in part that "the goal of providing a more comprehensive science curriculum is not furthered either by outlawing the teaching of evolution or by requiring the teaching of creation science." *Id.* at 586. As another part, the Court cited the testimony of the Louisiana Science Teachers Association that "[a]ny scientific concept that's based on established fact can be included in our curriculum already, and no legislation allowing this is necessary." *Id.* at 587.

<sup>11</sup> *Id.* at 593.

<sup>12</sup> *Id.* at 593.

<sup>13</sup> One of the concurring Justices went along with the majority, but with a reservation or condition — "[u]nless ... we are to reconsider the Court's decisions interpreting the Establishment Clause." *Id.* at 610 (White, J., concurring). Moreover, then Chief Justice Rehnquist joined Justice Scalia's dissent, deferring to the express purpose of the statute and criticizing the majority for "disposing of [the Act's constitutionality] on the gallop, by impugning the motive of its supporters." *Id.* at 611.

<sup>14</sup> *Moeller v. Schrenko*, 554 S.E.2d 198 (Ga. Ct. App. 2001). In this case, the plaintiff was a student who claimed that the challenged portion of the text denigrated her belief in creationism, presumably by not giving it commensurate credence with her religious views.

<sup>15</sup> *Pelozo v. Capistrano Unified Sch. Dist.*, 37 F.3d 517 (9th Cir. 1994); *Webster v. New Lenox Sch. Dist.* No. 122, 917 F.2d 1004 (7th Cir. 1990); *LeVake v. Indep. Sch. Dist.* No. 656, 625 N.W.2d 502 (Minn. Ct. App. 2001); cf. *Johnson v. Chesapeake City Sch. Bd.*, WL 3325875 (Va. Cir. Ct. 2000) (arbitrary and capricious, rather than constitutional claim). For an earlier similar outcome in South Dakota, see *Dale v. Bd. of Educ.*, 316 N.W.108 (S.D. 1982).

<sup>16</sup> *Freiler v. Tangipahoa Parish Bd. of Educ.*, 201 F.3d 602 (5th Cir. 2000).

<sup>17</sup> *Kitzmiller v. Dover Sch. Dist.*, 400 F. Supp. 2d 707 (M.D. Pa. 2005).

<sup>18</sup> *Selman v. Cobb County Sch. Dist.*, 449 F.3d 1320 (11th Cir. 2006). Both sides appealed the lower court's ruling. The appellate court concluded that the record in the case was not sufficient to rule on 1) the plaintiff-parents' claim that the trial court was wrong in concluding that the purpose of the policy was secular; and 2) the defendant-district's claim that the trial court was wrong in concluding that the primary effect of the disclaimer was religious. More specifically, the appeals court pointed to "fact-findings unsupported by evidence in the record and rampant confusion about what evidence was before the [trial] court." *Id.* at 1333.

<sup>19</sup> LA. REV. STAT. § 17:285.1 (2008).

<sup>20</sup> Jennifer Pinkowsky, "LA Governor Signs Controversial Education Sciences Act," *School Library Journal* (<http://www.schoollibraryjournal.com/article/CA6574335.html>).

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Waff, Diane. "What Teacher Inquiry Means in Practice." *Council Chronicle* 18.2 (2008): 32-34.

## Submissions

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## "Astrals"

"We are such stuff as  
dreams are made on."  
— Shakespeare

We have been taught our bodies came from dust,  
to dust, then, would return at death.

Tonight, I learned that only half a truth was told  
for wise astronomers, as one, now state  
that stardust was the matrix ore  
of which all things were ultimately made  
when, primally, a Supernova burst  
and sprinkled its debris across  
the far-flung galaxy that's our abode.

Since then, our bodies, made of astral dust,  
are longing to locate themselves once more  
among the womb of stars.

By Robert Lima



An astral. (Photo credit: Shutterstock.)

