

The  
Lynching  
of  
Bill  
Dembski

Scientists say the jury is out—so let the hanging begin.

FRED HEEREN



**M**athematician William Dembski stands accused of bringing shame upon a major university. Not only that, say his colleagues, he has managed to disgrace the entire scientific enterprise.

Scientists from distant universities wrote letters to the editors of his university newspaper, and biologists spoke up through the surrounding city papers, telling the public why this man must be stopped. When Dembski organized an academic conference, one incensed professor from another state sent long e-mails to the scheduled speakers, seeking to discredit Dembski and convincing one famed philosopher to cancel.

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The faculty senate of his own Baylor University voted 26 to 2 to recommend that his research center be dismantled. Eight members of Baylor's science departments wrote Congress about the dangers of Dembski's project, and several briefings on the issues were made before a bipartisan group of congressional members and staff.

So you're wondering: What kind of new and evil science is William Dembski practicing? Is he cloning half-humans without souls to create cheap labor? Several Baylor students interviewed for this article couldn't pinpoint the exact deed, but knew it was immoral because they heard that it had something to do with an evil use of the human genome project.

What does Bill Dembski think of all this? A mild-mannered mathematician more at home with probability theory than pol-



itics, he shakes his head in disbelief. "I've found that when people get to know me one-on-one, they think what I'm doing is legitimate, or at least worth pursuing. But when they start listening to the siren call of the Internet, things get out of control."

What Dembski has actually done hardly seems nefarious. As a scientist with twin Ph.D's in mathematics and philosophy, Dembski has set about developing mathematical methods for detecting intelligent design, should it be discernible, in nature. That's all. What's more, he has submitted his work to the scientific scrutiny of his peers. So why are all these professors so hysterical?

### *Disguised Creationism?*

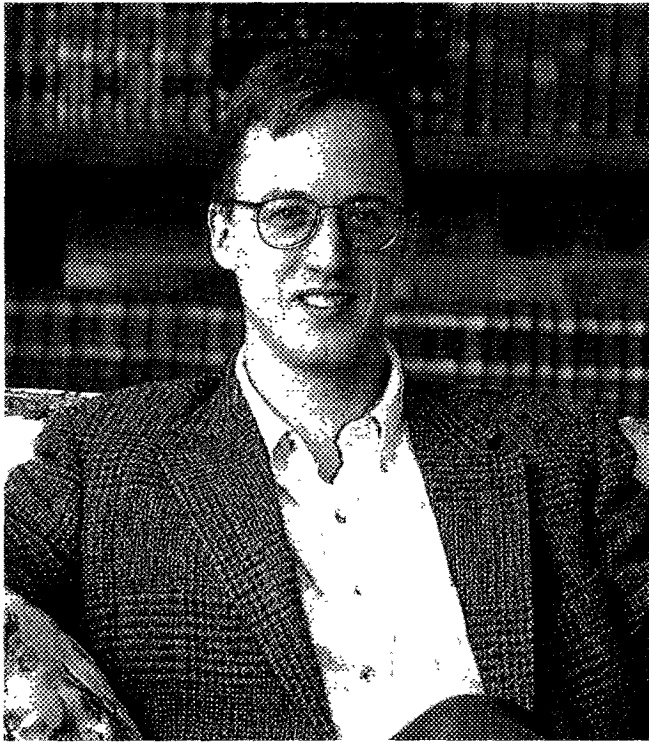
Since the 1980's, critics have charged that the intelligent design concept is really just "a disguised form of creationism." Accord-

ing to Eugenie Scott, executive director of the National Center for Science Education: "They're really saying God does it, but they're not as honest as the Biblical creationists. The intelligence is really spelled in three letters: G-O-D."

Not at all, says Dembski. Intelligent design points not to a creator, but to a designer—a crucial distinction. "If you examine a piece of furniture," he explains, "you can identify that it is designed, but you can't identify who or what is responsible for the wood in the first place. Intelligent design just gets you to an intelligent cause that works with pre-existing materials, but not the source of those materials."

