

Rav Dessler on Evolution and Time

A translation of Rav Dessler's letter on evolution with an in-depth commentary

By: Simcha Coffer

The following is a translation of part of a letter written by Rabbi E. E. Dessler delineating his refutation regarding certain proofs for the theory of evolution.¹ The letter was written to someone who was apparently having issues with a number of claims made by a particular evolutionist although the evolutionist's identity remains hidden.

When embarking on this venture, I was faced with a dilemma; should I choose a free-style format for the translation or should I utilize a more literal approach. Due to the importance of this letter, I opted to proceed with the latter despite the fact that English grammar and syntax had to be compromised in several instances. Thus, in order for the translation to be more accommodating to the reader, I have appended several insertions, enclosed in brackets. Please note: Whenever brackets appear in the body of the translation, they are insertions made by the translator. Whenever parentheses appear, they are by the author and can be found in the original printed letter.

There are five paragraphs in total; the first two pertain to alleged support for evolution from geology, the second three to ostensible evidence from embryology. Each paragraph is followed by a short synopsis and some clarifying notes. In addition, I have augmented my notes with several pages of scientific material. These pages are not necessarily indispensable to the comprehension of R' Dessler's letter however they can contribute greatly to an in-depth understanding of R' Dessler's words. They are written in layman's terms and can easily be grasped by the average person. To gain the maximum benefit from the translation, it is suggested that the reader download the Hebrew copy and have it at hand while reading the translation. It may be downloaded at www.torah.org. Questions or comments may be addressed to Simcha Coffer at rivkyc@sympatico.ca

Paragraph I

Two Refutations to the Claims of the Evolutionists

Geological Proofs

"All geological transformations are very much affected by the conditions [of the prevailing] atmospheric pressure. We can illustrate this [idea] from an example which is familiar to us. A [cooking] pot for meat which is sitting on the fire [is subject to several conditions which would alter the time it would take for the meat to cook], if the pot is uncovered, the

¹ Rabbi Eliyahu Eliezer Dessler, *Sefer HaZikaron LiBaal Michtav MeEliyahu*, Sifsei Chachamim, Institute for the Dissemination of Torah and Mussar 1994 – Collected Letters p. 108.

cooking takes so much time, if it is closed, less time, and if it is sealed (pressure cooker), it is cooked in a small fraction of [the original] time.”

“This [the accelerated time periods mentioned above] is as pertains to an alteration which is affected via cooking in a situation where the heat is unable to escape, and is compounded by an alteration whose primary cause is pressure. We know for certain that atmospheric conditions have changed, and that indeed these changes are [at least partially] responsible for the evolution [of the various geological formations] although the causes for these changes [in atmospheric conditions] are not known to us.”

Rav Dessler is obviously troubled by the confidence geologists exude in their temporal computations as they relate to the evolution of the earth’s various geological columns. However, at this point he has only succeeded in introducing reasonable doubt thereby questioning the acceptance of the time-related calculations of evolutionists as authoritative. He has not been successful in shortening the time frame adopted by the geologists because as he mentions above, “*the causes for these changes [in atmospheric conditions] are not known to us*” and thus, the actual conditions in the past must also remain unknown. Consequently, the conditions may have resembled an open cooking pot (i.e. longer periods of time), a closed cooking pot (i.e. shorter periods of time) or a pressure cooker (i.e. only a small fraction of the original time). At this point in his argument, it is impossible to calculate the duration of the various rock formations and sedimentary layers accurately without the introduction of further information. However, this changes shortly.

Paragraph II

“But in addition to this, there is evidence that these transformations [in the atmospheric conditions] occurred suddenly in a polar [i.e. from one extreme to the next] fashion for behold we find, just in places where the temperature is unyieldingly cold, embedded in the ice, carcasses of animals that according to their physiology were only able to exist in a warm climate. And since not only did they find their skeletons, they found their bodies fully intact, it is clear that the frigid temperature materialized in a very short period of time, relatively speaking, and polar changes in the atmosphere such as these must, by necessity, make transformations in the atmospheric pressure. If so, how can we measure the duration of the [geologic] changes according to the condition of our current atmospheric pressure?”

