

overview of the topics covered, which is much fairer to creationists than most evolutionist books.

References

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11. See also Larson, E.J. and Witham, L., Leading scientists still reject God, *Nature* 394(6691):313, 1998. The sole criterion for being classified as a ‘leading’ or ‘greater’ scientist was membership of the NAS; cited in, National Academy of Science is godless to the core — survey, <creation.com/article/4158>.

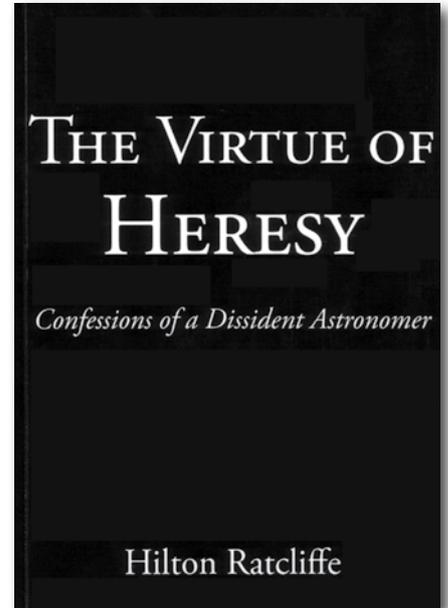
Heretic challenges the giants!

A review of
**The Virtue of Heresy:
Confessions of a Dissident
Astronomer:**
by Hilton Ratcliffe
AuthorHouse, Central
Milton Keynes, UK, 2007

John Hartnett

The subtitle of the book is “a daring exposé of cosmology's dark secrets”. I believe the author has achieved that, though in an unusual and somewhat “rambling” style. Ratcliffe is a daring author who lets go with blast after blast. He says after many attempts to “demystify the heavens, I became increasingly frustrated by ideas that just didn't harmonise.” That I can relate to. There is much out there in cosmology, astrophysics, relativity and quantum physics that doesn't seem to “stack up”, is internally inconsistent or needs to be explained with much hand waving nonsense. He certainly exposes many inconsistencies in these fields of science that (still) need serious consideration both experimentally and theoretically. He is not the first to expose these issues and cites other authors as he proceeds through the book.

He uses a few literary techniques/utilities that I really don't care for and which, on balance, I felt made it more difficult to follow than helped explain the ideas in the book. In his early chapters and in a few later chapters, he uses “Haquar” an imagined futuristic alien-like space traveller to refute notions in the cosmos that many have assumed to be true. In trying to attribute the design in the universe to a superior intelligence he uses the notion of “The X-Stream” but it is unclear, who or what that is.



He claims that science has been flawed by the current theoretical approach; that is, the mathematics has preceded the physics. I agree not all mathematics is realized in the physical realm, but also it may be a mistake to reject the symmetries found in mathematical studies that may show new insights into the laws of nature. Yet also I do agree with Ratcliffe when he argues the follies of string theorists and the like, who have long ago departed from a sound experimental basis. Without doubt it is dangerous to proceed into unknown territory, for four decades now in the case of string theory, without a single experimental verification. But I would also warn not to “throw the baby out with the bathwater”; mathematics is the language of physics and I believe a more conservative approach is needed to carefully examine new theoretical developments, combined with a will to discard the paradigm that is failing, instead of trying to prop it up with never ending patches—standard big bang cosmology for example.

Expanding or static universe

Ratcliffe is critical of the Copenhagen interpretation of quantum mechanics and also of aspects of relativity as espoused by Albert Einstein. This is not new and others have preceded him. However, the inconsistencies between general relativity and quantum physics are well known in modern physics and are the subject of debate and research, but they are not in the same philosophical camp as the big bang or biological evolution myths.

The author makes many deserving criticisms of the big bang myth and promotes the idea of a static universe, with many good arguments, which should be carefully evaluated. When astronomers look deep into the universe, they don't find a hierarchy of development of galaxies from large and complex nearby to the small and simple at great distance, but they find large complex galaxies at all epochs in the cosmos. The universe is organized *into structure* from star clusters, to galaxies, to galaxy clusters, to superclusters at all epochs. This is not what we would expect from the expanding big bang universe model.