Neuroscientist Lewis Barker, who left Baylor in protest over the administration's "religious" policies, buys none of this: "I see it as a form of stealth creationism, a very old argument wrapped

BRUN TEA TT



William Dembski,  
*mild-mannered mathematician or evil genius?*

in new clothes." Later, however, he adds: "The whole notion of using mathematics, that's something new."

Also novel is the respect many "intelligent design" proponents have earned in the academic community. "They're real academics, not cranks," admits *Skeptical* magazine publisher Michael Shermer, whose editorial board is overwhelmingly composed of intelligent design critics such as Stephen Jay Gould and Eugenie Scott herself. "They have real degrees and tenure," adds Shermer. Not only does William Dembski have doctorates in mathematics and philosophy, he has done post-doctoral work in mathematics at MIT, physics at the University of Chicago, and computer science at Princeton University. Even Lewis Barker says: "He seems to be a very bright guy."

Eugenie Scott argues that intelligent design proponents don't have a scholarly position because they never submit their work for peer review. But each time she brings up the kind of scholarly evaluation that's lacking—the reviewed publications or academic conferences—she stops short when she comes to the work of William Dembski.

Regarding conferences, Scott remembers Dembski's "The Nature of Nature" conference (April 12-15 at Baylor) and grudgingly admits: "They actually did invite some scientists there." In fact, the slate of speakers included two Nobel Prize-winning scientists and several members from the National Academy of Sciences. The list was weighted toward prominent biologists, physicists, and philosophers who were critical of intelligent design.

And when Scott ticks off a list of non-peer-reviewed design literature, she hesitates when she recalls that Dembski's book, *The Design Inference*, was written as part of a Cambridge University philosophy of science series. Published as Dembski's

doctoral dissertation in philosophy, it became Cambridge's best-selling philosophical monograph in recent years. After surviving a review of 70 scholars, and then the standard dissertation defense at the University of Illinois, *The Design Inference* finally underwent corrections and refereed scrutiny for two years at Cambridge University Press.

The great irony is that just as Dembski is proposing to test his theory with the help of molecular biologists, the very scientists who are challenging intelligent design to pass scientific tests are using every means possible to ensure those tests never take place.

## Birth of a Think Tank

The brief story of Dembski's Michael Polanyi Center starts with its home: Baylor University, the world's largest Baptist institution, located in Waco, Texas. For years, Baylor had a reputation among conservatives for going the way of many once-Christian colleges, neglecting its religious heritage and embracing the politically correct tenets of secular humanism instead.

All that began to change when Robert Sloan became president of Baylor University in 1995. Sloan, a New Testament scholar with a doctorate in theology from the University of Basel, proposed to return the school to its mission of integrating academic excellence and Christian commitment. To foster this goal, he oversaw the establishment of the university's Institute for Faith and Learning, which explores opportunities for profitable engagement between faith and academic pursuits like art, history, business—even science.

Sloan resisted the urging of fundamentalists to "throw the evolutionists out" of the biology department, vowing never to bar anyone at Baylor from teaching evolution. He rejects the notion of a "creation science" (6-day creation a few thousand years ago). But he also believes that "the academic world has become far too compartmentalized."

"Baylor ought to be the kind of place where a student can ask a question and not just get the runaround," says Sloan. "He shouldn't have to go to the theology department and be told, 'Oh, that's a scientific question. Don't ask me that.' And then the student goes to the science department and they tell him, 'That's a religious question. Don't ask me that.'"

So far this doesn't sound too different from many other universities nationwide that have recently set up centers to revisit the relationship between science and religion. But matters took a fateful turn in the fall of 1998 when President Sloan read an article by William Dembski and was wowed by his work and credentials. Others in the administration were also impressed. Michael Beaty, director of the Institute for Faith and Learning, says that Dembski's work "fit right in with the institute. Bill was fruitfully dialoging with religion and science."

When Beaty sounded him out about his interest in joining the institute, he learned that Dembski was seeking to build a research center to test the theory of intelligent design. The administration received his ideas with enthusiasm. His research would pursue not only intelligent design, but a broad range of topics having to do with the foundations of the natural and social sciences. Thus was born the Michael Polanyi Center, which Dembski named for an eminent phys-

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## An e-mail FRENZY spread to other universities and Baylor professors DEMANDED that Dembski's CENTER be shut down.