The word **astral** can relate to the stars as well as to the supernatural, and in "Astrals," Robert Lima draws from his title's two primary definitions. By evoking both the scientific and the miraculous, this meditative poem suggests these concepts to be not opposites but rather a single continuous thread of which the human and universal conditions are woven. Through the meditative poem's resonating final image of the body's desire for a return to its origin, to a place among the stars, Lima integrates the beginnings of the universe and humankind, even as the entire poem shows how much we long to, and fail to, understand fully the nature of that most primal connection. — *Sandra Meek, poetry editor*

**Editor's note:** The new *Phi Kappa Phi Forum* poetry contest is open only to active Society members, published or unpublished. Submissions — one per entrant per issue — should be up to 40 lines long and must reflect the theme of the issue. One original, previously unpublished poem is selected from all entries to appear in the printed version of the magazine as a complement to the scholarly articles. Runners-up may be chosen to appear online. The theme of the summer issue is American pride. The deadline to submit material is noon CST Friday, March 13, 2009. Entries will only be accepted by email at poetry@phikappaphi.org. Poet, Berry College professor and PKP member Sandra Meek serves as the poetry editor and judge in consultation with Society management. For complete details and rules, visit [www.PhiKappaPhi.org/Web/News/newsroom/news\\_article.html?articleID=78](http://www.PhiKappaPhi.org/Web/News/newsroom/news_article.html?articleID=78).



**Robert Lima** (Pennsylvania State University) began writing poetry as an undergraduate at Villanova, was a Greenwich Village poet in the early 1960s and has published six books of poetry as well as numerous books of criticism, biography and bibliography. He is Professor Emeritus of Spanish and Comparative Literature, and Fellow Emeritus, Institute for the Arts and Humanistic Studies, at Penn State. He was named Knight Commander in the Order of Queen Isabel of Spain by His Majesty Juan Carlos I. He is Academician of the North American Academy of the Spanish Language and Corresponding Member of the Royal Spanish Academy. Visit his homepage at <http://www.personal.psu.edu/rxl2/> and email him at [rxl2@psu.edu](mailto:rxl2@psu.edu)



**Sandra Meek** is the author of three books of poems, *Nomadic Foundations* (2002), *Burn* (2005), and her most recent, *Biogeography*, the 2006 winner of the Dorset Award (Tupelo Press, November 2008), as well as a chapbook, *The Circumference of Arrival* (2001). She also is the editor of an anthology, *Deep Travel: Contemporary American Poets Abroad* (2007), which was awarded a 2008 Independent Publisher Book Award Gold Medal. Her poems have appeared in *Agni*, *The Kenyon Review*, *Poetry*, *Conjunctions*, *Green Mountains Review* and *The Iowa Review*, among others, and she has twice been awarded Georgia Author of the Year, in 2006 for *Burn*, and in 2003 for *Nomadic Foundations*, which also was awarded the Peace Corps Writers Award in Poetry. Meek served as a Peace Corps volunteer in Manyana, Botswana (1989-91). An active PKP member since her induction in 1986 at Colorado State University, she is a cofounding editor of Ninebark Press, Director of the Georgia Poetry Circuit and Professor of English, Rhetoric, and Writing at Berry College in Mount Berry, Ga.



Photo credit: David Verba

**Matthew Henry Hall** is a cartoonist and writer who lives and sings in the wilds of northern Arizona. His work has appeared in many publications, including *The Missouri Review*, *The Chronicle of Higher Education*, and *Reader's Digest*. Visit his Web site at [www.matthewhenryhall.com](http://www.matthewhenryhall.com), and email him at [stumpystars@matthewhenryhall.com](mailto:stumpystars@matthewhenryhall.com).