At this point, Rav Dessler has conclusively illustrated that the atmospheric pressures of the past have, at times, been much higher than current day pressures. Thus, the atmosphere of the past can be duly compared to our pressure cooker above thereby dramatically reducing the time frames expounded by geologists for the evolution of the earth.

It is important to note that Rav Dessler does not reject the scientific data of the geologists. His issue is solely with the *time* that evolutionists assign to the various geological changes that can be observed on the earth's topography, not the actual changes themselves.

This concludes the first half of Rav Dessler's refutation. The next half pertains to his treatment of the purported evidence from the development of the embryo. In order for the reader to gain the maximum benefit from his words, it would be helpful to include some prefatory notes on the subject of embryology and how it relates to the theory of evolution.

Haeckel's Embryos – Fraud Recapitulated

When Charles Darwin published his famous book "On the Origin of Species", he included an entire chapter detailing the issues that his theory faced. The name of the chapter is "Difficulties on Theory" and the primary difficulty was what he referred to as the "absence or rarity of transitional fossils". He asks:

"Why, if species have descended from other species by insensibly fine gradations, do we not everywhere see innumerable transitional forms? Why is not all nature in confusion instead of the species, being as we see them, well defined?"

Later on, in chapter nine he asks:

"But just in proportion as this process of extermination (a theory Darwin proposed for the lack of transitional forms) has acted on an enormous scale, so must the number of intermediate varieties, which have formerly existed on the earth, be truly enormous. Why then is not every geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such finely graduated organic chain; and this is the most obvious and gravest objection which can be urged against my theory".

This "grave objection" is so powerful that even today, over 150 years after Darwin's book was published, paleontologists are still stymied by it. And although all the high-school biology text books assert with confidence that scientists possess numerous examples of transitional sequences, the truth is that these links are just as "rare or absent" today as they were in Darwin's age. In a future article, I intend to illustrate this point at length however my purpose here is not to highlight what Darwin considered his weakest link. Rather, I wish to focus on the link which Darwin considered the strongest in support of his theory. That link is ontogeny.

Ontogeny, or the study of the embryo through its various stages, was promulgated as evidence for Darwin's theories by a German embryologist named Ernst Haeckel. Haeckel theorized that living embryos re-experience the evolutionary process that their ancestors underwent. During its development in its mother's womb claimed Haeckel, the human embryo first displays the characteristics of a fish, then those of a reptile, and finally those

of a human. In order to illustrate his theory, Haeckel drew embryos from various classes of vertebrates to show that they are virtually identical in their earliest stages and become noticeably different only as they develop. It was this pattern of early similarity and later difference that Darwin seemed to adopt² and which subsequently caused him to exclaim that embryology was “the strongest single class of facts” in support of his theory³.

It has since been proven that this theory is entirely false. It is now known that the “gills” that supposedly appear in the early stages of the human embryo, and that are supposed to represent fish-like characteristics, are in fact the initial phases of the middle-ear canal, parathyroid, and thymus. The part of the embryo that was likened to the egg yolk pouch, which is supposed to represent bird-like characteristics, turns out to be a pouch that produces blood for the infant. The part that was identified as a “tail” is in fact the backbone, which resembles a tail only because it takes shape before the legs do.

What is shocking is the extent to which the academicians went to conceal these facts. Dr. Jonathan Wells writes as follows:

“Haeckel’s embryos seem to provide such powerful evidence for Darwin’s theory that some version of them can be found in almost every modern textbook dealing with evolution. Yet biologists have known for over a century that Haeckel faked his drawing; vertebrate embryos never look as similar as he made them out to be. Furthermore, the stage Haeckel labeled the “first” is actually midway through the development; the similarities he exaggerated are preceded by striking differences in earlier stages of development. Although you might never know it from reading biology textbooks,