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ical chemist who taught that biology is not reducible to chemistry and physics.

"This was an opportunity to reaffirm that Baylor is a university where controversial issues can be discussed," says Donald Schmeltekopf, Baylor's provost. "We decided to go ahead and give it a chance, believing the university would be a richer and more compelling place, knowing that there would be those who would have objections." His pleasant expression disappears, and he adds: "We didn't anticipate the *amount* of objection."

### Controversy

After Dembski brought on board Bruce Gordon (Ph.D. in the history and philosophy of physics) as associate director of the Polanyi Center, the duo made a good first impression on the faculty they met. Gordon led a colloquium reading group, using two books about interactions between science and faith. Discussion with participating faculty was cordial.

"The controversy began after our Website debuted in mid-January," explains Gordon. "That's what drew more faculty attention to the center." While the Polanyi site itself was unexceptionable, other groups with evolutionist-bashing agendas began linking up their Websites to the center. Many on the biology faculty flashed back to old culture battles, when such groups had publicly questioned the professors' integrity.

Gordon is understanding, but explains that the realities of the Web are such that the Polanyi Center has no control over who connects to their site.

"We don't endorse a connection to those sites at all. They didn't ask our permission. But we can't spend our time policing the Internet."

Reaction built quickly. One professor who had previously been friendly at the reading group wrote Gordon an insulting letter. An e-mail frenzy began between faculty in all departments, calling special attention to the creationist Websites that claimed the Polanyi Center as one of their own.

News spread to other universities, and soon newspapers in Waco and Houston were filled with reactions from a handful of vocal Baylor professors who were appalled that such a

monstrosity as the Polanyi Center should be found on their campus.

By this time, plans were well under way for a large Polanyi conference called "The Nature of Nature." Most Baylor biologists decided to boycott the event. Even so, the April conference drew 350 scholars from around the world whose views varied wildly on the conference's central question: "Is the universe self-contained or does it require something beyond itself to explain its existence and internal function?"

By all accounts, the conference itself was an outstanding success, drawing attention to Baylor as a place that could attract world-class scholars for dialogue on the big questions. In spite of one out-of-state professor's campaign to convince all speakers to cancel, the conference brought together such luminaries as Nobelist/physicist Steven Weinberg, Nobelist/biochemist Christian de Duve, big bang cosmologist Alan Guth, paleontologist Simon Conway Morris, and philosopher Alvin Plantinga.

But the conference only focused the Baylor faculty's anger more intensely on the Michael Polanyi Center. A few days

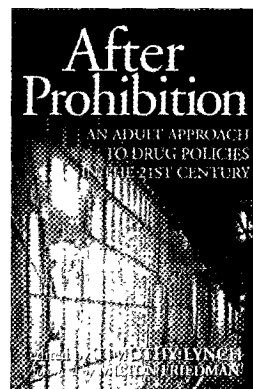
## What Happens after Prohibition?

"You cannot read this book without recognizing the social tragedy that has resulted from the attempt to prohibit people from ingesting an arbitrary list of substances designated 'illegal drugs.' . . . Not since the collapse of the attempt to prohibit the ingestion of alcohol has our liberty been in such danger as it now is from the misnamed 'war on drugs.'"

—MILTON FRIEDMAN

"I think the facts boil down to drugs being a bad choice. Drugs are a handicap. But should someone go to jail for just doing drugs? I believe the time has come for that to end."

—GARY JOHNSON  
Governor, New Mexico



*After Prohibition: An Adult Approach to Drugs in the 21st Century* edited by Timothy Lynch. Foreword by Milton Friedman. Available in fine bookstores or at [www.cato.org](http://www.cato.org) 185 pp./\$18.95 cloth/\$9.95 paper.

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## The committee did not include ONE PROFESSOR capable of UNDERSTANDING Dembski's mathematical ARGUMENTS.

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after it ended, the faculty senate met and voted to recommend that the administration dissolve the center immediately. The faculty claimed that President Sloan had no right to set up such a center and choose its head without their involvement.

"It's rather ironic that people in the scientific community, whose rights had to be protected in the face of ideological pressure [from creationists], now appear to be suppressing others," says President Sloan. "People have always asked questions about the relationship of religious views and the natural phenomena we see in the world. I think it just borders on McCarthyism to call that 'creation science.'"

