HOW INTELLIGENT DESIGN ADVOCATES TURN THE SORDID LESSONS FROM SOVIET AND NAZI HISTORY UPSIDE DOWN

By Wesley R. Elsberry and Mark Perakh

CONTENTS

Wesley R. Elsberry and Mark Perakh, Introduction

Wesley R. Elsberry, The Biologist's Tale: Where Analogies to Lysenko Fail or The High Cost of Politically Sanctioned Biology

Mark Perakh. Under the Party's Thumb: A Physicist's Memoir of Life Under Politically Sanctioned Science, or Who Really Are More Like Stormtroopers?

Wesley R. Elsberry and Mark Perakh, Conclusion.

Introduction

Wesley R. Elsberry and Mark Perakh

"Intelligent design" is a form of antievolution that is a proper subset of the openly religious forms of creationism which have been popular in the USA for decades, dropping explicit references to God in the hope that jurists will fail to notice the identity of content.

"Intelligent design" advocates (IDAs) are quick to cry "Foul!" when they find themselves at the short end of a sharp piece of rhetoric. But they are just as quick to use invidious comparisons that are intended to discomfit their critics. This article documents several such cases. For example, the intelligent design advocate William A. Dembski has compared biologists critical of "intelligent design" to the former Soviet regime. Specifically, Dembski has compared his critics to Trofim Denisovich Lysenko and his cronies in the Soviet hierarchy during Stalin's reign. Every reasonable person must take umbrage at this comparison. We will present here views aimed at revealing the insidious and underhanded nature of the attack made by Dembski and some of his colleagues.

While the part contributed by WRE approaches the matter from a standpoint of a biologist offended by the preposterous comparisons of mainstream biologists to Lysenko's cohorts who shamelessly suppressed genuine biological science, the part contributed by MP draws on his personal experiences both in the Soviet empire and with regard to the very similar totalitarian system maintained by the Nazis in Germany. There are certain instructive redundancies in this twice-told tale that indict IDAs who engage in casual, self-serving abuse of historical tragedies.

The Biologist's Tale: Where Analogies to Lysenko Fail Or The High Cost of Politically Sanctioned Biology

Wesley R. Elsberry

An article by Stephen Goode [1] reported William Dembski comparing the Fellows of the Discovery Institute's Center of Science and Culture (CSC), (formerly the Center for the Renewal of Science and Culture) to the freedom and democracy movement in Eastern Europe, and the current evolutionary science to the former Soviet Union. Specifically, the CSC Fellows allegedly resist the Darwinian explanations in evolutionary biology as the Freedom movement resisted Soviet hegemony in Europe.

Dembski's reported analogy struck me as glib and self-serving, so I contacted Jay Wesley Richards, the vice-president of the Discovery Institute and Senior Fellow of its CSC, to ascertain whether any liberties had been taken in Goode's report of Dembski's position. Although Richards commended my hesitation to simply accept Goode's report at face value, he confirmed that Dembski actually uses that analogy in his lectures, as do others of the Fellows of the CSC.

Here is what Richards says about the matter (personal communication):

"Phil Johnson, Dembski and many other design theorists do see *Darwinian* evolutionary theory as a moribund 19th century intellectual enterprise. And, like the Soviet Union, we predict that it will go belly up in what after the fact will seem like a very short time. Dembski himself has said as much in public lectures. (I should add, of course, that the point of the analogy is not to call Darwinists "communists" or some such thing. It is a sociological observation about a seemingly invincible intellectual hegemony which nevertheless collapsed quickly.)" [emphasis in original]

The stated point of the analogy, alas, seems to get lost in transit, if Goode's article is any guide to what listeners take away from these lectures. Goode makes no mention whatever of the demise of the Soviet system, and thus there is no comparison to rapid collapse.

A more recent appearance of the analogy is found in a book by William A. Dembski [2]:

"In the current intellectual climate it is impossible to get a paper published in the peer-reviewed biological literature that explicitly affirms intelligent design or explicitly denies Darwinian and other forms of naturalistic evolution. Doubting Darwinian orthodoxy is comparable to opposing the party line of a Stalinist regime. What would you do if you were in Stalin's Russia and wanted to argue that Lysenko was wrong? You might point to paradoxes and tensions in Lysenko's theory of genetics, but you could not say that Lysenko was fundamentally wrong or offer an alternative that clearly contradicted Lysenko. That's the situation we're in. To get published in the peer-reviewed literature, design theorists have to tread cautiously and can't be too up front about where their work is leading. Indeed, that's why I was able to get The Design Inference published with Cambridge University Press but not No Free Lunch, which was much more explicit in its biological implications."

Contrary to Richards, this statement has nothing to do with projected rapidity of collapse of the opposition. Instead, it has everything to do with an invidious comparison between biologists and the repressive former Soviet regime.

According to Richards, the Soviet Union collapsed suddenly, and the IDAs hope that Darwinian evolutionary theory will do likewise. The former Soviet Union defended its position against the challenge of the freedom and democracy movement. Biologists defend their position against the challenge of the IDAs. That is, Group A defended itself against criticism, and so does Group B. By this token, the analogy could with equal justice be reversed: evolutionary biologists criticize the IDAs, and then the IDAs respond with Soviet-like defensiveness and will eventually crumple with Soviet-like suddenness. The basis of Richards' analogy is extremely weak, as seen by the ease with which the entities on one side may be exchanged.

If we consider the less benign form of the analogy as deployed by Dembski, the IDAs represent the underdog anti-establishment pitted against the implacable opposition of entrenched ideology. That looks just perfect to some people. But it leaves out some details, such as the many significant points of disanalogy. The Soviet Union employed less than civil means of suppressing dissent, like exile, imprisonment, torture, extortion, starvation, and assassination. Evolutionary biologists can hardly be said to do the same in their defense. Analogies that come loaded with such convenient polarizing baggage should be justified in more detail or sharply delimited and qualified.

The Soviets also provide us with an experiment in accepting a teleological biology. We don't have to project what wondrous advances might be made without the albatross of the biology of the west; the Soviets were kind enough to try it out for us. This chapter of history tells us what the consequences of politically mandated biology really are like. We would profit in learning from this lesson in history rather than reliving it for ourselves. Dembski has apparently learned the name by which to reference this episode of history, but has failed to take its meaning.

