

Matti Leisola— bioengineer dumps Darwin, declares design

Heretic: One scientist's journey from Darwin to design

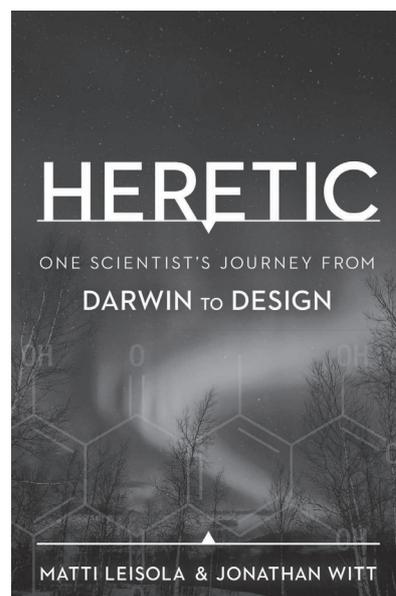
Matti Leisola and Jonathan Witt

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Matti Leisola and Jonathan Witt have written a very readable and engaging book in 11 layman-friendly (and one technical) chapters. Endnotes appear at the back, along with a helpful alphabetic index, all in 257 pages. *Heretic* outlines the experience and career of bioscientist Matti Leisola and his conversion from evolutionist to Intelligent Design advocate. This is not a science book; it is a personal account of a journey from Darwin believer to Darwin skeptic and a career spent in the practical pursuit of intelligent design in academia, industry, and public discourse.

Leisola is a high-flyer in both academia and industry. He was the Dean of Chemistry and Material Sciences at Helsinki University of Technology, with 140 published papers, and is expert in rare sugars and enzymes. He served as research director of an international biotech company (Cultor), co-founded the International Society of Rare Sugars and became founding editor of *BIO-Complexity*, an online journal which “aims to be the leading forum for testing the scientific merit of the claim that Intelligent Design (ID) is a credible explanation for life”.¹ Because of this, Leisola is well worth listening to.



Evolution and phlogiston: theories that explain everything explain nothing

This book is a fun read. I particularly enjoyed Leisola’s ability to poke fun at evolution. The following highly quotable-quote from Leisola, comparing the plasticity of evolution to the chemical paradigm of ‘phlogiston’, is gold. He explains:

“The story of phlogiston shows how an established paradigm may persist in the face of contrary evidence because its supporters patch it up *ad nauseum* instead of following the evidence. The Darwinian theory of evolution is the phlogiston of our day, festooned with a myriad and growing number of patches” (p. 198).

Leisola waxes eloquent, stating: “Evolution is slow and gradual except when it is fast. It is dynamic and creates huge changes over time,

except when it keeps everything the same for millions of years. It explains both extreme complexity and elegant simplicity. It tells us how birds learned to fly and yet also lost that ability. Evolution made cheetahs fast and turtles slow. Some creatures it made big and others small; some gloriously beautiful and others boringly grey. It forced fish to walk and walking animals to return to the sea. It diverges except when it converges; it produces exquisitely fine-tuned designs except when it produces junk. Evolution is random and without direction except when it moves toward a target. Life under evolution is a cruel battlefield except when it displays altruism. Evolution explains virtues and vice, love and hate, religion and atheism. And it does all this with a growing number of ancillary hypotheses. Modern evolutionary theory is the Rube Goldberg of theoretical constructs. And what is the result of all this speculative ingenuity? Like the defunct theory of phlogiston, it explains everything while explaining nothing well” (p. 199).

Intelligent Design proponent

Leisola’s book *Heretic* is in the ID camp, having been published by the Discovery Institute. However, several statements in his book lean towards a biblical understanding of history, including the Fall (p. 204). Unfortunately, there are no direct statements regarding the age of the earth, and in places Leisola seems to take the ‘Cambrian explosion’ at face value (pp. 48–51, 54–55, 101, 148, 234).