The day after the faculty senate vote, President Sloan addressed the faculty, telling them that he would not close down the Polanyi Center merely because they demanded it. The procedure he had used in setting up the center was no different from the one he and previous administrators had used to establish other centers.

Michael Beaty, director of the Institute for Faith and Learning, notes that they had used the same procedure for setting up the Center for American Jewish Studies, without criticism.

Recognizing that the faculty's real objections were not about procedure, Sloan repeated to the faculty an earlier announced plan to form an independent peer review committee to evaluate William Dembski's work and the work of the Polanyi Center. He said that he sympathized with the science faculty over their concern for their reputations, but that the bigger issue is academic freedom. He didn't like the idea of snuffing out a project without giving it a chance to have its work reviewed by peers.

Assuming the committee would impartially address the matter, Dembski welcomed the review. "Academic programs need to be held accountable," he said at the time. "I would go further than that and say that I value objective peer review. I always learn more from my critics than from the people who think I'm wonderful."

Initially, Baylor spokesman Larry Brumley insisted that the committee wouldn't be asked whether the center should be dissolved. "It's not a committee to look at whether we should reconsider having the Polanyi Center," Brumley said. "They're looking at how we can better communicate its purpose and address the concerns of faculty members."

When the committee membership was announced, however, Dembski was surprised to find antagonistic biologists in the majority. Worse, the committee did not include a single person capable of understanding the mathematical arguments made in Dembski's *The Design Inference*. (This was partially rectified when one statistician was later added to the team.) Neither were Dembski's prospects brightened when the committee chose as its head William Cooper, a philosophy professor who

calls the Polanyi Center extremely "polarizing" and doubtlessly connected to the old-style "creationists."

Lingering anger in the biology department is perhaps an understandable reaction after years of ideological assault by creationism activists. But the personal outrage against the very idea of Dembski's work runs even deeper than that. The resentment becomes obvious to any outsider who dares to roam the halls of the Baylor biology department and ask professors for their take on the dispute.

What exactly is intelligent design (ID), and why do the very words incite such fury among some biologists?

### What Is Intelligent Design?

ID depends upon a concept known as specified complexity.

Say you're out raking leaves in the backyard. If you were to find little piles of leaves, equally spaced apart in a long line, the arrangement would be an example of specificity, but it could be explained by what fell out of a rolling barrel. Each time the barrel made a revolution, another clump fell out, each spaced apart by about the same distance. The pattern is specified, but not complex.

When you come across thousands of piles of leaves in no particular pattern, that's complex, and it may take billions of overturned barrels to produce another pattern just like it. But it's not specified. No intelligent design is required to explain it.

But let's say you come across a thousand leaves arranged as letters spelling meaningful words, sentences, paragraphs, even a whole story—that's specified complexity. Specified complexity creates information and meaning, and that requires intelligent design.

Many scientific disciplines already use such logic to distinguish between phenomena produced by an intelligence from those that are not. The cryptologist, when breaking a code, looks for patterns that create meaning and are not due to chance. SETI (Search for Extraterrestrial Intelligence) does the same in its search for signals of intelligence from space (think Jodie Foster in *Contact*). Even Quincy's forensic science was all about trying to determine whether a death was due to an accident, natural causes, or the design of an intelligence.

William Dembski puts it this way: "Specified complexity powerfully extends the usual mathematical theory of information, known as Shannon information. Shannon's theory dealt only with complexity, which can be due to random processes as well as to intelligent design. The addition of specification to complexity, however, is like a vise that grabs only things due to intelligence. Indeed, all the empirical evidence confirms that the only known cause of specified complexity is intelligence."

Thus when Dembski observes this specified complexity in DNA messages and protein coding, he infers intelligent design.

These patterns give real information in the form of meaningful instructions, precisely analogous to language with words, sentences, punctuation marks, and grammatical rules.

The old "scientific creationism" based itself upon two tenets: a supernatural agent created all things, and the Bible gives us an accurate account of what happened. In contrast, according to Dembski, intelligent design is built upon three very different tenets:

1. Specified complexity is well defined and empirically detectable
2. Undirected natural causes are incapable of explaining specified complexity.
3. Intelligent causation best explains specified complexity.