In 1925, the same year as our own Scopes trial, a different kind of trial was beginning in the USSR. That was the year when a young Soviet biologist named Trofim D. Lysenko graduated and set about making a career for himself. Unlike many of his peers, Lysenko was politically astute and had a feel for what those in power wanted to hear. Lysenko began a campaign to purify Soviet biology and remove traces of bourgeois science. That meant that chance-based and capitalist-inspired doctrines like Morganism, Mendelism, and Weismannism had to go. And go they did, sometimes by the expedient of denying research in that vein, but also by exiling or executing those researchers with the bad fortune to use such principles in their studies. Lysenko became director of the Institute of Genetics of the USSR Academy of Sciences in 1940 and retained that post until 1965. Lysenko was also head of the Lenin Academy of Agricultural Sciences. Lysenko's career included having the favor of Stalin during Stalin's rule but also having the flexibility to survive political change at the top.

Now, one might ask what sort of research occurred under the leadership of Lysenko. Lysenko preferred a teleological approach to biology called Michurinism, which had much overlap with the ideas of the French zoologist Jean Baptist de Lamarck. In particular, Lysenko asserted that "vernalization" of wheat, a process that helps deal with short growing seasons, could be made into an inherited character via a Lamarckian process. Many consecutive five-year plans for agriculture were based on Lysenko's favored approach. Many of these resulted in abject failure. The whole concept of

centralized five-year plans became an object of derision here in the west, where the term "five-year plan" became synonymous with "blueprint for failure", but Lysenko's political savvy kept him in place and in power until the 1960's. After decades of crop failures and widespread food shortages, the Soviets had had enough. Lysenko was out, and suddenly non-Lysenkoist biologists were yanked out of cold storage in Siberia to get back to work. But it was hard to turn around over a generation of mismanagement and pseudoscience, and the Soviets paid for their long experiment in politically determined biology with continued dependence on foreign food and discontent over food shortages at home. The Cold War was waged in terms of economics, and the legacy of Lysenkoism had but one positive outcome: it hastened the collapse of the Soviet regime which had adopted and nurtured it.

Today, Lysenko's legacy might produce something of value, if only we have the wisdom to get the message. The Discovery Institute's CSC Fellows have been assiduously promoting "Intelligent Design" as a cure-all for biological science. While some small effort has gone into developing academic support for ID, the majority of the effort appears to go into various political maneuvers. This should hardly come as a surprise, since the Discovery Institute's mission is political action on a variety of fronts. Biology decreed by political mandate, whether through appeal to a central party elite or through appeal to democratic populism, is bad biology. As the Soviets learned, bad biology has a high price tag. Let us hope that the consumers of the west will have the good sense to read the reviews of politically sponsored science and not actually have to buy it before realizing that it's a lemon.

Darwinian ideas have undergone severe scientific test and review over the past one hundred forty years. The theories have changed, adapted, evolved since Darwin's time to better fit the observed reality of living organisms. The insights of the Modern Synthesis have produced positive results in epidemiology, evolutionary medicine, medical research, and agriculture. We can even see the benefit of Darwinian views of evolution in the field of computer science, where researchers and engineers use "evolutionary computation" to accomplish difficult tasks in optimization and design. One thing that we know is true about Darwinian evolutionary theory is that it works.

On the other hand, the "Intelligent Design" pushed by the IDAs has yet to produce even one hypothesis that has undergone a field test, much less any hypotheses that have withstood empirical research. There is nothing to suggest that any such hypothesis based upon ID will be forthcoming in the future. Indeed, even Trofim Lysenko was one-up on the IDAs, since he at least had a hypothesis to test. His hypothesis turned out to be false, and his methods of research were appalling, but Lysenko put forward an actual testable hypothesis.

The Discovery Institute's Center for Science and Culture is an extraordinarily well-funded interest group that spends freely on publicity and whose paid Fellows travel frequently for talks and meetings. I would suggest to the Fellows of the Discovery Institute's CSC that they cut the travel budget by half and use the money saved to fund a pilot study to develop, research, and test at least one scientific hypothesis based upon Intelligent Design. It doesn't have to be as ambitious or potentially useful as inducing the inheritance of vernalization in wheat. It just needs to provide an example of how Intelligent Design can produce good empirical science in one of the fields of study where the IDAs claim that current evolutionary theory is impeding research. Given the demanding lecture schedule that many of the Fellows seem to keep, this tactic would likely result in better funding than is available in the typical start-up National Science

Foundation grant. The CSC Fellows might even write up such a proposal for the Discovery Institute in the form of a five-year plan.

Under the Party's Thumb: A Physicist's Memoir of Life Under Politically Sanctioned Science

or

Who Really Are More Like Stormtroopers?

Mark Perakh

Introduction

The Intelligent Design advocates regularly resort to comparing their pro-evolution opponents to Nazis, Soviet Communists and the like, while depicting themselves as fighters for freedom of expression and of unbiased exploration of reality.

A short collection of such venomous verbal protuberances emitted by the ID generals, has, for example, been presented on a website [3]. We find on this website quoted utterances by ID advocates Phillip E. Johnson, William A. Dembski, Stephen S. Meyer, Jonathan Wells, Mark Hartwig, and John Calvert who compare their opponents either to the Nazis or to the Soviet communists.

Here is one example from that collection.

In the report about a meeting in Ohio on March 11, 2002, where ID advocates Jonathan Wells and Stephen S. Meyer encountered opponents of ID Kenneth R. Miller and Lawrence Krauss, Wells writes,

"Afterwards, in private, Steve Meyer kept repeating Miller's pompous declaration with a heavy German accent, sounding for all the world like Heinrich Himmler, Hitler's propaganda chief." [4].

This statement, besides its low taste and rudeness, reveals how poorly the ID advocates are equipped to make such comparisons. Heinrich Himmler had little to do with the Nazi propaganda machine; he was the head of SS (often referred to by a slightly misleading term of *stormtroopers* [5]) and of the Gestapo, the dreaded secret police; Hitler's propaganda chief was Joseph Goebbels.