Also, type Ia supernova light curves exhibit no time dilation as they should in an expanding universe. The stellar explosions are believed to be from the collapse of a white dwarf star of a very specific mass and hence this makes their supernova luminosity a standard candle for distance measurements in the cosmos. But if their light curves, which describe their brightening and dimming over time, show no stretching due to time dilation, then that would imply the theory from which the interpretation of the cosmological

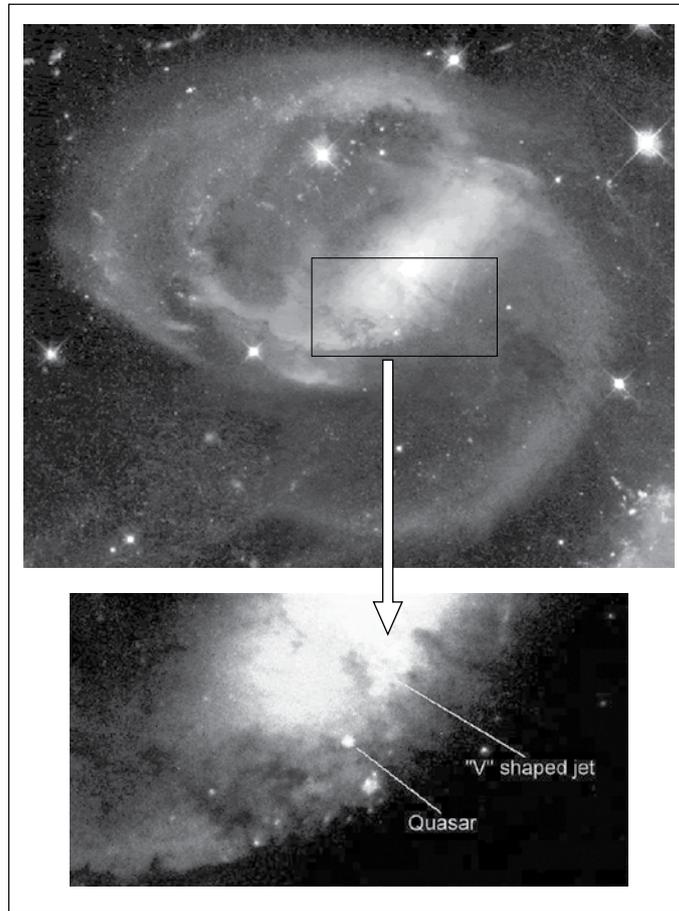


Figure 1. Nearby spiral galaxy NCG 7319 with high red-shift quasar at arrow (below). V-shaped jet clearly seen entrained behind the ejected quasar.

After NASA/Hubble Space Telescope

expansion is derived is also in error. Hence they are not a standard candle, and the supernova-derived redshift-distance relationships are in error and cannot be used to establish the current accelerating universe model.

The arguments presented by Halton Arp for the ejection of quasars from parent active galaxies are important in astrophysics but they have been largely ignored. Over decades, he has showed that there is much more than a chance alignment in the sky of these objects with an active central galaxy. A more probable explanation is physical association. In 2004, Arp published his *pièce de resistance*. He and his colleagues published astounding evidence to support his hypothesis—a high-redshift quasar ($z = 2.1$) lying between Earth and a low redshift galaxy NGC 7319 ($z = 0.022$). There is no way it could

be said that the quasar was in the background of the galaxy; even a Doppler blue-shifted plume of gas is seen to be entrained behind the quasar ejected towards the observer.

In 1967, Margaret and Geoffrey Burbidge noticed that the redshifts measured from quasars or Quasi Stellar Objects (QSOs) seem to be more commonly near $z = 1.95$. Once sufficient QSO redshifts were measured, in 1971 K.G. Karlsson found that they tended to fall at certain preferred values $z = 0.061, 0.30, 0.60, 0.91, 1.41, 1.96$... (the last values listed here being the one the Burbidges had found). This fact undermines the standard interpretation of quasar redshift being from the expansion of the universe (the Hubble law) and calls into doubt all redshifts of extragalactic objects.

That brings us to the problems of galaxy formation in an expanding universe. It seems to be more logical that the dominant mechanism for growth of structure in the big bang universe, i.e. galaxy mergers, should happen in a static universe. Ratcliffe claims that a big problem in galaxy formation has been the absence of the inclusion of plasma and electromagnetic effects. In modeling their structure and formation, the effects of the dominant component plasma—the fourth state of matter—needs to be taken into account. Only through the “pinch effect” (seen in fusion reactors and the Sun) can gravity overcome the gas pressure to form a star.