The anti-ID school might argue that in the case of biological evolution, natural causes do eventually produce the specified complexity we see in living things. Natural selection culls through countless mutations over time, eventually producing specified complexity. As the need for survival helps organisms evolve, new information is created and they ratchet their way up into new forms.

The problem with this scenario, according to ID theorists, is that mutations do not produce new information. Natural selection has slim pickin's to choose from, even when it picks the fittest. Without an intelligence to produce new information, no amount of re-shuffling of genes will result in a new organism.

Biologist Peter Medawar called this principle the law of conservation of information. Michael Polanyi himself believed that natural selection and mutation, the two mechanisms of neo-Darwinism, are inadequate for the task of producing new anatomies or functions in evolving animals. The focus on information theory is one reason mathematicians have often been more skeptical of rigid Darwinist explanations than their colleagues in biology.

If the creation of new information is such a problem, you ask, then why isn't this common knowledge in our institutions of higher learning? And if intelligent design is such an obvious answer, why haven't we heard more about this before? For one thing, no one's ever gotten far enough along to test it before. But William Dembski is getting close.

Bruce Gordon says that design theory, as a scientific strategy, involves two goals: 1. to mathematically characterize designed structures (using stochastic processes theory, probability theory, complexity theory, etc.) to detect intelligent design, and 2. to go into nature and see whether the mathematical structures map onto the physical structures in a way indicative of design.

This, of course, is precisely what Dembski has been preparing to do with

his research center. He is laying the groundwork to hire molecular biologists to do research on protein structure and protein folding to test ID. "What has to happen," says Dembski, "is that ID has to generate research that's more fruitful for biology than neo-Darwinism."

Can design actually be tested as part of science?

"Has ID really been tried?" repeats Eugenie Scott. "I think that's a legitimate question. I don't really think we have an answer yet."

"The jury is out on that," says William Cooper, chair of the committee evaluating the Polanyi Center. "The mathematical discussion has not progressed sufficiently."

Of course, if the committee pronounces final sentence on the Polanyi Center and ends all discussion now, we'll never know. The hanging will have occurred before the jury comes back.

### Before Congress

On May 10, a month after Baylor's big Polanyi conference, a number of members of Congress attended a three hour briefing on intelligent design. William Dembski had been invited to join other ID scientists in the presentation, but the Baylor administration ordered him not to participate. President Sloan wanted to keep Baylor from all appearance of mixing academics with politics.

But some Baylor biologists became so concerned about how far the intelligent design message was spreading that eight of them drafted a long letter to Congressman Mark Souder, an Edu-

## FORREST McDONALD

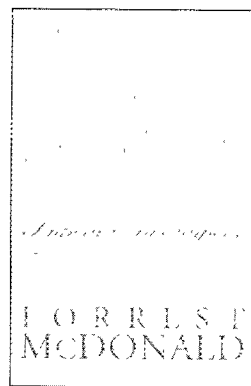
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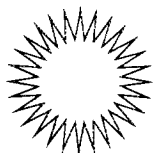
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cation: Committee member, who had co-hosted the meeting. Their letter was intended to let the congressman know that he had been duped by the ID proponents, and that ID research is not legitimate science. Their attempt to embarrass the ID people was turned around on them when Congressman Souder responded with his own presentation to the House of Representatives, including the reading of their letter into the *Congressional Record*

Using their letter as Exhibit A, he told the House that these scientists were practicing “viewpoint discrimination in science and science education,” and that “ideological bias has no place in science.”

Referring to the letter’s frequent use of the phrase “materialistic science” as their noble cause, the congressman told his colleagues, “One senses here not a defense of science but rather an effort to protect, by political means, a privileged philosophical viewpoint against a serious challenge. . . . As [members of] the Congress, it might be wise for us to question whether the legitimate authority of science over scientific matters is being misused by persons who wish to identify science with a philosophy they prefer.”

A preferred philosophy? Could it be that it took an outsider, a congressman from Indiana no less, to get an objective fix on the real source of the conflict?