While the ID advocates are fond of wrapping themselves in togas of alleged impartiality and honest pursuit for truth, in fact it is they whose behavior is often redolent of that by the suppressors of biological science in the former USSR, or by the Nazis.

Bits of a personal experience

I have lived through the years of the Soviet regime and was myself a victim of its repression.

The system of government in the former USSR was officially based on the so-called Marxism-Leninism. Of course, the bloody upheaval of 1917 in Russia, although proclaimed to follow the teachings of Marx and Engels, had in fact almost nothing in common with the blueprint provided in the writing of these founders of Marxism. Likewise, the extreme form of a monopolistic state capitalism which was built in the USSR under the deceptive label of socialism, had little resemblance to Marx-Engels's

prescriptions. However, the ideology of Marxism-Leninism was ostensibly upheld in the USSR very much like a godless religion. No critique of its officially approved tenets was tolerated. It required worship in whose rituals every citizen was forced to participate.

One such ritual demanded that every member of the "intelligentsia" endlessly study "Marxism-Leninism." In particular, the people possessing higher education diplomas and scientific degrees were forced to study, along with their regular work as teachers, scientists, physicians, or engineers, in the so-called *Evening Universities of Marxism-Leninism*.

I took these courses in the early fifties. Although I completed the studies with the highest grades, the result was contrary to the goals of the indoctrination – I did not become an adherent of Marxism – in fact the opposite was true. However, I may claim that I have a reasonable knowledge of Marxism in all of its facets.

From my experience both with Marxism and with the realities of the Soviet system, I can assert that in the dispute between the Intelligent Design advocates and their opponents, including pro-evolution scientists, it is ID advocates whose behavior is reminiscent of the oppressive Soviet regime. Indeed, the Soviet oppressive system worked under a decorum of a dogmatic religious-like conceptual set, which was very similar to the attitude of the ID advocates who, sometimes surreptitiously, but often explicitly, base their attitude on an inherently anti-scientific commitments (see, for example, Phillip Johnson's *The Wedge of Truth* [6], or part 3 in William Dembski's *Intelligent Design* [7]). Like the Soviet satraps, the ID advocates often demonize their opponents, not shying away from *ad hominem* attacks, rude derision, misquotations and outright distortions (as I will demonstrate by quotations a few lines down).

How ID advocates use the ghost of Lysenko

Since the dispute between the ID advocates and their opponents often narrows to the biological problems, they frequently invoke the image of Trofim Denisovich Lysenko whose long reign in the Soviet agriculture is allegedly an analog to the Darwinian "officially established" dogma reigning in the mainstream biology. In his book [2] William Dembski wrote,

"Doubting Darwinian orthodoxy is comparable to opposing the party line of a Stalinist regime. What would you do if you were in Stalin's Russia and wanted to argue that Lysenko was wrong? You might point to paradoxes and tensions in Lysenko's theory of genetics, but you could not say that Lysenko was fundamentally wrong or offer an alternative that clearly contradicted Lysenko. That's the situation we're in."

Like in the case of Wells talking about Himmler, this quotation also reveals the actual dismal level of Dembski's knowledge of the subject he discusses. If Dembski thinks that Lysenko's opponents were allowed to "point to paradoxes and tensions in Lysenko's theories of genetics," he has very little understanding of the situation in the USSR at the time of Lysenko's reign. Any utterance which would fall short of an unbounded admiration of Lysenko's pseudo-theories would result in immediate severe punishment, not to mention any attempts at even an extremely mild and cautious critique

of any elements of Lysenkoism.

Where does Dembski see any similarity between the merciless persecution of biologists in Stalin's USSR and the critique of the ID theories by their opponents? Are the ID advocates really muzzled by officialdom? Are they not publishing their numerous opuses day in and day out, unrestricted and unrestrained? Are they arrested? Exiled? Executed?

Moreover, the above quotation where Dembski compares the ID advocates to the biologists in Stalin's USSR is ironic because, in fact, Lysenko's ideas had little in common with Darwinian theories. Many elements of Lysenko's pseudo-biology were Lamarckian. Lysenko's theory carried the label of a Michurinian biology, after a Russian self-educated selectionist Ivan Michurin. Michurin was known for developing several hybrid brands of fruit but not for any scientific work. Lysenkoism was completely inimical to the neo-Darwinian synthesis, very much like the modern ID advocates' views are. The label of Morganist-Mendelist-Weissmannist had all the connotations of anathema pronounced by church leaders in regard to excommunicated apostates. The anti-Lysenkoist stand of the ID advocates is therefore ludicrous given the similarity of their denial of Darwinian biology to the denial of the neo-Darwinian synthesis by the Lysenkoists.

Some biographical data

Although I am not a professional biologist, I happened to be rather close to the events related to Lysenko's rise to power and to the destruction of the biological sciences in the USSR under his leadership, and I can attest that the very behavior of ID advocates is often reminiscent of that by Lysenko and the rulers of the USSR.

Before the World War 2 I lived in the city of Odessa, in the Ukraine. There was at that time in Odessa a Children's Biological Station, located close to the Arcadia suburb. It was a fine educational institution with two divisions, one botanical/agricultural, and the other zoological. Kids from 8 to 16 could come over at any time and conduct simple biological experiments, under supervision of several instructors, in a small zoo, terrarium or aquarium, or in the several hectares of fields adjacent to the station. I used to come to the station where I conducted experiments, some with fish mimicry, and in some others attempting to hybridize peanuts with various other plants (I was 12 at that time and the experiments did not have such a comic sound as they have from the standpoint of my present age). I did not become a professional biologist (which I might have if the war did not interfere in June of 1941 and force me to pursue a very different path), but I have preserved a fascination with biology.

In those years, Lysenko was not yet the omnipotent president of the Academy of Agricultural Sciences in Moscow, but only the director of the Institute of Agrobiology in Odessa. Even in this capacity, he was already a very powerful figure in the Soviet hierarchy. His theory of "Yarovization" (i.e. of vernalization) of winter crops was already much acclaimed by the docile Soviet press. His institute has experimental fields next to the Children's Biological Station. On a few occasions Lysenko happened to walk in the vicinity of our Station. I remember his somber looks, piercing eyes in a bony, sharpnosed peasant face, and the obvious discomfort our instructors experienced when seeing the unfriendly Academician reviewing his possessions.