Ratcliffe promotes an infinite eternal universe. He argues that logic dictates that the universe must be infinite and has always existed. To me, to conceive something that is infinite

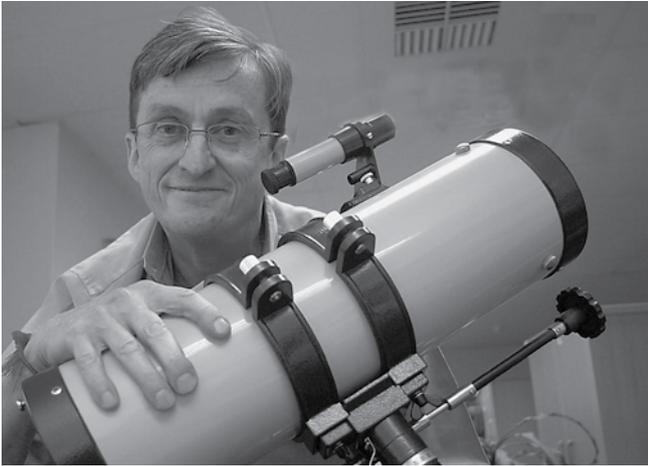


Figure 2. Dr Hilton Ratcliffe, astrophysicist, Christian and heretic to the astronomy establishment. He continues to challenge the giants from his home in Durban, South Africa.

seems contrary to rational thinking when nothing in our experience includes infinity. I can't understand his logic on ruling out a finite universe; I mean bounded and finite. However, it depends on how you define finite; space could extend infinitely but not matter, for example. The author seems to hold to a view that there is design in the universe, and that design is found on all scales; imprinted on atoms, on biological systems, and even on the largest structures. They were destined to evolve, because there is an underlying intelligence that determined that the universe should continually generate structure and life from eternity past to eternity future.

In at least 11 places we read of God “stretching out the heavens” (e.g. Job 9:8, Isaiah 40:22 and 42:5, Jeremiah 10:12, Zechariah 12:1). Some creationists, notably Russ Humphreys, have concluded that God stretched out the heavens and that this is evidenced by the ubiquitous redshifts of galaxies in the universe. It is evidence consistent with expansion but it does not demand it. Cosmological redshift has not yet been experimentally established. References are made to things like putting up a tent, which doesn't imply the fabric is stretched, and that God created the heavens and the host within. So if it turned out that the universe

is not expanding, or that the galaxy redshifts do not imply expansion, then these verses would take the more straightforward meaning that God made all the stars in the heavens like putting up a tent (only a metaphor), not that the tent was made of some stretchy materials.¹ Also, Psalm 147:4 and Isaiah 40:26 suggest that the number of stars

in the universe is finite. So it is not unreasonable on biblical grounds to believe that the universe, meaning the number of galaxies and stars, is finite.

Biblical history?

Overall I enjoyed reading the book, but I feel it falls short for the following reasons. The historical validity of the biblical text seems to carry no weight with the author. He is looking at nature and trying to deduce history from that. I personally hold to the view that despite great mystery, the Bible was written to be understood. And it is valid to deduce from the text how it is meant to be understood, i.e. the grammatical-historical interpretation. But it is invalid to start with presuppositions outside the text and then say it is just a “different but equally valid interpretation”. Otherwise, one may as well reinterpret the Resurrection as some sort of symbolism. A crucial point is, how did Jesus and the inspired NT writers understand it? How did the bulk of the Church take Genesis all through the ages? Do we need modern science to understand it, not in a deeper sense, but in a sense that is 180 degrees opposite to how it has been understood throughout the ages? That would make God someone who cloaks the text in such mystery as to be guilty of misleading us!

The impression I get is that Ratcliffe, in his challenge to the false philosophies in the world, rejects the possibility that the Bible contains any significant historical or “literal” truth. He speaks of scientific discoveries overturning dogma of the day, but that can only be true where the dogma was built on a misunderstanding of the biblical text. (Of course, the underlying premise here is that as Christians we believe the Bible to be the written Word of God. Some who call themselves Christians claim it to be just another historical text on par with other great myths, e.g. the epic of Gilgamesh,² yet it contains important moral truths despite the fact that its history is inaccurate at best.) I don't disagree with him that science cannot discover God—it may *never* do so because God is a spirit—but the reverse does not follow; that what God has written in the Bible must be false in reference to nature because it was written in simple language for the “primitive” mind or some similar idea.