² Although he may have reached this conclusion independent of Haeckel’s drawings

³ At the end of Darwin’s presentation on Embryology, he states as follows: “Thus, it seems to me, the leading facts in embryology, which are second in importance to none in natural history, are explained on the principle of slight modifications not appearing, in the many descendants from some one ancient progenitor, at a very early period in the life of each, though perhaps caused at the earliest, and being inherited at a corresponding not early period. Embryology rises greatly in interest, when we thus look at the embryo as a picture, more or less obscured, of the common parent-form of each great class of animals.” This summation makes it perfectly clear how important embryology was in Darwin’s eyes. At the beginning of this chapter Darwin commences his presentation as follows: “It has already been casually remarked that certain organs in the individual, which when mature become widely different and serve for different purposes, are in the embryo exactly alike”. Darwin does not reveal the identity of the “casual remark” however it has been assumed by some that he was referring to Ernst Haeckel.

There are however, some evolutionists who reject this idea. Stephen J. Gould, in his book *Phylogeny and Ontogeny* (1977) seems to demonstrate that Darwin was actually influenced by another, more prominent 19th century embryologist named Karl Ernst von Baer. Von Baer disagreed with Haeckel (and Darwin) and claimed that the earlier features of the embryo were simply an indication of homologous features in embryos which were subsequently reused by the embryonic entity in various ways just as a beam from a skyscraper can subsequently be reused in the construction of a bridge. Taken as is, von Baer’s interpretation actually supports design “theory” however Darwin reinterpreted von Baer’s data to support his own theory by using the data to reinforce his ideas regarding general (larger) phylogenetic classifications. Although S.J. Gould is an authority, I believe that an unbiased reading of Darwin’s 13th chapter of the *Origins* clearly demonstrates that Darwin adopted Haeckel’s approach to embryology. Unfortunately, a full treatment of this subject is beyond the scope of this article.

*Darwin's "strongest single class of facts" is a classic example of how evidence can be twisted to fit a theory."*⁴

A little known fact is that Haeckel himself was caught in his forgeries during his lifetime. When he was taken to task regarding his gross misrepresentations, he replied as follows:

*"After this compromising confession of 'forgery' I should be obliged to consider myself condemned and annihilated if I had not the consolation of seeing side by side with me in the prisoner's dock hundreds of fellow culprits, among them many of the most trusted observers and most esteemed biologists. The great majority of all the diagrams in the best biological textbooks, treatises and journals would incur in the same degree the charge of 'forgery,' for all of them are inexact, and are more or less doctored, schematised and constructed".*⁵

Lest the reader imagine that I am concocting fairy tales, a few choice quotes from leading evolutionists would seem in order.

Two leading neo-Darwinists, George Gaylord Simpson and W. Beck state:

*"Haeckel misstated the evolutionary principle involved. It is now firmly established that ontogeny does not repeat phylogeny".*⁶

"Misstated" is merely a subtle way of saying "lying", much like the accountants associated with the Enron fiasco who "misstated" the energy giant's earnings. Haeckel lied, that's all. Plain and simple. And upon this and countless other prevarications, rests the very foundations of a theory that has blinded mankind to the truth for over a century.

In the book Biological Science, we read as follows:

*"The modern view is that this idea is a gross oversimplification. Ontogeny does not repeat phylogeny in any strict or literal sense. An individual's developmental stages do not correspond to its successive adult ancestors. A mammalian embryo never develops into a fish or amphibian and it doesn't even come close to doing so."*⁷

Sir Arthur Keith writes as follows:

*"It was expected that the embryo would recapitulate the features of its ancestors from the lowest to the highest forms of the animal kingdom. But now that the appearances of the embryo at all stages are known, the general feeling is one of disappointment. The human embryo at no stage is anthropoid in its appearance."*⁸

⁴ Jonathan Wells *Icons of Evolution* Regnery Publishing Inc. Washington D.C. 2002 p. 82

⁵ Francis Hitching, *The Neck of the Giraffe: Where Darwin Went Wrong*, Ticknor and Fields, New York, 1982, p. 204

⁶ G. G. Simpson, W. Beck, *An Introduction to Biology*, Harcourt Brace and World, New York, 1965, p. 241

⁷ William T. Keeton *Biological Science*, W.W. Norton & Company, Inc. 1986 p. 616