Now jump over almost twenty years, to the early fifties, when the destruction of the Soviet biological science was nearly complete. At that time I was a *docent* (the

equivalent of an associate professor rank in the US) at an Institute in Stalinabad (now Dushanbe), the capital of Tajikistan (now an independent country, but at that time a part of the USSR). Our institute included an engineering school where I taught physics (and occasionally mathematical physics), as well as a school of agriculture, and a school of animal husbandry. I had many acquaintances and some friends among the faculty of these two schools. Many of them came to Stalinabad/Dushanbe after being kicked out from universities and research institutes in the Ukraine and central Russia.

I was well aware of the preceding events of 1948 when Lysenko, who enjoyed direct support from Stalin, eliminated most of the prominent biologists and became an omnipotent viceroy in charge of biological science in the USSR. I learned firsthand the ugly stories of my colleagues' persecution. These persecutions did not stop when these biologists found what at first seemed to be a haven in the remote mountainous country of Tajikistan. It was a very depressing picture of these fine scientists being subjected to continuous denunciations, verbal assaults, derision, and ultimately to dismissal from their positions for allegedly adhering to the "bourgeois pseudo-science of Mendelism-Morganism-Weissmannism." Jews were subjected to especially severe treatment, mostly resulting at best in their dismissal and at worst in arrests.

Although I was not a biologist, the vigilant KGB found a way to get to me as well. In 1958 I was arrested, convicted by a kangaroo court of "anti-Soviet propaganda" and sent to a Siberian prison camp. In the prison camp I met many outstanding writers, scientists, artists, and engineers. We discussed the oppressive and repressive system in the USSR, the stifling atmosphere of one-party control, the atrocities of the KGB and many other subjects, so that every participant in those discussions acquired an immense amount of knowledge far exceeding the individual experience of a single person.

And what about the comparison of their opponents to Nazis, stormtroopers, Goebbels (or Himmler) and the like, to which the ID advocates resort along with the comparison to Lysenko and the Soviet oppressive system? [3]

In 1941, when I was 16, I volunteered to fight the Nazi assault on Russia. In the immediate aftermath of the war I served in the Soviet Zone of Occupation in Germany. In the mess that followed the fierce battles of the war, piles of German documents, letters, old newspapers etc. lay around here and there. Being fluent in German, I spent many hours inspecting these documentary remnants of the monstrous Nazi regime. I was struck by the amazing similarity of the Nazi propagandistic language and ritualistic behavior to those of the Soviet authorities. Often, just replacing the name of Hitler with that of Stalin would make a document perfectly suitable for use in the USSR.

My experience shows clearly that behavior and methods of dispute of the ID advocates are much closer to the behavior of Lysenkoists, Soviet authorities, or Nazis, than is the behavior of their opponents.

To illustrate my claim, let us review certain facts. I'll now look at two features of both groups' behavior. One feature is how the disputants speak about themselves, and the other feature is how they speak about their opponents.

How ID advocates speak about themselves

In a blurb on the dust cover of Dembski's book *Intelligent Design*, Rob Koons, who is a professor of philosophy at a Texas University, writes, "William Dembski is the Isaac Newton of information theory, and since this is the Age of Information, this makes Dembski one of the most important thinkers of our time." [8]. Reportedly, Koons

repeated the same accolade at a conference at Calvin college a few years later.

In an introductory note to Dembski's *The Design Inference* another anti-Darwinist, and a writer of popular books on mathematics, David Berlinski praises Dembski's work in similar superlative terms [9].

Michael Behe, a biochemist acclaimed by the ID advocates as a pioneer in the modern revival of the ID concept, in the foreword [10] to Dembski's *Intelligent Design*, dabbles in prophecies predicting the triumph of the ID which will occur thanks to Dembski's great insights. He writes, "...[U]ntil Dembski, thinking about how we detect design was like writing before the alphabet or calculating before Arabic numerals." (page 9). On page 12 he adds, "I expect that in the decades ahead we will see the contingent aspects of nature steadily shrink. And through all of this work we will make our judgments about design and contingency on the theoretical foundation of Bill Dembski's work."

Another supporter of the ID movement, Charles Colson seems to be especially fond of the epithet "brilliant" regarding the literary output of the ID advocates. In a blurb on the cover of Phillip Johnson's *Defeating Darwinism by Opening Minds*, Colson asserts that Johnson's analysis is "brilliant" [11]. In a foreword to William Dembski's book titled *The Design Revolution*, Colson again uses the same epithet, telling the readers that Dembski is a "brilliant thinker." [12].

In a blurb for Dembski's *No Free Lunch*, Andrew Ruys of Australia, who is introduced as a "Queen Elizabeth II fellow in bioceramic engineering" refers to Dembski's "formidable intellect." [13]. As Ruys tell us, Dembski's law of conservation of information has implications "which are revolutionary in their significance for the study of life sciences in the new millennium." It looks like the ID advocates and friends are loath to speak in terms of periods of time shorter than millennia. For Ruys, Koons, and their fellow travelers, the devastating critiques of Dembski's alleged law of conservation of information from a number of scientists seems to have left no impression on them, so, instead of giving a thought to the critique, they prefer to indulge in a much more pleasant mutual admiration which often segues into self-admiration.

J. Budziszewski, a philosopher at the university of Texas and of course a fellow of the Discovery institute, in a blurb for Dembski's *Intelligent Design* predicts that "the toppling of the Berlin wall will be small in comparison with the impending demolition of scientific naturalism." [14]. Who or what will actualize such a demolition? The work of Dembski, of course, which Budziszewski is pleased "to extol." Again, the ID advocates are not content with viewing their impending achievements as simply certain steps in the development of philosophy or science – their alleged breakthroughs are always on a par with the revolutionary historical events.

Moreover, many of the ID advocates do not shy away from self-praise. In William Dembski's early publication [15], he already compares himself to Kant and Copernicus. In *Intelligent Design* and *The Design Inference*, Dembski uses expressions such as "having profound significance for science" when referring to his own ideas. He is not stymied by the obvious puffery of his statements wherein he asserts that his concept has an "enormous advantage" over existing ideas.