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 Northern Arizona University, Flagstaff, Ariz.  
 Northern Illinois University, DeKalb, Ill.  
 Northwestern State University, Natchitoches, La.  
 Ohio Northern University, Ada, Ohio  
 The Ohio State University, Columbus, Ohio  
 Ohio University, Athens, Ohio  
 Oklahoma City University, Oklahoma City, Okla.  
 Oklahoma State University, Stillwater, Okla.  
 Old Dominion University, Norfolk, Va.  
 Oregon State University, Corvallis, Ore.  
 Pennsylvania State University, University Park, Pa.  
 Pittsburg State University, Pittsburg, Kan.  
 Plattsburgh State University, Plattsburgh, N.Y.  
 Plymouth State University, Plymouth, N.H.  
 Portland State University, Portland, Ore.  
 Purdue University, West Lafayette, Ind.  
 Radford University, Radford, Va.  
 Sage Colleges, Troy, N.Y.  
 Salem State College, Salem, Mass.  
 Salisbury University, Salisbury, Md.  
 Samford University, Birmingham, Ala.  
 San Diego State University, San Diego, Calif.  
 San Jose State University, San Jose, Calif.  
 Shepherd University, Shepherdstown, W.Va.  
 Shippensburg University, Shippensburg, Pa.  
 Slippery Rock University, Slippery Rock, Pa.  
 South Dakota State University, Brookings, S.D.  
 Southeast Missouri State University, Cape Girardeau, Mo.  
 Southeastern Louisiana University, Hammond, La.  
 Southern Illinois University-Carbondale, Carbondale, Ill.  
 Southern Illinois University-Edwardsville, Edwardsville, Ill.  
 Southern Oregon University, Ashland, Ore.  
 State University of New York-Cortland, Cortland, N.Y.  
 State University of New York-Oswego, Oswego, N.Y.  
 State University of New York-Potsdam, Potsdam, N.Y.  
 Syracuse University, Syracuse, N.Y.  
 Tennessee Technological University, Cookeville, Tenn.  
 Tennessee State University, Nashville, Tenn.  
 Texas A & M International University, Laredo, Texas  
 Texas A & M University, College Station, Texas  
 Texas Woman's University, Denton, Texas  
 Texas Tech University, Lubbock, Texas  
 Truman State University, Kirksville, Mo.  
 Troy University, Troy, Ala.  
 United States Military Academy, West Point, N.Y.  
 United States Naval Academy, Annapolis, Md.  
 University of Alabama at Birmingham, Birmingham, Ala.  
 University of Alabama in Huntsville, Huntsville, Ala.  
 University of Alabama, Tuscaloosa, Ala.  
 University of Alaska-Anchorage, Anchorage, Alaska  
 University of Alaska-Fairbanks, Fairbanks, Alaska  
 University of Arizona, Tucson, Ariz.  
 University of Arkansas-Fayetteville, Fayetteville, Ark.  
 University of Arkansas at Little Rock, Little Rock, Ark.  
 University of Bridgeport, Bridgeport, Conn.  
 University of California-Davis, Davis, Calif.  
 University of Central Florida, Orlando, Fla.  
 University of Central Missouri, Warrensburg, Mo.  
 University of Connecticut, Storrs, Conn.  
 University of Delaware, Newark, Del.  
 University of Evansville, Evansville, Ind.  
 University of Florida, Gainesville, Fla.  
 University of Georgia, Athens, Ga.  
 University of Houston-Clear Lake, Houston, Texas  
 University of Houston-Downtown, Houston, Texas  
 University of Houston, Houston, Texas  
 University of Houston-Victoria, Victoria, Texas  
 University of Idaho, Moscow, Idaho  
 University of Illinois at Chicago, Chicago, Ill.