⁸ Sir Arthur Keith, President, Royal Anthropological Institute, England <http://www.therai.org.uk/>

In an article published in American Scientist, recapitulation is described as follows:

“Surely the biogenetic law is as dead as a doornail. It was finally exorcised from biology textbooks in the fifties. As a topic of serious theoretical inquiry it was extinct in the twenties...”⁹

The only part of this statement I disagree with is the exorcism described above, as would anyone familiar with modern day biology textbooks.¹⁰

In the September 5, 1997 edition of the highly prestigious scientific journal Science, an article was published finally revealing that Haeckel's embryo drawings were the product of a deception. The article, called "*Haeckel's Embryos: Fraud Rediscovered,*" stated as follows:

“The impression they [Haeckel's drawings] give, that the embryos are exactly alike, is wrong, says Michael Richardson, an embryologist at St. George's Hospital Medical School in London... So he and his colleagues did their own comparative study, re-examining and photographing embryos roughly matched by species and age with those Haeckel drew. Lo and behold, the embryos “often looked surprisingly different,” Richardson reports in the August issue of Anatomy and Embryology.”¹¹

The article explains that in order to be able to show the embryos as similar, Haeckel deliberately removed some organs from his drawings or else added imaginary ones. Later in this same article, the following information is revealed:

“Not only did Haeckel add or omit features, Richardson and his colleagues report, but he also fudged the scale to exaggerate similarities among species, even when there were 10-fold differences in size. Haeckel further blurred differences by neglecting to name the species in most cases, as if one representative was accurate for an entire group of animals. In reality, Richardson and his colleagues note, even closely related embryos such as those of fish vary quite a bit in their appearance and developmental pathway. “It (Haeckel's drawings) looks like it's turning out to be one of the most famous fakes in biology,” Richardson concludes.”¹²

The Science article then goes on to discuss how Haeckel's confessions on this subject were covered up from the beginning of the last century, and how the fake drawings began to be presented in textbooks as scientific fact:

⁹ Keith S. Thomson, *Ontogeny and Phylogeny Recapitulated*, American Scientist, vol. 76, May/June 1988, p. 273

¹⁰ See Jonathan Wells *Icons of Evolution* Regnery Publishing Inc. Washington D.C. 2002 p. 249 for an extensive list of modern-day textbooks displaying, in one form or another, a representation of Haeckel's drawings. This book is very well researched and is highly recommended for people who wish to understand some of the issues which the theory of evolution is plagued by.

¹¹ Elizabeth Pennisi, *Haeckel's Embryos: Fraud Rediscovered*, Science, September 5, 1997

¹² Elizabeth Pennisi, *Haeckel's Embryos: Fraud Rediscovered*, Science, September 5, 1997

“Haeckel's confession got lost after his drawings were subsequently used in a 1901 book called Darwin and After Darwin and reproduced widely in English language biology texts.”¹³

In other words, the fact that Haeckel's drawings were falsified had already emerged in 1901, but the entire world of academia continued to allow themselves to be deceived by them for a century.

The following was written in an article in the scientific journal New Scientist:

“[Haeckel] called this the biogenetic law, and the idea became popularly known as recapitulation. In fact Haeckel's strict law was soon shown to be incorrect. For instance, the early human embryo never has functioning gills like a fish, and never passes through stages that look like an adult reptile or monkey”.¹⁴

The above ten quotes should suffice to convince any sceptic that I have not misrepresented the facts however I would like to affix one final quote to the list. This quote is actually my favourite one. In attempting to advance one of his pet theories, Dr. Stephen J. Gould, one of the foremost evolutionists of the past quarter century, writes as follows:

“The notion of neoteny achieved its initial fame as a way of opposing the theory of recapitulation, a dominant idea in late nineteenth century biology. The theory of recapitulation proclaimed that animals repeat the adult stages of their ancestors during their own embryonic and postnatal growth – ontogeny recapitulates phylogeny, in that mystical phrase we all learned in high school biology...If recapitulation was true – which it is not – then features would have to be accelerated during evolutionary history, for adult characters of ancestors can become the juvenile stages only if their development is speeded up...Thus there is a general correspondence between accelerated development and recapitulation...”¹⁵

The reason this quote is my favourite is because it is echoed by none other than Rav Dessler himself (probably before Gould was even born) in a letter to one of his students.¹⁶

What emerges from this discussion is that the evidence which evolutionists imagined was most conclusive turned out to be one of the biggest hoaxes in scientific history whereas the primary difficulty with evolution continues to be an obstacle for anyone attempting to adopt it as a unified explanation of organic life on earth.

