

# Another evolution pillar demolished

***The Evolution Revolution—Why Thinking People are Rethinking the Theory of Evolution***

Lee Spetner

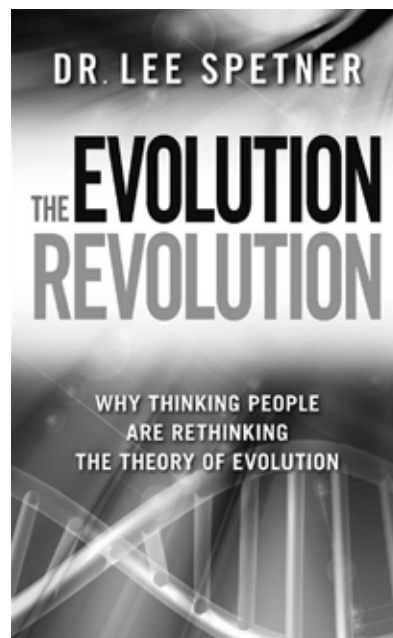
Judaica Press, Brooklyn, NY, 2014

Jerry Bergman

Most examples of evolution used by its supporters today to document their theory are termed ‘microevolution’ by some evolutionists. Creationists call this ‘variation within the Genesis kinds’. Evolutionists argue that macroevolution from one genus to another is simply large-scale microevolution, which, when allowed to operate for long periods of time, will produce macroevolution or major changes in all life forms. Spetner documents why many cases of this so-called microevolution evidence does not support common-ancestry evolution from single cells to humans by mutations and natural selection.

## Spetner’s conversion

A common stereotype is that most people who reject Darwinism are uneducated Christians who rejected evolution due to their religion. Spetner is one of many persons that contradict this theory. Spetner, a Jew with a doctorate from MIT in science, rejected Darwinism due to his intensive and extensive research on the subject. He writes that his journey, which ended in rejecting Darwinism, began at a lecture by leading American geneticist and anti-eugenicist (Hiram) Bentley Glass (1906–2005) at Johns Hopkins University (figure 1), where Spetner was then teaching information theory.



This lecture caused Spetner to wonder about the source of the enormous amount of biological information existing in DNA in all life forms. For this reason he posed a question about the source of genetic information to Professor Glass. Glass responded that he never really thought about this problem (p. 7). Thus began Spetner’s intellectual journey, researching the dilemma of new information coming into existence as life progressed. He ended up publishing a few papers on the topic in peer reviewed scientific journals, including *Nature* and *The Journal of Theoretical Biology*. In his research, after reading Dawkin’s book *The Blind Watchmaker*, Spetner concluded that the standard explanation for Darwinism, according to its leading advocates,

“... didn’t make sense. Random errors in copying the DNA and natural selection were supposed to account for the evolution of all life from some simple primitive cell. I

could not understand how random mutations and natural selection could account for the information buildup in what is called Common Descent. Could those DNA copying errors really bring new information into living organisms?” (p. 7).

His study led him to write his first book, *Not By Chance!*, published in Israel, then later in the United States. The common view of Darwinists was that the “vast amount of information contained in trees, fish, elephants, and people” came from “random mutations and natural selection.” Spetner concluded that this view was scientifically bankrupt. The problem was the fact that:

“Natural selection is supposed to be the magic that makes evolution happen, but all natural selection does is eliminate the less adaptive organisms and allow the more adaptive ones to survive and proliferate. Where do those more adaptive ones come from? Apparently, that’s what random mutations are supposed to accomplish” (p. 8).

This book examines in detail one solution to part of this problem—the theory that much adaptation is a result of complex inbuilt systems that respond to the environment, and not random mutations that are selected by natural selection.

A major section of the book documents Professor Spetner’s theory that much of the ‘microevolution’ observed in nature is a result of complex inbuilt mechanisms, such as epigenetics, that are influenced by the environment to inactivate certain genes and activate others. Many examples of this process are well known in bacteria. If certain types of sugar are present in the environment, and the preferred sugar type is lacking, the bacteria is stimulated to produce the enzymes necessary to utilize less preferred sugar types. If the preferred type of sugar is present, the bacterium does not need to waste energy and resources to produce the enzymes required to digest the other sugar type. Thus, the



Figure 1. Johns Hopkins University where Lee Spetner was professor.

environment affects bacterial gene expression by inactivating these genes.

A key evidence for the conclusion that microevolution cannot account for the changes that have been observed to occur in many life forms includes the fact that they occur with a speed that is far greater than can be accounted for by the “Neo-Darwinian mechanism of random mutations and natural selection” (p. 65).

Another problem is that supporters of Neo-Darwinian theory have always been vague about how the long strings of mutations that their theory requires can happen at just the proper time to allow each mutation in the sequence to have selective value over the previous non-mutation state (p. 66).

### Phenotypic-plasticity theory

Many other examples exist of what is now called the phenotypic-plasticity theory. A well-documented example is the pupfish that evolved very rapidly in response to environmental changes that occurred when they were moved from their original home into Devil’s Hole in Death Valley, the hottest and driest location in North America (p. 64).

After the pupfish were relocated, their inbuilt ability to adapt to this environment involved alterations of both their body shape and their behaviour to allow them to adapt

rapidly to Devil’s Hole’s very high average temperature and meager food resources. Their adaptation to this harsh environment required only a few years, which was far too rapidly for the necessary set of random mutations to achieve this task (p. 65).