University of Illinois at Urbana-Champaign, Urbana, Ill.  
 University of Kansas, Lawrence, Kan.  
 University of Louisiana-Lafayette, Lafayette, La.  
 University of Louisiana-Monroe, Monroe, La.  
 University of Louisville, Louisville, Ky.  
 University of Maine-Orono, Orono, Maine  
 University of Maryland, College Park, Md.  
 University of Massachusetts, Amherst, Mass.  
 University of Memphis, Memphis, Tenn.  
 University of Michigan, Ann Arbor, Mich.  
 University of Minnesota, Minneapolis, Minn.  
 University of Mississippi, Oxford, Miss.  
 University of Missouri-Columbia, Columbia, Mo.  
 University of Missouri-Kansas City, Kansas City, Mo.  
 University of Missouri-St. Louis, St. Louis, Mo.  
 University of Montana, Missoula, Mont.  
 University of Montevallo, Montevallo, Ala.  
 University of Nebraska at Kearney, Kearney, Neb.  
 University of Nebraska at Omaha, Omaha, Neb.  
 University of New Mexico, Albuquerque, N.M.  
 University of New Orleans, New Orleans, La.  
 University of Nevada-Las Vegas, Las Vegas, Nev.  
 University of Nevada-Reno, Reno, Nev.  
 University of North Alabama, Florence, Ala.  
 University of North Carolina at Charlotte, Charlotte, N.C.  
 University of North Carolina-Wilmington, Wilmington, N.C.  
 University of North Florida, Jacksonville, Fla.  
 University of North Texas, Denton, Texas  
 University of Oklahoma, Norman, Okla.  
 University of the Pacific, Stockton, Calif.  
 University of the Philippines, Quezon City, Philippines  
 University of Pittsburgh at Greensburg, Greensburg, Pa.  
 University of Pittsburgh at Johnstown, Johnstown, Pa.  
 University of Puerto Rico, Mayaguez, Puerto Rico  
 University of Puget Sound, Tacoma, Wash.  
 University of Rhode Island, Kingston, R.I.  
 University of South Alabama, Mobile, Ala.  
 University of South Carolina Upstate, Spartanburg, S.C.  
 University of South Florida, Tampa, Fla.  
 University of Southern California, Los Angeles, Calif.  
 University of Southern Maine, Portland  
 University of Southern Mississippi, Hattiesburg, Miss.  
 University of Tennessee, Knoxville, Tenn.  
 University of Tennessee at Martin, Martin, Tenn.  
 University of Texas at Austin, Austin, Texas  
 University of Texas at El Paso, El Paso, Texas  
 University of Texas-Pan American, Edinburg, Texas  
 The University of Texas Medical Branch @ Galveston, Galveston, Texas  
 The University of Texas at Arlington, Arlington, Texas  
 The University of Texas at Tyler, Tyler, Texas  
 University of Toledo, Toledo, Ohio  
 University of Tulsa, Tulsa, Okla.  
 University of Utah, Salt Lake City, Utah  
 University of West Alabama, Livingston, Ala.  
 University of West Georgia, Carrollton, Ga.  
 University of Wisconsin-Eau Claire, Eau Claire, Wis.  
 University of Wisconsin-Green Bay, Green Bay, Wis.  
 University of Wisconsin-Madison, Madison, Wis.  
 University of Wisconsin-Milwaukee, Milwaukee, Wis.  
 University of Wisconsin-Platteville, Platteville, Wis.  
 University of Wisconsin-River Falls, River Falls, Wis.  
 University of Wisconsin-Stevens Point, Stevens Point, Wis.  
 University of Wisconsin-Whitewater, Whitewater, Wis.  
 University of Wyoming, Laramie, Wyo.  
 Utah State University, Logan, Utah  
 Utah Valley State College, Orem, Utah  
 Valdosta State University, Valdosta, Ga.  
 Villanova University, Villanova, Pa.  
 Virginia Commonwealth University, Richmond, Va.  
 Virginia Military Institute, Lexington, Va.  
 Virginia Polytechnic Institute and State University, Blacksburg, Va.  
 Washburn University, Topeka, Kan.  
 Washington State University, Pullman, Wash.  
 Wayne State College, Wayne, Neb.  
 Weber State University, Ogden, Utah  
 Wesleyan College, Middletown, Conn.  
 West Virginia University, Morgantown, W.Va.  
 West Virginia Wesleyan College, Buckhannon, W.Va.  
 Western Carolina University, Cullowhee, N.C.  
 Western Illinois University, Moline, Ill.  
 Western Kentucky University, Bowling Green, Ky.  
 Western Michigan University, Kalamazoo, Mich.  
 Western Oregon University, Monmouth, Ore.  
 Western Washington University, Bellingham, Wash.  
 Westfield State College, Westfield, Mass.  
 Westmont College, Santa Barbara, Calif.  
 Wichita State University, Wichita, Kan.  
 Widener University, Chester, Pa.  
 Winthrop University, Rock Hill, S.C.  
 Wright State University, Dayton, Ohio  
 Youngstown State University, Youngstown, Ohio