Theistic evolution and design

I read the first edition of the book. Through email communications with Ratcliffe I discovered that he significantly changed chapter 5. This chapter is important as it deals with free will, fate, life, its origin and design. It is now clear to me that Ratcliffe could be described as an theistic evolutionist. He opens chapter 5 with quotes in praise of evolution, Charles Darwin and Ernst Mayr. He quotes Mayr:

“... there is no longer any need to present an exhaustive list of proofs for evolution. That evolution has taken place is so well established that such a detailed presentation of the evidence is no longer needed. In any case, it would not convince those who do not want to be persuaded [emphasis in original].”

Ratcliffe then writes:

“I fully agree. Evolution has taken place. It is taking place right now. I am evolving, you are evolving, and

so is every other biological species. That fact is certain and measurable [emphasis in original].”

He even goes on to say how much we needed Darwin and even “blesses” him. (p. 101). He wrote a small essay on the history of Charles Darwin (pp. 103–105), but that has been deleted from the second edition.

After reading this chapter I emailed the author with my comments on the chapter and he informed me that it had been extensively rewritten, and sent me a copy. Yet all of the above remains unchanged in the second version. I told him that I get the impression from chapter 5 that he supports molecules-to-man evolution, but only that, in addition, some design must have been involved, i.e. templates upon which life was built came from some intelligence. Ratcliffe protested that he certainly does not support such goo-to-you type evolution and said that “I’d made that clear, at least in chapter 5.” He did not. If that was his desire I think he missed the mark by a wide space in regard to life and its origin. Yet he says (pp. 101–102):

“Notwithstanding any of the above, I must tell you that evolution as a complete answer to the advent of living things on Earth, and as a model for the genesis of the physical Universe, fails completely.”

You can’t have your cake and eat it too.

As a general comment, and this applies to the whole book and not just the issue of biological evolution but also in regard to all the useable energy in the universe, Ratcliffe has not mentioned at all or dealt with the issue of entropy and thermodynamics. In praising the virtues of biological evolution, though he tells me he is trying to say that “without design life cannot exist”, he writes that Darwinian evolution is a valid scientific theory supported by evidence. I suggested to him that either he had not made it clear what he is trying to say or that he does not understand genetics and natural selection. If he understood

genetic entropy he would realize that natural selection (which was not first discovered by Darwin as he says, but by Edward Blyth³) only works on *existing* information. This means all species have very limited times over which they can exist. It is the opposite of what Charles Darwin proposed in his books *Origin of Species* and *The Descent of Man*.

The following comments are specific only to the first edition, as I state exact page numbers as I have above. The issue of genetic entropy alone completely undermines notions of life existing on Earth for billions even millions of years. The author writes on p. 106:

“Today, no one still in possession of his sensibilities can refute the facts that the Earth is billions of years old, and that animal species, including *Homo sapiens* itself, have to some extent at the very least evolved over a long period of time.”

Probably that makes me “not in possession of my sensibilities”, as I would state that not only is there not a shred of experimental observational evidence for Darwinism as a mechanism for the origin and development of life on Earth, there is no indisputable, irrefutable method to measure the age of the Earth. All methods rely on untestable unprovable assumptions. Mankind, as a population, has only historical knowledge to a few thousand years BC. Even this is sketchy at those limits, and history is often rewritten with each new discovery. Few historical texts survive, yet the Bible remains one of the best resources of early history. Ratcliffe writes (p.106):

“Darwinism, as it became known, was largely untested and marked a complete turnabout in scientific thought. But it astonishes me no end that there are, after nearly 150 years, still intelligent apparently rational people fighting tooth and nail to show that the notion of evolution

is nothing more than a conspiracy by servants of the devil.”

Unless he has confused natural selection acting on pre-existing genes with evolution, he shows his own blind hypocrisy. The book after all is an exposé of the short-comings of modern science—demanding that a paradigm shift is needed in our fundamental thinking about the cosmos and particle physics—then where is the openness to challenge the biggest fraud ever perpetrated on the intelligence of thinking man? I mean evolution. Again on page 107 he says it fails, but just after he says it is an intrinsic part of life. Confused? So was I.

On p.112 he talks about “added structure”, and that it will be “constrained by the overall genetic blueprint of the organism”. It seems he is having a bet each way: that if any evolution does happen to occur from which an organism can benefit, natural selection will be the hero. He says:

“In its quest for survival, evolution always plays by the rules. If it experiences sight, it will hang onto it.”

But that is observationally unfounded; it has never been observed; it is fanciful fiction. Darwinism is mere story telling, not repeatable scientific methodology. Only when the genetic information pre-exists can we get natural selection working on it for an organism to adapt to an environment, and that always means a loss of information or at most it is neutral in a few very limited cases.