Also absent from Leisola’s book is any direct discussion of a ‘spiritual conversion experience’, but reading between the lines one can listen to a fellow believer of great maturity, integrity, and experience with desire to reach others with Gospel truth. This is

confirmed in an earlier interview with Jonathan Sarfati for CMI’s *Creation* magazine in 2010, where Leisola discusses his clear conversion from atheism to Christianity.² In *Heretic*, Leisola discusses theistic evolution (TE) and makes some refreshing and candid admissions. I found myself holding my breath while reading, because he states:

“Some theologians find themselves attracted to this hybrid approach [TE], and I understand how it might be a tempting option for those repeatedly told that evolution is a ‘fact’ supported by the ‘scientific consensus’. I understand because I myself was convinced of it in this way as a young scientist. But my journey from Darwin to design has convinced me that the great weight of scientific evidence is against theistic evolution because it is against blind evolution generally” (p. 213).

Leisola is really describing his journey from theistic evolutionist to biblical creationist. In *Heretic*, Leisola outlines his growing skepticism over evolution, after his own philosophical presuppositions were challenged by reading Francis Schaeffer, who talked of evolution producing a “line of despair” between faith and reason (pp. 17–18). Leisola recognized that methodological naturalism is the only guiding principle allowed by the scientific establishment, and origin-of-life stories have to be materialistic, otherwise they are censored. Leisola admits most scientists believe evolution because other scientists believe it, and when pressed, have very little evidence to back up their beliefs. He recalls how he began to see through the bluster and hand-waving and recognized the steps for life to arise by chance were impossible.

I was very impressed to read of how influential Leisola was with his students, who found his critique of evolution during his lectures very

stimulating, some even remembering 40 years later what they had heard in class (pp. 58–59). During his academic career (late ’70s to early ’80s), Leisola had significant public impact due to his skepticism of evolution, both in print and on radio. This included interactions with high-profile professors who defended Leisola’s position, knowing the evidence was lacking in the Darwinian account of origins. For instance, Professor Jouko Virkkunen, physicist at Helsinki University of Technology, publicly sided with Leisola, live on TV, doubting the Darwinian mechanism could ever produce new biological structures—such as a new hand—stating, “I do not understand how a random mechanism can produce fine mechanisms, a control system, and the computer program in the brain to move the hand. Evolution stands on clay feet” (p. 71).³

Design aired on national TV

Leisola recounts how he became involved in a Finnish TV production that was interested in his conversion from Darwinist to design advocate. The resulting film *The Deep Waters of Evolution* is available on YouTube,⁴

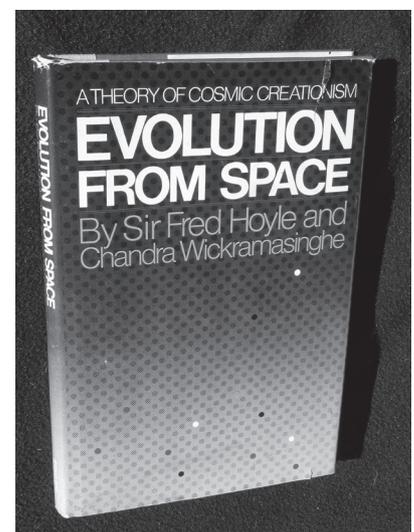


Figure 1. Chandra Wickramasinghe openly questioned Darwinian evolution in his book co-written with Fred Hoyle.

and is worth watching, as it sums up Leisola's career experiences well to that point. There are a number of significant interviews in the film including Dean Kenyon, who recalls how he recanted his own theory of chemical evolution after reading A.E. Wilder-Smith's criticism in his book *The Creation of Life* (figure 1). Here, Wilder-Smith concludes from Kenyon's work, quipping "Kenyon's theory would lead us to believe, in essence, that life is by no means an accident but that it is based on a secret hidden in non-living matter."⁵ Kenyon recounts how he later met Wilder-Smith and admitted he wasn't angry about the criticism of his theory because, in his words, it was correct! A number of others were approached for comment in the making of the film, including Chandra Wickramasinghe, who recounts how he had to flee Britain to his native Sri Lanka, after receiving death threats for his public questioning of evolution in the 1981 book titled *Evolution from Space*, co-written with Fred Hoyle (p. 110) (figure 2).