Behe provides another example of self-admiration. In *Darwin's Black Box* (page 232-233) Behe writes that study of cells has led to indisputable proofs of design, and that this discovery "...[m]ust be ranked as one of the greatest achievements in the history of science. The discovery rivals those of Newton and Einstein, Lavoisier and Schroedinger, Pasteur, and Darwin." [16]. Since his concept of "irreducible complexity" is presented

by Behe as the most decisive proof of design on molecular level, it makes his claim to sound as an unfettered self-praise.

I challenge the ID advocates to quote legitimate scientists ever using such self-aggrandizing puffery. In the scientific literature such an exaggerated praise of achievements of colleagues is unheard of, not to mention a scientist explicitly praising himself or comparing himself to Newton or Einstein.

However, these displays of memberships in mutual admiration clubs as well as of the self-admiration sound very familiar if we recall both the Soviet and the Nazi propaganda.

In the early fifties Stalin decided that Russian "patriotism" (read: chauvinism) generously sprinkled with anti-Semitism would be a more potent force than internationalism. One of the results of that decision was a nauseating explosion of books, articles, lectures, etc., full of exaggerated acclaims of everything Russian. Textbooks were re-written (as the ID advocates urge us to do with biology textbooks) wherein the names of Western scientists and inventors were replaced with the names of hitherto unknown Russians who supposedly preceded the Westerners in every field of science and technology. For example, it was claimed that Lavoisier's law in chemistry was in fact discovered by Mikhailo Lomonosov, the steam engine was invented not by James Watt but by Ivan Polzunov, the radio invented not by Guglielmo Marconi but by Ivan Popov, the first airplane built not by the Wright brothers but by Alexandr Mozhajski, and even that Achilles of Greece was a Russian Prince! The endless stream of books was full of unlimited praise for incomparable virtues of the Russian culture and great genius of its practitioners, in terms similar to those used by ID advocates. (The real great contribution of Russian culture, including science, to the mankind requires no proof; the appalling feature of the described propaganda campaign was in its unbounded exaggeration.)

A similar picture emerges if we review the main features of Nazism. Like communists whose Bible was the writing of Marx, Engels, and Lenin, the Nazis had their own Bible – *Mein Kampf* by Hitler plus a number of lesser sacred texts such as the racist opuses by Alfred Rosenberg. Like ID, Nazism was inherently anti-science. The Nazis denounced, for example, Einstein's relativity theory as a "Jewish pseudo-science." A prominent physicist, Nobel laureate of 1905, Philip Eduard Anton Lenard, who was a devout Nazi, vigorously denied the validity of relativity theory only because it seemed to be contrary to his religion which was Nazism.

The official Nazi philosophy included the concept of the inherent superiority of the so called Aryan people to whom civilization owes all its achievements (sounds familiar if we recall the Russian priority campaign in the USSR, does it not?). The German nation was officially proclaimed to be the most authentic incarnation of these mythical Aryans, and everything German was acclaimed in superlative terms very much like the ID advocates incessantly praise themselves and their colleagues. Their opponents never do so. Neither do legitimate scientists in general.

Obviously, from the viewpoint of how each group speaks of itself, it is the ID advocates who behave in a way similar to the Soviet communists and the Nazis, the two groups sent to the ash heap of history.

How ID advocates speak of their opponents

Phillip Johnson is considered the leader of the ID movement. The notorious "Wedge" document is usually attributed mainly to him [18]. Johnson's books and articles are vivid examples of the manner the ID advocates treat their opponents. Perhaps the most amusing example of the ID advocates' attitude to anybody who is not within their ranks is found in Johnson's book *The Wedge of Truth*, where (page 92) he pronounces his verdict on some statement by Einstein, asserting that Einstein "was apparently unaware that his own statement was both immodest and self-contradictory."[6]

It hardly matters which statement by Einstein is Johnson referring to. Johnson teaching Einstein modesty and logic – a really fantastic picture. The Russians have an adage for such occurrences – they call it *a dream of a gray mare*. Throughout Johnson's books we encounter time and time again derision in its utmost rude form when he refers to scientists. "Wild nonsense" is his favorite epithet regarding the views of biologists and computer scientists (see, for example, page 74 in *Defeating Darwinism by Opening Minds*[17]).

Dembski is not far behind Johnson. For example, in his replies [19] to Richard Wein's and Erik Tellgren's critiques [20] of Dembski's *No Free Lunch* (critiques which, in reasonably polite and restrained language, pointed to faults in Dembski's use of the No Free Lunch theorems of Wolpert and Macready [21] and of his "law of the conservation of information") Dembski resorts to language which would be more suitable to an exchange of insults between members of rival mafia families. In his response to Wein, Dembski repeats several times the word "rubbish" in regard to Wein's arguments. A closer look at Dembski's opus reveals the paucity of real argumentation which therefore is replaced with irrelevant references to Wein's having no advanced degrees. In his response to Tellgren, Dembski refers to Erik's mathematical analysis which reveals inconsistencies in Dembski's logic, as "ugly mathematics." I believe this telltale expression alone deprives Dembski of the right to the title of a mathematician.

More recently, Dembski published [22] a critical review of an article by Nicholas Matzke [23]. At least 1/3 of that review is an irrelevant discussion of Matzke's education, affiliation and pen names. Based on these data, Dembski asserts that Matzke is allegedly not qualified to tackle the topic of his article – the scenarios for the evolution of a bacterial flagellum. Dembski seems not to notice the irony of his argument – he himself is not a biologist but nevertheless endeavors disputing arguments of professional biologists. Look, for example, at Dembski's meaningless calculation (see Dembski's *No Free Lunch*) of the probability of the flagellum chance generation, which is based entirely on a scenario no biologist ever suggested [23].

Many more rude personal assaults displaying Dembski's unfounded contempt of his opponents are scattered through Dembski's extensive literary output.

The Soviet and Nazi propaganda, while being implacable enemies of each other, used very similar propagandistic tools.

For both the Soviet and the Nazi propaganda machines facts were of no interest. Their goal was to brainwash rather than to find the truth, and one of the tools of both propaganda machines was throwing mud on everybody who was not promoting their line. In the early fifties, the common phrase the Soviet propaganda used when mentioning Harry S Truman, was "The drummer of war." Konrad Adenauer was a "warmonger and revanchist." The biologists in the USSR who did not enthusiastically shout pro-Lysenkoist mantras, were denounced as adherents of the false theories of Mendel,

Morgan and Weissmann, and the style of those denunciations abounded in derogatory terms and rude personal insults.