¹³ ibid.

¹⁴ Ken McNamara, *Embryos and Evolution*, New Scientist, vol. 12416, October 16, 1999

¹⁵ Stephen Jay Gould *Ever Since Darwin* W.W. Norton & Company New York p. 67

¹⁶ Michtav Me’Eliyahu Chelek Dalet p. 357. This ma’amar, in addition to the one currently being addressed, is incontrovertible proof that R’ Dessler rejected the idea of seeing the creation of our world in terms of protracted periods of time. More on this later in the article.

Enter R' Dessler. As mentioned above, most people were unaware that Haeckel doctored his drawings. Consequently, when R' Dessler's letter was written, the scientific community still tended to bandy around Haeckel's embryos as evidence of evolution. This was the atmosphere in which R' Dessler advanced his refutation against embryology.

It is important to keep in mind that R' Dessler was working under a severe handicap. He was not aware that Haeckel's drawings were faked and thus his opposition was formed due to, and based entirely on logic and common sense. This speaks volumes for a character trained to reject theories that fly in the face of reason despite the fact that evolutionists claimed to possess evidence to the contrary.

No doubt R' Dessler's fortitude was reinforced by the maamar Chazal on the pasuk regarding a *maysis umaydiach*. The Torah says, *Ki yesischa achicha... laymor, neylcha vinaavda elohimacheirim... meyelohey haamim... hakirovim eilechah, oh harichokim meemeka*¹⁷. Chazal comment; why does the verse have to warn against false gods that are near to you or far from you? The answer is, "*meyteevasan shel kirovим, atah lameid tivasan shel richokim*", from the nature of the close gods, with whom you are familiar, you may infer the nature of the gods that are far from you.¹⁸ *Kisheim sh'ein mamash b'eiylu, kach ein mamash b'eilu*, just as there is no substance to the gods that you are familiar with, so too there is no substance to the far away gods.¹⁹ Just as so many of the doctrines of the gentiles whose speciousness *can* be verified are false, so too the ones whose inefficacy cannot be verified are necessarily suspect.

Paragraph III

Proofs from the Development of the Embryo

I wonder greatly what basis there is for [saying] that the changes that occurred in the evolutionary stages of previous generations must also appear in the embryo [of the progeny during its course of development]. Do they themselves not claim that the [various] details of the evolutionary process were random and only in a very slow fashion did they [these changes] attain the phase which we currently observe. If so, [why] does everything that takes place in the ancestor have to appear in the progeny? For instance, if a midget cohabits with a midget and this pattern persists for generations, it would naturally follow that [from generation to generation] the progeny would also be dwarf-like (if we agree that this [idea that species give birth to their own type] never changes just as we find that humans never give birth to horse-like progeny [although we may find extreme aberrations in human fetuses due to random, non-beneficial mutations]), would we say that the [midget] embryo had all of the

¹⁷ Dvarim 13, 7-8

¹⁸ Sanhedrin 61

¹⁹ Brought down in Rashi on Dvarim 13, 8

[genetic] components which cause growth but later [when the embryo finally asserts itself, these features] change in him because his ancestors where dwarves?

Rav Dessler is asking a powerful question however in order to follow his line of reasoning, the following two points must be made.

First of all, Rav Dessler was not aware that Haeckel's embryos were forged as noted above. He accepted the scientific "facts" as they were presented to him without question. Thus his argument above must be viewed as purely logical. He was not contesting the "facts"; he was merely contending with the evolutionary *interpretation* of Haeckel's embryos.