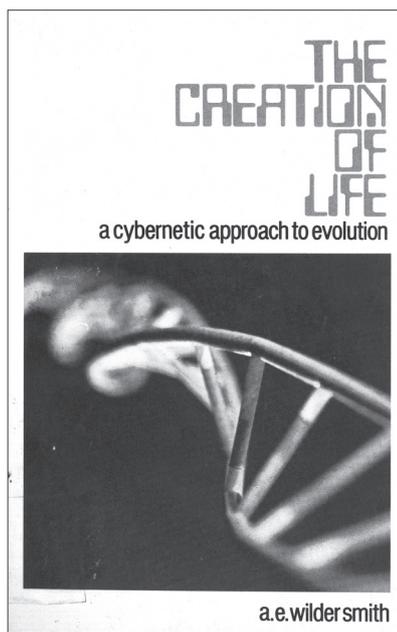


Figure 2. A.E. Wilder-Smith provided a thorough refutation of chemical evolution.

Leisola complains that even though *Deep Waters* was aired on Finnish TV it was shown on Good Friday, as though it were a piece of 'religious programming', and not purely a scientific critique of Darwinism. As he points out, all science documentaries and TV programming in Finland (and typically in the West), are pro-evolution and never show a balanced view—including creationist or ID ideas.

Leisola mentions his participation in CMI's 2009 award-winning documentary *Darwin: The Voyage that Shook the World*,⁶ which was even praised by evolutionists for its extremely high production values and balanced treatment of Darwin. But, as Leisola points out, despite having two Finnish professors interviewed, the documentary was censored from being aired on Finnish TV (p. 115). In this documentary, Leisola discusses the definition of evolution as "molecules to man", and recognizes the changes observed in nature, such as speciation, do not provide evidence of new structures and information required for evolution to be true. Leisola also points out that Darwin, along with the science of his time, had no idea of the complexity of the cell, and that cells can be likened to 'cities of complexity', full of information processing and molecular machinery. Leisola's contribution to CMI's documentary is therefore significant.

The Finnish church's Darwinian compromise

Leisola bemoans the compromise of the Finnish Lutheran church. "My own view of Christian faith is that one of its main purposes is to disturb established institutions with sharp questions and function as their conscience" (p. 127). The Lutheran church's woeful compromise has also been replicated in the Finnish school system, which is thoroughly naturalistic, and any

discussion of religion is only allowed by Darwinists. The takeover of naturalism in Finland was very sudden and can be pinpointed to between the years 1883–1885, during which time the established church, en masse, capitulated to Darwin, as it continues to do to the present day, the Finnish Bible Institute being a typical example of such public 'churchian' compromise (p. 133).

The inadequacies of peer review

Leisola recognizes the limitations of peer review, that it is deeply conservative and only operates within the naturalistic paradigm. Even when it comes to good operational science, peer review will often reject evidence it deems to be outside the accepted norm (p. 153). A prime example that impacts upon the age of the earth, which Leisola is well aware of, is Mary Schweitzer's work on dinosaur soft tissue and the problems she faced in the peer-review process. I found this encouraging to read in an ID book.

Warren Hamilton, who is a very famous conventional geologist, describes peer review as the "tyranny of the majority" (p. 136), as he has experienced papers being blocked because of the perceived challenge to "accepted concepts". Günther Blobel (Nobel prize in physiology and medicine), regarding the peer-review process, bluntly states, "grants and papers are rejected because some stupid reviewer rejected them for dogmatic adherence to old ideas" (p. 136).

The norm, therefore, is that any paper that is critical of Darwin, and supportive of design, simply won't get through the peer-review process when submitted to a journal. An infamous case involved a Chinese publication on the architecture of the hand, where the paper made a sole reference to a 'creator' (which, in context, referred to impersonal nature, rather than God),

but which was subsequently withdrawn from publication (p. 137) in a fit of academic paranoia.⁷

An astonishing example of academic persecution is the case of Stephen Meyer’s paper considering ID as a possible explanation for the Cambrian explosion. Three reviewers unanimously favoured its publication and Richard von Sternberg, editor of the *Smithsonian Institute Journal*, accepted the paper, which was subsequently published. The resulting outcry from committed evolutionists forced Sternberg to resign from his position, amid swirling accusations. As Leisola points out, the Darwinists wanted to make Sternberg an example, so that other journal editors didn’t make the same ‘mistake’ of publishing anything even remotely embarrassing to the Darwinist cause. These reasons and more prompted Leisola to start a new open journal based at BIO-Complexity.org, with papers offering challenges to the neo-Darwinian worldview, which, as he recalls, has been greeted by many with great hostility (pp. 179–181).