Nazi propaganda had its own versions of derogatory labels. The Western democracies were "Jewish-Capitalist entities." Name-calling was the permanent feature of both the Soviet and the Nazi disinformation machine.

It is hard to find in the scientific literature, as well as in sources critical of the ID theories, rude personal attacks or ad-hominem remarks. They happen but are exceptions. Such remarks, though, are a staple in the pro-ID literature.

For example, in the same report [4] where Wells referred to Himmler as "propaganda chief," we find the following statement,

"Although I felt afterwards (as I usually do after dealing with people like Krauss and Miller) that I needed a shower..."

Both the Soviet communists and the Nazis widely used cartoons where whoever they chose to claim to be their enemies were depicted as ugly creatures whose very looks were designed to invoke an extremely negative image of the objects of their attack. Perhaps especially ugly were the Nazi cartoons showing curve-nosed Jews drinking blood of their gentile victims, and committing other equally disgusting deeds. When Wells writes that after meeting Miller and Krauss he needs to take shower, it is an equivalent of those Nazi and Soviet cartoons except that this time the picture is in words rather than in graphics.

Not all ID advocates resort to the explicit name-calling and verbal abuse of their opponents, and those who do are not always so ill-spoken. However, ugly examples are by no mean uncommon in the ID advocates' output.

How tolerant are ID advocates and their opponents?

Two main tools of the Soviet communists were the informational vacuum in which they kept the people and the merciless hand of the Cheka, GPU, NKVD, MVD, MGB, and finally the KGB – as the apparatus of intimidation and persecution was sequentially renamed during the seventy-three years of the communist rule. The Nazis ruled for a much shorter time, and their apparatus of suppression never developed to such an omnipresence as the KGB enjoyed, but the Gestapo and other security branches of the Nazi machine were every bit as merciless as their communist counterparts. The slightest expression of discontent was immediately crushed so no voices of anti-Nazi or anti-Soviet feelings or views had a chance to be heard.

Look now at the situation in the ID-related controversy.

The ID advocates have conducted several meetings of their adherents, such as the "Mere Creation" conference at Biola university in 1996 [24], and similar events elsewhere. Not a single voice of the ID opponents was allowed to be heard at those events. Moreover, anyone not explicitly belonging to the ID society of mutual admiration had a hard time trying just to attend the ID advocates meetings as listeners. To have access to the ID advocates' meetings, one must share their philosophy and religious preferences.

The behavior of the opponents of the ID is different. Here are just a few examples. Michael Behe, the originator of the "irreducible complexity" concept, repeatedly repudiated by the ID opponents, was scheduled to give a talk at the *Science and Religion* meeting in Atlanta, GA in November 2001. The meeting was organized by

the CSICOP (The Committee for the Scientific Investigation of Claims of the Paranormal) which is squarely on the side of the ID opponents [25]. Behe did not show up, but this was not the meeting organizers' fault. Some other CSICOP's opponents (such as Owen Gingerich) gave their talks, unfettered by the conference organizers and the audience. William Dembski, one of the leading figures in the ID movement, together with another prominent member of the ID group, Paul Nelson, were invited to talk at the World Skeptics meeting in Burbank, CA in June 2002 (and they did talk there). Unlike the gatherings of the ID proponents, no ID advocate was ever prohibited from attending the meetings of their opponents.

In the thick anthology edited by Robert T. Pennock, [26] who is a known ID's opponent, there are reproduced, along with articles by many ID opponents, also numerous articles by Alvin Plantinga, William Dembski, Phillip Johnson and other ID adherents. Another anthology, *Science and Religion: Are They Compatible?* [25] edited by Paul Kurtz, who is a prominent figure in the Skeptic and Rationalist movement, includes Dembski's presentation to the meeting in Burbank despite the absence of substance in that piece of sheer polemics. The ID advocates never published an anthology containing a single article by their opponents.

The ID advocates have no Gestapo or KGB at their disposal, so they can't muzzle their opponents as the Nazis and the Soviet communists did. However, as becomes clear from their publications (see, for example Johnson's *Darwin on Trial* [27]), putting their opponents on trial (whose outcome – a verdict of guilty - would be easily predictable) is the ID advocates' sweetest dream.

Much more could be said about the tolerance and behavior of ID advocates and their opponents. The readers can decide themselves who are more like the stormtroopers in the dispute between the ID advocates and their opponents.

(Recently Dembski expanded his collection of alleged prototypes of vicious Darwinists, this time comparing evolutionary biologists to the judges at the Salem witch trials who sentenced people to death despite being aware of their innocence [28].)

How ID advocates predict the future

Both the Soviet communists and the Nazis were fond of claiming the imminent total victory of their "revolutions." Likewise, the writings of the ID advocates abound in such claims, asserting the inevitable collapse of the theory of evolution and the rapidly approaching complete victory of their ID concept, and often even announcing, in fits of self-admiration, that their revolution has already vanquished their opponents, that evolution is a dead (or dying) theory, etc. It is worth remembering that claims of the imminent death of Darwinism have been constantly and triumphantly announced by anti-evolutionists of various brands during all those over 140 years since *The Origin of Species* was first published. Nevertheless, evolution theory is not only alive and well, but the evidence supporting it constantly grows, buttressing its profound theoretical insights.

In his latest book titled *The Design Revolution* [29] Dembski maintains that the critique of his work is just what all geniuses and innovators have always been subjected to by the orthodox priesthood of the established science. He claims with an amusing aplomb that his intelligent design theory will inevitably and soon lead to a revolution in which science will be completely overhauled according to his and his cohorts' ideas. Well, let us wait and see. To my mind, Dembski and Company's epochal revolution in science more reasonably can be expected to result in their landing in the same ash heap of

history where the theories of phlogiston, caloric fluid, vitalism [30], and other discarded concepts already reside. A consolation for Dembski and Friends will perhaps be that they will have company of such great thinkers and discoverers as Velikovsky and Blondlot [31].