And when the author describes the process where natural selection selects against the added trait he writes (p.114),

“All that billion-to-one intricacy is going to be thrown out because it does no good, and we are right back to square one...”

But that is not how it works. The slate is not wiped clean. The organism does not start again with a fresh clean palette. Mutations are nearly all deleterious, and cannot be selected against, hence they accumulate

in the population of the organism and result in a loss of fitness. They eventually destroy the organism by genetic meltdown—just the sort of mechanism we see elsewhere in nature where entropy is at work.⁴ Parenthetically, I would add that only a creator could start the universe and the organisms in it in a low entropy state. And I am afraid that is a nail in the coffin of the eternal universe also. Quasar ejections cannot solve the problem to reintroduce new energy into the universe as the Gibbs free energy always runs down, or we must abandon the physics we know in the lab.

On p. 118 he states:

“We cannot deny that evolution does take place, and that the universe and its endless populants are constantly evolving over an immense history. The cornerstones of the X-Stream are evolution and infinite times; they are fundamental to the way that the universe runs.”

But it critically depends on your definition of evolution. At universities they usually “muddy the water” on that. If by evolution he means change, then he doesn’t understand genetics. I would say that natural selection does take place, but no amount of natural selection will ever increase genetic information. So the general reader will get the impression that the author is talking about “molecules-to-man evolution” happening over long periods of time.

In the 2nd edition he says:

“*We are designed to evolve.* We can see this process of change in the world about us, and we can examine or even alter the means of procession. Because evolution takes place so slowly on the human time scale, it is the study of biological relics left to us by a succession of epochs in the 4-billion-year history of life on Earth that best illustrates how it works [emphasis in original].”

But “evolution” in that sense NEVER takes place. If I may quote the anti-creationist Richard Dawkins, “it is

just that it hasn’t been observed while it is happening”.

In the 2nd edition, Chapter 5, the author finishes this point with:

“Why? If we say that God gave man the ability to discover things, and acknowledge that this is realised progressively, then we imply that the *species* has a divine destiny. We thereby theologically support the process of evolution, so I can’t understand why the Christian fundamentalists (particularly) so vehemently deny it [emphasis in original].

“If you were to interrupt me here and say that the preceding pages contain what looks very much like a glowing endorsement of Darwinism, I would have to agree, but with reservations. My admiration of Darwin and Mayr is real, and I do believe that evolution is an intrinsic part of life on Earth, and possibly even of cosmology. How then could I assert with such certainty that the theory fails? Like nearly every other dilemma we face in physics, it comes down to a question of scale. Darwin’s theory asserts that evolution has taken place without pre-emptive design from the most simple manifestation of a living organism right through to the most complex and diverse beings in the world today (remember that Darwin referred only to biological evolution as evidenced on Earth). Big bang Theory makes even grander claims, postulating that the entire Universe evolved in infinitesimal steps from featureless, characterless fuzz right up to the majestic sweep of galaxies and beyond. I call this ‘A–Z’ evolution. It’s impossible. I can see you recoiling in horror, but stay with me and I’ll tell you just why it’s impossible on that scale, and redefine the tight boundaries within which it very successfully operates.”

He then goes onto talk about design, templates and irreducible complexity in living organisms. But

still gives the distinct impression that evolution in the sense of simple-to-complex occurs over long periods of time. He says “So maybe things are moving towards perfection...” (p.119), and “compels him to evolve ...” (p.123), but this is impossible; genetic entropy is increasing every generation; it results in a relentless degradation of the genome, not progress toward perfection.

Conclusion

I expressed these above-listed comments to the author by email and he responded. He wrote:

“Now I look back and try to fit my opinion on evolution into my scientific ethos. As an astrophysicist, that means addressing it purely in terms of how it is defined in Big Bang theory, that is, non-biological or ‘A–Z’ evolution as I term it. It occurred to me that it was simply impossible, logically and empirically, for the Universe we see around us to have emerged by chance, random events in an infinitesimally smaller, infinitely simpler ‘primeval atom’ without design. Design is the product of intelligence. Furthermore, the requirement of design (a divine precursor to everything) does not necessarily verify BBT. As far as I can see, the Creator created the Universe as it is, whatever that might be. We can see a small part of it, and we must use whatever gifts we have to decipher the signals. He did not make our job plain or easy!