Second of all, Rav Dessler has a perfectly plausible explanation for the embryonic development of a human fetus from fish to reptile to bird to ape-like hominid to human which he forwards in Paragraph V. Thus, he is not bound by the evolutionary theory of this phenomenon and is therefore free to subject both his explanation and the standard evolutionary interpretation to the rigorous analysis of logic. It must be understood that although the printed copy of Rav Dessler's letter breaks up the embryonic argument into three paragraphs, it is really one long line of reasoning and should be seen in that light.

In view of the above, Rav Dessler's argument can be understood as follows: True the human embryo may possess the appearances of different species during the course of its development, but why postulate that these stages are random? After all, if the mutations which caused one species to metamorphosis into another were purely accidental, where is the logic in saying that these accidental mutations were retained in the genetic code of the future progeny? Why would we imagine that a horse has fish-like coding in its genes that is subsequently ignored by the genetic apparatus? Is it not more logical to say that once a species transforms into another species via small, gradual, random mutations, the new species now has its own peculiar genetic code and is entirely differentiated from any other species just as we find that a horse never gives birth to a cow and never comes close to doing so?

Genetics and Evolution – A Brief History

Before we proceed to Paragraph IV, it would be helpful to discuss some details regarding the dynamics of the relationship between the relatively recent science of genetics and the theory of evolution.

Despite having its roots in ancient Greece, the theory of evolution was first brought to the attention of the scientific world in the nineteenth century. The most thoroughly considered view of evolution was expressed by the French biologist Jean-Baptiste Lamarck, in his *Zoological Philosophy* (1809). Lamarck thought that all living things were endowed with a vital force that drove them to evolve toward greater complexity. He also thought that organisms could pass on to their offspring traits acquired during their

lifetimes. As an example of this line of reasoning, Lamarck suggested that the long neck of the giraffe evolved when a short-necked ancestor took to browsing on the leaves of trees instead of on grass.

Vague beliefs about inheritance led Darwin to base his theory on completely false grounds. Darwin assumed that natural selection was the "mechanism of evolution." Yet one question remained unanswered: How would these "useful traits" be selected and transmitted from one generation to the next? At this point, Darwin embraced the Lamarckian theory, that is, "the inheritance of acquired traits." In 1868, when Darwin published Varieties of Animals and Plants under Domestication, he gave a whole series of examples of supposed Lamarckian inheritance such as a man losing part of his little finger and all his sons being born with deformed little fingers, and boys born with foreskins much reduced in length as a result of generations of circumcision.

However, Lamarck's thesis was disproved by the laws of genetic inheritance discovered by the Austrian monk and botanist, Gregor Mendel. Mendel announced the laws of genetic inheritance that he discovered as a result of long experiment and observation in a scientific paper published in 1865 but this paper only attracted the attention of the scientific world towards the end of the century. Mendel was actually opposed not only to Lamarck's model of evolution, but also Darwin's. As the article "Mendel's Opposition to Evolution and to Darwin" makes clear, "he [Mendel] was familiar with The Origin of Species ...and he was opposed to Darwin's theory; Darwin was arguing for descent with modification through natural selection, Mendel was in favor of the orthodox doctrine of special creation."²⁰ Thus, it took a long time for the academic world to finally accept the findings of Mendel. However, by the beginning of the twentieth century, the truth of these laws had been accepted by the whole scientific community. The concept of "useful traits" was therefore left unsupported.

Genetic laws showed that acquired traits are not passed on, and that genetic inheritance takes place according to certain unchanging laws. These laws supported the view that species remain unchanged. No matter how much the cows that Darwin saw in England's animal fairs bred, the species itself would never change: cows would always remain cows.

In the middle of the twentieth century, the discovery of the structure of DNA revealed that the nuclei of the cells of living organisms possess very special genetic information, and that this information could not be altered by "acquired traits." In other words, during its lifetime, even though a giraffe managed to make its neck a few centimetres longer by extending its neck to upper branches, this trait would not pass to its offspring. In brief, the Lamarckian view was simply refuted by scientific findings, and went down in history as a flawed assumption. This was a serious dead-end for Darwin's theory, which tried to base the inheritance of "useful traits" on Lamarckism.