To evaluate the phenotypic-plasticity theory, Spetner reviewed in some detail Sean Lema and his team’s pupfish research. They took newly hatched pupfish from the Amargosa River and reared them in the adverse conditions typical of Devil’s Hole. The biological effects of this major environmental change included alterations in their thyroid secretion levels. The behaviour changes that occurred were attributed to arginine vasotocin hormone changes and other adaptations.

The researchers also found several DNA regulation differences between the pupfish that were moved from the Devil’s Hole to the experimental refuge environment. Their findings supported the phenotypic-plasticity theory, and could not be explained by the mutation/natural selection evolutionary process (p. 65).

In another example, after David Reznick moved 200 guppies from Aripo to a tributary, changes occurred in only two years in the newly hatched guppy population, which was “much too short for random mutations and natural selection to have an effect”

(p. 72). Again, no new information was produced in the guppy's DNA, but an altered expression of existing information occurred. Spetner documents that even the famous well-documented evolution of Darwin's finches is also an example of this process. He writes that, in just 17 years or less,

"... the finches had diversified into various niches. If this diversification occurred in less than seventeen years, why did Darwin's Galapagos finches [as claimed by evolutionists] have to take two million years? They could have done it much more rapidly, and perhaps they indeed did. The diversification can be accounted for by a built-in response of the finch's genome to an environmental input" (p. 76).

Spetner gives many other examples of rapid evolution that are far better explained by inbuilt variation or regulation systems than by mutations and natural selection.

Spetner concluded by opining that biologists need to

"... stop pretending evolutionary events occur through random mutations and find out how they really occur. Biology has had an exciting ride in the twentieth century. Biology in the twenty-first century portends to be even more exciting" (p. 145).

His review of the literature has documented that, in many cases of so-called microevolution, adaptation was due to innate mechanisms that were designed to adapt to the local environment conditions, not mutations and natural selection as postulated by Darwinism.

His observations are shared by others, such as Professor Reznick, an evolutionary biologist at University of California at Riverside, who found that "some species are evolving far more quickly than Darwin ever imagined".<sup>1</sup> Specifically,

"Darwin had assumed that evolution takes tens to hundreds of thousands of generations to produce new species—a plodding path so slow it is essentially invisible. That theory still

held sway when Reznick began grad school in 1974. Scientists had studied evolution in controlled laboratory experiments, but watching it happen in a natural setting in a human lifetime was considered improbable at best, more likely impossible. ... Reznick says, 'People ... doubted I would live long enough to see the results'."<sup>1</sup>

It turned out that he did see clear evidence of rapid changes in 1981 when he

"... returned to Trinidad's swift streams to test his theory. He transplanted guppies from a site where they had to fend off cichlids, an aggressive, wide-mouthed fish, to a new site with no predators and no other guppies. Reznick also introduced cichlids to guppy sites without predators. He found that within four years—a mere six to eight generations—male guppies had significantly changed their reproductive patterns. Those transplanted from a high-predation site to a stream without predators were larger, matured later and reproduced more slowly. Where Reznick had introduced predators, the guppies adapted by maturing at an earlier age. Survival became a race to produce more babies."<sup>1</sup>

Other examples of rapid changes that random errors in DNA cannot achieve include the apple maggot fly (p. 70), guppies (p. 71), lizards (p. 72), and *Flavobacterium* (p. 56).

### Rapid evolution compounds the production of genetic trees

Spetner also tackled the phylogenetic tree challenge produced by Darwinists, showing that the tree produced depends heavily on the specific traits selected to produce the tree (p. 87). Select one set of traits and you will get one tree. Select another set of traits and you could produce another very different tree. And because phenotypic-plasticity theory can

explain some trait variation, it causes problems for constructing phenotypic trees. As millions of potential traits exist that could be compared, theoretically millions of different trees could be produced, some of which will be misleading due to phenotypic-plasticity events (pp. 88–89).

Related to phylogenetic trees are the many problems that exist in evolutionary convergence explanations for similar traits in very different life forms. This is a concept that has been illustrated with many examples, both by Spetner and others. A good example is the auditory system of mammals and that of certain insects, such as the South American rainforest katydid, which has a hearing system analogous to that of the vertebrates (p. 89).<sup>2</sup>

The theory postulates that life forms which are placed on very different parts of the phylogenetic tree and that do not have a recent common ancestor, must have independently evolved remarkably similar organs or structures. In this case, very similar hearing systems in life forms that were located on drastically different parts of the evolutionary tree.

Spetner noted that the authors of the katydid study called this "a notable case of convergence" which found that mammals and katydids "have evolved to hear in a markedly analogous way". Spetner then shows that the theory of convergence itself is problematic for many reasons, one of which is that genetic plasticity may account for some examples of convergence (p. 90).

In summary, this book is a *tour de force* of documentation that represents a major step in documenting the fact that the microevolution to macroevolution theory is problematic at its foundation.

### References

1. Little, J.B., Life in the Fast Lane, *Discover* 36(2):70, March 2015.
2. Cf. Sarfati, J., Katydid's amazing ear design, *Creation* 35(4):12–13, 2013; [creation.com/katydid](http://creation.com/katydid).