Conclusion

Wesley R. Elsberry and Mark Perakh

Our culture appreciates rhetoric and wit and cheers on even those we disagree with if they but express themselves well. But in trying to paint an unappealing picture of biologists as oppressors of truth, certain "intelligent design" advocates have indulged in unseemly polemics when they liken biologists to Trofim D. Lysenko and his comrades or to the Nazis. The lessons to be learned from actual knowledge of Lysenko's career and the subservience of science to politics in the Soviet Union and Nazi Germany should give pause to those enamored of "intelligent design." The costs of politicized science are high, both in terms of economics at the scale of nations (reflected in the long-term food shortages that the people of the Soviet Union endured) and in the personal equations of lives taken or grossly and unjustly disrupted in the dubious pursuit of purity of policy in science.

Acknowledgments

We would like to thank Matt Young, Brendan McKay, Paul R. Gross, Nicholas J. Matzke, and Glenn Branch for their comments on the draft of this article.

Notes

- 1.Stephen Goode, April 19, 1999, "Scientists find evidence of God," *Insight on the News. http://www.arn.org/docs/insight499.htm, last accessed 2004/02/09.*
- 2. William Dembski. *The Design Revolution*. (Downers Grove, Ill. InterVarsity Press, 2004): 302-303.
- 3. Quotations illustrating the penchant of ID advocates to compare their opponents to Nazis and Soviet communists can be seen at http://tinyurl.com/g384.
- 4. This quotation from Jonathan Wells's report can be seen at http://www.creationists.org/20020311OSBEwells.html
- 5. Hitler's Nazi party (its official full name was National Socialist German Workers Party) had several militarized wings. One of them (often referred to as Brown Shirts) was the SA (*Sturm Abteilungen*, *i.e.* "Storm Detachments") notorious for vicious violence against the Party's adversaries; it was prominent in the early years of the Nazi's rise to power; its members are properly called *stormtroopers*. Many of them, including their chief Ernst Röhm, who could become a potential rival to Hitler, were murdered on Hitler's order in 1934. The other was the SS (*Schutzstaffeln*, i.e. "Guard Echelons") also referred to as Black Shirts, whose role and influence greatly exceeded that of the SA after the Nazis took power; their chief was Heinrich Himmler; they committed unspeakable atrocities in the countries occupied by the German army in 1940-1945; although they were not the proper "stormtroopers," sometimes this label is metaphorically extended to them

- as well.
- 6. Phillip E. Johnson, *The Wedge Of Truth* (Downers Grove, Ill.: InterVarsity Press, 2000).
- 7. William A. Dembski. *Intelligent Design*: The Bridge Between Science and Theology. (Downers Grove, Ill.: InterVarsity Press, 1999).
- 8. Rob Koons. The blurb on the dust cover of William A. Dembski, *Intelligent Design: The Bridge Between Science and Theology*. (Downers Grove, Ill.: InterVarsity Press, 1999).
- 9. David Berlinski. Introductory note to William Dembski's *The Design Inference* (Cambridge: Cambridge University Press, 1998); the page has no number.
- 10.Michael J. Behe, "Foreword," in William A. Dembski, *Intelligent Design: The Bridge Between Science & Theology*, (Downers Grove, Ill: InterVarsity Press, 1999).
- 11. Charles Colson, the blurb on the cover of Phillip E. Johnson, *Defeating Darwinism By Opening Minds* (Downers Grove, Ill.: InterVarsity Press, 1997).
- 12. Charles Colson. Foreword to William A. Dembski, *The Design Revolution*, (Downers Grove, Ill.: InterVarsity Press, 2004). Here is the quotation from Colson's foreword (p.17): "Dembski is a pioneer and a brilliant thinker who is making a tremendous mark."
- 13. Andrew Ruys, the blurb for William A. Dembski, *No Free Lunch: Why Specified Complexity Cannot Be Purchased Without Intelligence* (Lanham, Md: Rowman & Littlefield, 2001).
- 14. J. Budziszewski, the blurb for William A. Dembski, *Intelligent Design: The Bridge Between Science And Theology* (Downers Grove, Ill.: InterVarsiy Press, 1999).
- 15. William A. Dembski, 1991. "Randomness by Design" http://www.designinference.com/documents/2002.09.rndmnsbydes.pdf, accessed on June 3, 2003.
- 16. Michael J. Behe, *Darwin'd Black Box: The Biochemical Challenge To Evolution*, (New York: Simon and Schuster, 1996).
- 17. Barbara Forrest. "The Wedge At Work: How Intelligent Design Creationism Is Wedging Its Way into the Cultural and Academic Mainstream." In Robert T. Pennock, ed., *Intelligent Design and Its Critics:Philosophical, Theological, and.Scientific Perspectives* (Cambridge, MA: MIT Press, 2001). Also, see Brian Spitzer, "The Truth, the Whole Truth, and Nothing But the Truth?" at www.talkreason.org/articles/honesty.cfm where the biologist and a believing Christian Spitzer thoroughly documents numerous distortions, misquotations and misrepresentations of the opponents' views typical of the literary production of Phillip Johnson (posted on August 4, 2002, accessed on Octrober 3, 2003).
- 18. Phillip E. Johnson. *Defeating Darwinism By Opening Minds*. (Downers Grove, Ill.: InterVarsity Press, 1997).
- 19. William A. Dembski, "Obsessively Criticized But Scarcely Refuted: A Response To Richard Wein."
 - www.designinference.com/documents/05.02.resp_to_wein.htm; Dembski, "The Fantasy Life of Richard Wein: A Response to Response." www.designinference.com/documents/2002.6WeinsFantasy.htm, accessed on December 26, 2002; Dembski, "If Only Darwinists Scrutinized Their Own Work as Closely: A Response To Erik."