In the early 19th century, naturalists were searching for a mechanism to explain the complexity apparent in all living things. When Darwin came along and offered them a

²⁰ B.E. Bishop, "Mendel's Opposition to Evolution and to Darwin," Journal of Heredity 87 (1996)

glib explanation, that life on earth was beset by a constant struggle for survival, and that the fittest of the species were the most logical choice for “nature” to select as the progenitors of the future, the scientific world welcomed it with open arms. Although at first there was opposition to Darwin’s theories, the majority did not come from academic circles. Now that Lamarckism was dead, the scientific world strove to retain Darwin’s explanation and synthesize it with the new-found facts of inheritance.

According to Dr. Niles Eldredge, a leading evolutionist, there were three people who were primarily responsible with “linking the data of field genetics, systematics, and the fossil record with the neo-Darwinian paradigm... Theodosius Dobzhansky started the trend toward complete synthesis with his *Genetics and the Origin of Species* (1937), followed by Ernst Mayr’s *Systematics and the Origin of Species* (1942), and, lastly, George Gaylord Simpson with *Tempo and Mode in Evolution* (1944)”²¹

The above-noted scientists joined a group of academics who were determined to reconcile Darwinism with the science of genetics, in one way or another. They all came together at a meeting organized by the Geological Society of America in 1941. After long discussion, they agreed on ways to create a new interpretation of Darwinism and over the next few years, specialists produced a synthesis of their fields into a revised theory of evolution.

In addition to the academics mentioned by Niles Eldridge, the scientists who participated in establishing the new theory included the geneticists G. Ledyard Stebbins, the zoologist Julian Huxley, the paleontologist Glenn L. Jepsen, and the mathematical geneticists Sir Ronald A. Fisher and Sewall Wright.²²

To counter the fact of "genetic stability" (genetic homeostasis), this group of scientists employed the concept of "mutation," which had been proposed by the Dutch botanist Hugo de Vries at the beginning of the 20th century. Mutations were defects that occurred, for unknown reasons, in the inheritance mechanism of living things. Organisms undergoing mutation developed some unusual structures, which deviated from the genetic information they inherited from their parents. The concept of "random mutation" was supposed to provide the answer to the question of the origin of the advantageous variations which caused living organisms to evolve according to Darwin's theory-a phenomenon that Darwin himself was unable to explain, but simply tried to side-step by referring to Lamarck.

The Geological Society of America group named this new theory, which was formulated by adding the concept of mutation to Darwin's natural selection thesis, the "synthetic theory of evolution" or the "modern synthesis." In a short time, this theory came to be known as "neo-Darwinism" and its supporters as "neo-Darwinists."

Armed with this information, we can now more deeply appreciate the following paragraph in Rav Dessler's letter.

²¹ Foreword by Niles Eldredge to G.G. Simpson’s *Tempo and Mode in Evolution* Columbia Press c1944

²² Michael Denton, *Evolution: A theory in Crisis* Adler & Adler 1986

Paragraph IV

Behold there are some that claim that changes which randomly occur in the “father” will not generate its likeness in the “son”²³ but even if we were to say that it does²⁴, would the embryo have to recapitulate the exact method by which the random change occurred in its progenitor?²⁵ And what necessitated him [our nameless evolutionist] to say something so absurd? Simply because he wished to claim that in this manner all life evolved.

Rav Dessler’s argument is essentially a continuation of his argument in the previous paragraph. He merely adds that according to the modern view of genetics, organisms cannot inherit traits that were randomly acquired by their ancestors thus reinforcing his previous argument. As it happens, this last argument may not necessarily be entirely sound. This is not to say that Rav Dessler’s first argument is insufficient to counter the claims of neo-Darwinism. It simply means that his additional argument in support of his original line of reasoning does not achieve its intended purpose.²⁶ It would seem that Rav Dessler was writing this letter before neo-Darwinism took full shape. Consequently, he was not fully aware of the parameters of neo-Darwinism and how they proposed to synthesize the science of genetics with evolutionary theory.