Academic censorship

After the 1980s, Leisola experienced the complete clampdown on freedom of thought in academia, where public questioning of Darwin was not tolerated. This was manifested both in the passive non-engagement, and complete ignoring of Leisola as an academic (along with his like-minded colleagues)—to the public denouncement of Leisola’s pro-design views in the journals. Leisola’s association with the triple Ph.D., English, creationist A.E. Wilder-Smith (1915–1995) also brought much publicity, both positive and negative (pp. 74–75).

From the perspective of reading about the history of the creation movement in Europe, Leisola’s book makes for some very engaging reading. For instance, he organized high-profile

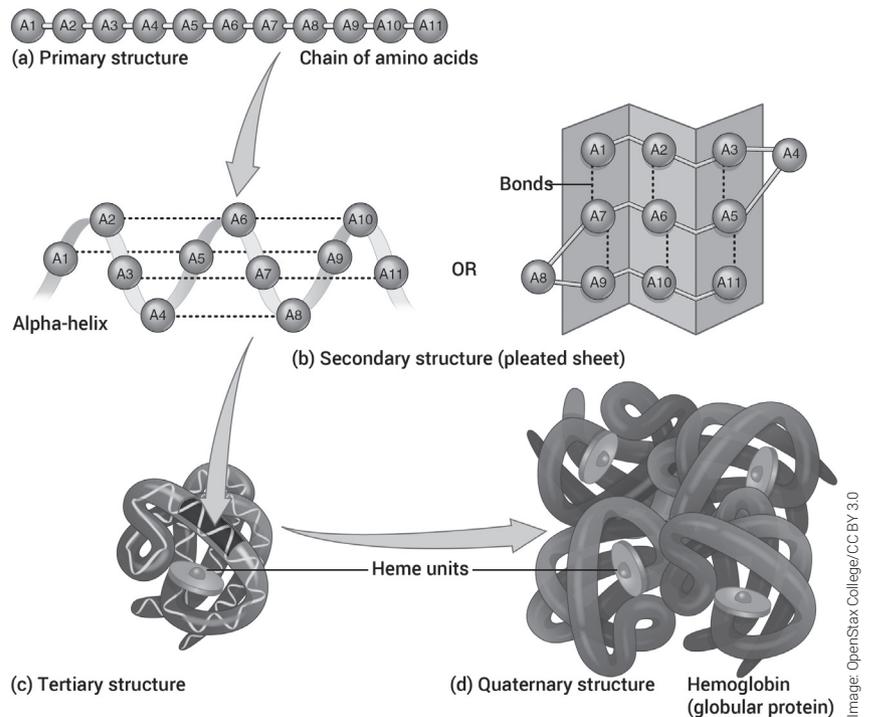


Figure 3. Protein chains on average are 300 amino acids long, and require folding to highly specified shapes in order to function correctly. Such highly ordered and specified complexity could not arise by chance in the supposed universe’s supposed secular time-frame.

seminars to discuss the weakness of Darwinism, including with Lennart Saari, a noted ornithologist, along with creationist Siegfried Scherer (professor of microbial ecology). In 2003 Leisola organised a seminar with ID proponents Paul Nelson, and Richard Sternberg, vs Anto Leikola and Petter Portin, both well-known evolution-promoting university professors (p. 78). Unfortunately, due to pressure from Leisola’s university, the event was cancelled, with an explanation given that this was better served as a ‘philosophy event’ (i.e. not science). A rescheduled, retitled event took place, which again was opposed, but nevertheless went ahead, and was received extremely positively (p. 79). However, press and academics alike vilified the event (despite not attending), and the university demanded the removal of the lecture notes from Leisola’s lab web page.