- <u>www.designinference.com/documents/2002.08.Erik_Response.htm</u> . Accessed on January 16, 2003.
- 20. Richard Wein,. "Not a Free Lunch But a Box of Chocolate."

 www.talkreason.org/articles/choc_nfl.cfm, posted on May 6, 2002, accessed on October 3, 2003; Wein, "Response? What Response? How Dembski Avoided Addressing My Arguments." www.talkreason.org/articles/response.cfm, posted on May 27, 2002, accessed on October 3, 2003; Erik Tellgren. "On Dembski's Law Of Conservation Of Information."

 www.talkreason.org/articles/dembski_LCI.pdf. Posted on June 30, 2002, accessed on October 3, 2003. (The byline of this essay contains only Tellgren's first name, Erik).
- 21. David H. Wolpert and William G. Macready. 1997. "The No Free Lunch Theorems For Optimization." *IEEE Trans. Evol. Comp.* v.1, no 1, 67–82.
- 22. William Dembski. "Biology in the Subjunctive Mood: A Response to Nicholas Matzke." http://www.designinference.com/documents/2003.11.Matzke_Response.htm . Dated Nov. 11, 2003.
- 23. Nicholas J. Matzke. "Evolution in the (Brownian) space: a model for the origin of bacterial flagellum." www.talkreason.org/articles/flagellum.cfm, posted on Oct. 11, 2003, updated on Nov. 10, 2003 (actually posted on Nov. 12, 2003). (Nicholas J. Matzke, a long-time follower of the evolution/ID debate, has a double B.S. in biology and chemistry. After earning his Master's degree in geography, he painstakingly reviewed every recent scientific publication relevant to the evolutionary origin of the bacterial flagellum. The flagellum is the IDA's favorite example of "irreducible complexity," the evolution of which is supposed to be impossible or wildly unlikely. Matzke carefully synthesized the data to produce a detailed model for how the flagellum originated. Matzke's article was thoroughly discussed and highly acclaimed by many experts in the subject.)
- 24. For the proceedings of the 1996 conference at Biola university see Dembski, ed. *Mere Creation* (Downers Grove, Ill.: InterVarsity Press, 1998).
- 25. Paul Kurtz, ed. *Science And Religion: Are They Compatible?* (Amherst, NY: Prometheus Books).
- 26. Robert T. Pennock, ed. *Intelligent Design and Its Critics: Philosophical, Theological, And Scientific Perspectives.* (Cambridge, MA: MIT Press, 2001).
- 27. Phillip E, Johnson. *Darwin on Trial*. (Downers Grove, Ill.: InterVarsity Press, 1993 [1991]).
- 28. The comparison of evolutionary biologists to Salem judges is found in William Dembski's foreword to a book by Geoffrey Simmons titled *What Darwin Did Not Know*, Harvest House Publishers 2004 (this foreword can be seen at http://www.arn.org/docs2/news/Dembski013004.htm). As is often the case with Dembski's invidious comparisons, he seems not to realize that for an unbiased reader Salem judges appear in fact like spiritual twins of Dembski and his cohorts rather than of biologists. Indeed, Salem judges were religious zealots as Dembski and his friends essentially are. That the characterization of Dembski as a religious zealot is not just an arbitrary asseveration can be seen for example, from what Dembski said in his lecture on March 7, 2004 in the Fellowship Baptist Church (in Waco, Tx): "I think at a fundamental level, in terms of what drives me in this is that I think God's glory is being robbed by these naturalistic approaches to

biological evolution, creation, the origin of the world, the origin of biological complexity and diversity. When you are attributing the wonders of nature to these mindless material mechanisms, God's glory is getting robbed." He continued, "And so there is a cultural war here. Ultimately I want to see God get the credit for what he's done -- and he's not getting it." (Dembski's lecture was taped and the tape is available on request).

Like Salem judges, Dembski has never admitted a single error in his discourse despite the critique of his ideas by many scientists. He avoided answering such critique as, for example, that by David Wolpert, the co-author of No Free Lunch theorems who revealed Dembski's egregious misunderstanding and misuse of these fine theorems. Comparing evolutionary biologists to Salem merciless elders, Dembski has once again demonstrated his true character of a pseudoscientist who would not shy away from any device, however underhanded, to win the battle regardless of which side the truth is on. Indeed, in his latest post at http://www.designinference.com/documents/2004.04.Backlash.htm Dembski with a surprising frankness describes various subterfuges he utilizes in order to "have the last word" and to win the battle (like posting to the internet preliminary texts of segments of his forthcoming books to see what his critics may say, then modifying the final text in a way preempting critical comments, and deleting portions of the posts subjected to critique). Apparently he does not mind that his readers may construe such a behavior as not exactly fitting the requirements of intellectual honesty and pursuit of truth.

- 29. William A. Dembski. Preface to *The Design Revolution*. Downers Grove, Ill: InterVarsity Press, 2004.
- 30. (a) The term "phlogiston" (stemming from Greek and meaning "burned") was introduced at the beginning of the 18th century by Georg Ernst Stahl. It denoted a hypothetical component of all combustible materials (as well as of corrosionsusceptible metals). According to Stahl's hypothesis (which has its origin in the theory of Johann Joachim Becher suggested in 1669), oxidation (including burning) is a process wherein phlogiston is released from the material, leaving "ashes". The theory of phlogiston was abandoned by science as it did not conform to experimental evidence. (b) "Caloric" is the term that denoted a hypothetical fluid whose flow between various bodies was the essence of the heat transfer. The work of the Anglo-American chemist Benjamin Thompson (Count Rumford) at the end of the 18th century led to the demise of the caloric hypothesis – the heat was understood to be a form of motion; subsequently the thermodynamic science explained heat as the energy transfer via interactions of randomly moving particles constituting physical bodies. (c) vitalism is a theory (stemming from ancient philosophical systems, e.g. from the ideas of Aristotle) which explained the nature of life as allegedly resulting from a vital force peculiar to living organisms, whose essence is principally different from any other known physical or chemical forces. The development of natural sciences has led to the vitalism's losing its prestige as it has been abandoned by modern science, although its vestiges are still present in some philosophical systems.
- 31. (a) Immanuel Velikovsky was the author of several sensational books (e.g. *The Worlds in Collision*, New York, Macmillan, 1950) wherein he suggested various ideas having no foundation in facts but pretending to be scientific breakthroughs. He enjoyed a short-lived notoriety spread by popular media, but was never taken

seriously by scientists. (b) René Prosper Blondlot (1849-1930) was a French physicist who claimed to have discovered a new type of radiation, shortly after Roentgen had discovered X-rays. He called it the N-rays. In fact, no such radiation exists; this was a notorious example of false claims based on a crank scientist's self-deception.