“So what came out of my meeting with Mayr was a vision of the need for a way that evolutionists and creationists, atheists and believers, could coexist and talk with each other rather than at each other in scientific forums. The first step would be to develop the necessary etiquette and terminology that offends neither party to the debate. We should avoid the words, phrases and expressions

that trigger hostility and negative barriers. In science, we stick to science, and in faith, we stick to our belief system. The two belong in different classrooms, but I can comfortably take my faith into the arena of science. I just don't use it as an argument.

"That is what I attempted to do in *The Virtue of Heresy*, and I can see now that I didn't do a very good job of it, so I am going to try and try again."

References

1. The starlight-travel-time problem could still be explained with a supernaturally imposed time dilation event on Day 4 of Creation Week when God created the Universe. I first suggested this in J.G. Hartnett, A new cosmology: solution to the starlight travel time problem, *Journal of Creation (TJ)* 17(2):98–102, 2003.
2. Yet the features of the Gilgamesh Epic show that it's a distortion of Genesis. For example, its ark is shaped like a cube, a nonsensical top-heavy structure for a boat, but explainable because a cube requires only one dimension to be specified, consistent with loss of detail from the true account. See Osanai, N., *A comparative study of the flood accounts in the Gilgamesh Epic and Genesis*, MA Thesis, Wesley Biblical Seminary, USA, 2004; <creation.com/gilg>.
3. See <creation.com/brainchild>
4. See Sanford, J.C., *Genetic Entropy & The Mystery of the Genome*, Ivan Press, Lima, NY, 2005; review by Royal Truman, *Journal of Creation* 21(1):43–47, 2007. Genetic meltdown occurs in a species whose numbers get dangerously low and any further breeding between existing adults results in catastrophic genetic damage because they carry the same bad genes.

If you can't beat them, ban them

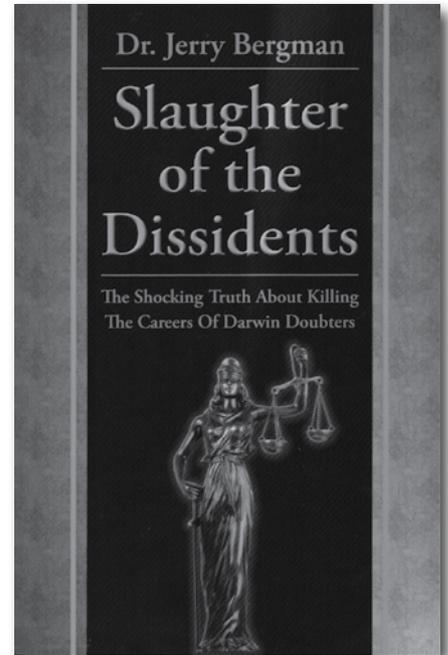
A review of
Slaughter of the Dissidents:
by Jerry Bergman
Leafcutter Press,
Southworth, WA,
2008

Lloyd To

Suppression of criticism of evolution is not a recent phenomenon. In his Preface to the 1959 (100th anniversary) edition of *Origin of Species*, Professor W.R. Thompson, FRS, detailed the shortcomings of evolutionary theory, and then commented:

"It is therefore right and proper to draw the attention of the non-scientific public to the disagreements about evolution. But some recent remarks of evolutionists show that they think this unreasonable. This situation, where scientific men rally to the defense of a doctrine they are unable to define, much less demonstrate with scientific rigour, attempting to maintain its credit with the public by the suppression of criticisms and the elimination of difficulties, is abnormal and undesirable in science."

Slaughter of the Dissidents gives a detailed report on the educational establishment's efforts to insulate evolutionary theory and philosophical naturalism from critical assessment. It describes the suppression of critical views, and the victimisation of dissenting teachers and pupils in schools, and students and faculty in universities. The report is largely confined to the situation in the US. The author uses the term "Darwin Doubter" to describe the victims, and for convenience I shall follow his usage.



Suppression by schools and colleges

Cases range from the puerile to the criminal. An example of the first involves a professor who got his students to read two articles critical of aspects of evolution from the well established *Journal of Theoretical Biology*. He was reassigned to the History of Science Department, and the college even cancelled its subscription of the journal, although it is hardly a creationist publication. An example of the second involves a professor who "came out of the closet" about Darwinism. He was struck with the fist by a colleague and sustained a broken nose which required surgery. No action was taken against the assailant. "The dean told me he could understand why my ideas made them mad."

The youngest instance involves a 12 year old boy who said he didn't believe in evolution, and was ridiculed by his teacher in front of his class. She also warned him never to say that again in her class or she would take him to the principal for discipline.