Bacteria evolving into—bacteria?

Leisola cites the work of Robert Lenski, who bred thousands of generations of bacteria, in lab conditions, to investigate evolution. A *New Scientist* report stated in 2008, “It’s the first time evolution has been caught in the act of making such a rare and complex new trait.” Leisola dryly comments:

“... notice that for 150 years we have repeatedly been told that the grand powers of the mutation/selection mechanism have been proven beyond a shadow of a doubt. And yet here, in 2008, a prominent science journal reports that a lab has uncovered the *first evidence* of evolution’s ability to innovate in an impressive way. The implication shouldn’t be missed: All the grand claims for evolution that came before this lacked empirical support” (p. 164).

Leisola cites Michael Behe, who has commented on this experimental result, reasoning no new information

was added; rather, existing genes were mutated, or turned off, resulting in a net saving of energy for the organism—but that’s it, nothing new was created, despite the *New Scientist* hype (p. 164). To drive the point home, Leisola quotes Alan Linton, a professor of bacteriology from Bristol University, who says, “Throughout 150 years of the science of bacteriology, there is no evidence that one species of bacteria has changed into another” (p. 167). Leisola can speak authoritatively from his years of experience in the bioengineering industry, producing complex sugars using yeasts. His experiences of the limited range of mutation has convinced him of the extreme limitations of the evolutionary process. All of the desired results were gained not through random mutations, but “fore-sight, planning and design”, which as he points out, are all things lacking in the neo-Darwinian process (pp. 172–173).

Evolution impossible

When it comes to functionality at the molecular level, specific proteins are required. To select a functionally correct protein randomly from all the possible protein shapes that are theoretically available, Leisola explains, is a huge task. If left to natural selection, there would be a staggering 1 in 10^{100} possibilities of selecting a correctly functioning protein (based on an average length of 300 amino acids) (pp. 182–184). When we consider there are ‘only’ 10^{82} atoms in the visible universe, selecting the right atom at random is far easier than selecting the right protein by chance (p. 184) (figure 3).

Despite this, genetic engineers use a process they term ‘guided evolution’ to produce ‘amazing results’ in terms of arriving at functional enzymes. However, Leisola points out, these lab processes are nothing like what happens in nature, but are intelligently designed, complex scientific

procedures. To further quantify this picture, Michael Behe, in his book *The Edge of Evolution*, discusses the very limited nature of what mutations can achieve—specifically seen in the malarial parasite, which is the parade example in Behe’s book. Put simply, evolution has failed to evolve a solution to malaria’s inability to bypass the sickle cell in humans, and has failed to solve its inability to function in colder climates.

Leisola recognizes that to get two or more correct proteins to function together by chance is more than can be expected in the evolutionary timeframe (p. 190). He states, “Mutation and selection can improve good designs but never invent a design” (p. 191). Dan Tawfik (of the Weizmann Institute, Israel), who studied how proteins *may have* evolved, is candid about origin-of-life problems, saying, “Evolution has this catch-22: Nothing evolves unless it already exists”, but of the first enzymes and other proteins, he describes their origin as: “something like close to miracle” (p. 195). Leading synthetic chemist James Tour says of the origin-of-life question:

“I have asked all my colleagues—National Academy members, Nobel Prize winners—I sit with them in offices. Nobody understands this. So if your professors say it’s all worked out, if your teachers say it’s all worked out, they don’t know what they’re talking about” (p. 221).

Conclusion

Heretic ends with a challenge for scientists to go where the evidence leads them, and to be open to honest interpretation of that evidence. Reading Leisola’s book, full of quotable quotes, one quickly comes to the conclusion that he is a brave warrior for Gospel truth, for academic freedom of speech and for open discussion between scientists, regarding Darwin’s theory of evolution and its inability to describe

the complex world of nature. Would that there were more like Leisola in secular academia today, willing to put their heads above the parapet of the ruling materialist paradigm. His book *Heretic* is an excellent read; though technical in places, I can thoroughly recommend it for the creation/ID section of your book shelf.

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