### Philosophizing Science

There is a method used in science today that goes beyond the scientific method. It’s based on a philosophy called naturalism, defined by Funk & Wagnalls as “the doctrine that all phenomena are derived from natural causes and can be explained by scientific laws without reference to a plan or purpose.” It’s the “without plan or purpose” part that nixes intelligent design.

When this philosophy is applied to science, it’s called methodological naturalism, and for many scientists today it is an unquestioned assumption.

Last spring biology Professor Richard Duhrkopf got his picture in the papers when he accused the Polanyi Center of trying to “change the philosophy of science.” But is science supposed to have a particular philosophy attached to it? Many of us laymen have always thought that science was supposed to be about applying the scientific method to observations and measurements and gaining as much knowledge of the world as possible, not reaching foreordained conclusions.

Methodological naturalism proposes that scientists be provisional atheists in their work, no matter what contrary evidence they find. Intelligent design proponents are asking simply that science be purified of all philosophical biases. At least, no philosophical bias should be promoted as scientific. Scientists are welcome to hold to personal philosophies and even have them running in the background, as guiding principles, if they think that helps them do their work. But those personal philosophies should not be confused with science.

Berkeley law professor Phillip Johnson stated the issue succinctly at the congressional briefing: Americans, he said, must choose between two definitions of science in our culture: 1. science is unbiased, empirical testing that follows the evidence wherever it leads, or 2. science is applied materialist philosophy which, like Marxism or Freudianism, is willing to impose its authority.

### Being Methodologically Correct

“The twentieth century was the high point of methodological correctness,” says President Sloan. “We all know that life is more than sociology or history or anthropology. Unfortunately, people have forgotten that the methodological brackets we apply are purely artificial, intended to be temporary.”

ID keeps an open mind, and is entirely agnostic on the subject of religion. The intelligent design that Dembski hopes to detect could belong either to a Biblical God or to an earlier race of Martians who planted us here (like in the movie *Mission to Mars*).

The idea that life here was seeded from another place may seem pretty far out. But Francis Crick, winner of the Nobel Prize for his co-discovery of DNA’s structure, is one of a number of scientists who have seriously promoted the “panspermia” hypothesis, the idea that life was sent here in the form of seeds from a faraway civilization. The reason for such an idea? Crick wrote that “the probability of life originating at random is so utterly minuscule as to make it absurd.”

Writing with his colleague Chandra Wickramasinghe, Crick stated: “The theory that life was assembled by an intelligence. . . is so obvious that one wonders why it is not widely accepted as being self-evident. The reasons are psychological rather than scientific.”

Asked about the *Mission to Mars* possibility, Michael Shermer replies, “That’s a legitimate hypothesis. That’s testable, that’s explainable. But ‘a miracle happened’ — that’s different.” In other words, design is detectable and testable — but only as long as you can be sure ahead of time that the designer isn’t God.

This is less a philosophy than an intellectual straitjacket. By this reasoning, scientists whose findings point to natural causes may proceed unimpeded, while those whose evidence points to a supernatural cause must immediately close up shop and go home. One thing you have to say for Dembski’s intelligent design theory: It makes the ultimate questions real, putting them into our own world. By blocking ID research, methodological naturalism becomes not only a method for doing science, but a method for keeping the deepest human concerns a safe distance from our personal lives.

On September 8 and 9, the peer review committee finally met and even brought in Dembski and Gordon for 45 minutes of grilling. One committee member chastised Dembski for questioning the adequacy of neo-Darwinism. Dembski, however, showed none of the hoped-for contrition. As this issue goes to press, the committee is getting set to announce its recommendation.

What will be the fate of Dembski, Gordon, and their Michael Polanyi Center? It’s up to one man only — President Robert Sloan. He can bow to faculty pressure and dissolve the present Polanyi Center, perhaps restaffing it with scholars more to the faculty’s liking; or clip Dembski’s wings by taking away his ability to raise money to run programs. Or he can stand behind the man he hired, make the case that science should be about facts, not McCarthyite lynch mobs — and take the heat that will surely be generated by disgruntled faculty and their sympathetic media.

Either way, the ultimate victim or victor won’t be Bill Dembski, it will be unbiased science and humanity’s quest to discover the truth — wherever that truth leads us. ❁