We now proceed to the final chapter of R’ Dessler’s letter.

Paragraph V

And here I ask, why would he [the evolutionist] not say that the embryo’s development is purely natural, and that at this time we have still not been able to understand the mechanisms [lit. causes] which are involved [in the development of the fetus]? And the fact that we find differentiated species amongst the [various] life-forms is merely because there were those [species] that did not traverse the entire length of the development in their fetal stage and remained [somewhere] in the middle, and thus did the

²³ neo-Darwinism and the modern view of genetics which claims that a random change in the giraffe’s neck is not inherited by its progeny

²⁴ The Lamarckian view which states that random changes in the organism are inherited by its descendants.

²⁵ In other words, if let’s say a man severed one of his fingers midway through his life, would we say that his future son would have one of his fingers severed midway through his development as an embryo?

²⁶ Rav Dessler tries to support his original argument by quoting neo-Darwinist synthetics regarding superficial changes in the organism. However, neo-Darwinists claim that the random mutations which effect variation in the species are made on a molecular level and are imprinted on the DNA helix of the developing embryo, or according to some radical views, on the very organism itself. Thus, it would seem to me that R’ Dessler’s second argument falls short of its intended purpose although I freely concede that I may be wrong in this regard.

species become differentiated one from another.²⁷ If this [theory] is so, than the “madder has fallen in the well”²⁸ for in this fashion [i.e. the development of the various species on earth through the mechanism described by R' Dessler] there is no longer any connection to calculating [long] periods of time at all. And if for the various technicalities which are responsible for the development of the fetus there are further causes (I am employing the idiotic terminology of the evolutionist, woe to that wisdom [i.e. the study of nature] if it does not lead one to be aware of the handiwork of Hashem for behold [there is no wisdom here, rather] there is just folly animated by the desire to throw off the yoke of heaven) also they [these causes] have natural causes, which means that [only] via features [of the development of the embryo] which are intrinsic to the embryo [as opposed to the randomness of evolution] does the fetus develop, thus leading to the ultimate differentiation in the various species.

Rav Dessler's argument can be encapsulated in two sentences. Who says that the fact that embryos seem to recapitulate the features of other species is an indication that it descended from other species? Perhaps all species are naturally represented in the embryonic entity due to certain immutable ontogenetic laws and whereas lower forms are genetically programmed to terminate their development at say, the fish stage, higher forms, such as man, traverse the entire developmental stage until reaching their preprogrammed state?

If this were so, there would be no correlation between embryology and the vast periods of time espoused by the evolutionists because this type of development is a naturally occurring feature of the embryo and does not represent slow random mutations that have somehow been imprinted onto organism's developmental stage over the period of millions of years. This concludes Rav Dessler's refutation of embryology.

To sum up, Rav Dessler makes three points in his letter.

1. Geology and Embryology cannot be used as proofs for the long periods of time purported by scientists for the evolution of the world.
2. Geology is actually proof that the world unfolded rapidly, in a short period of time, as opposed to the evolutionary time frame.
3. It makes more sense to say that Haeckel's embryos is a naturally occurring feature of ontogeny rather than a representation of randomness occurring over vast periods of time.

What is most noteworthy is Rav Dessler's remark in Paragraph V; anyone viewing the world within the context of evolution over millions of years as opposed to seeing the *yad Hashem* in the *beria* is a *tipesh* and a *porek ol*. What is interesting is the fact that

²⁷ Despite the punctuation marks, the above eight sentences are actually one long line of reasoning. If it seems confusing, try re-reading the above while ignoring the punctuation marks.

²⁸ See *Berachos* 56. A “madder” is a vegetable dyer’s utensil. The expression indicates that all is lost and within our context, that there is no longer any proof from embryology.

Rav Dessler does not seem to allow for any grey area in this matter. If you see evolution you don't see Hashem. This is a sad commentary on much of what is occurring in today's climate. May Hashem open our eyes to see the truth of His creation.

[Translators Note: Some of the scientific material in this paper has been taken directly from online sources.]