

AN ANALYSIS OF DARWIN'S NATURAL SELECTION—ARTIFICIAL SELECTION ANALOGY

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It is pointed out that Darwin based his case very much on an alleged analogy between the facts that in nature some creatures have more offspring than others, and that a breeder arranges for creatures of the kind which he wants to have more offspring. In other words, he drew an analogy between the alleged natural selection, and selection as practiced by a breeder. However, the two cases are quite different in many respects, and there is no true analogy. Hence Darwin's arguments prove nothing.

Critique of Darwin's Methods

The following analysis of Darwin's natural selection-artificial selection analogy is an excerpt from a manuscript in which all eight of the basic hypotheses that make up evolution theory are analyzed. Also, in the manuscript—and it is essential to the analysis—I have gone to considerable lengths to establish the existence of several common misconceptions regarding evolution theory. One of them is the belief that Darwin was a scientist in the modern sense of the word. In reality, however, he was a natural philosopher (in the contrasting sense), not an exact or natural scientist. Because evolution theory was established according to natural philosophical guidelines rather than the more rigorous natural or exact science guidelines, the controversy centers *first and foremost* on natural philosophy versus natural science. The primary antagonists are not, as is popularly misconceived, theology versus natural science. John Dewey, one of the founders of the Progressive education movement, explained it this way: "The vivid and popular features of the anti-Darwinian row tended to leave the impression that the issue was between science on one side and theology on the other. Such was not the case—the issue lay primarily within science itself"¹

Darwin's *modus operandi* as an investigator was a throwback to the natural philosophical method of investigating the environment which had been common among seventeenth century naturalists and also prior to a reform of science instituted by René Descartes and Sir Francis Bacon, among others. Natural philosophy, if I may borrow a phrase from the evolutionists, was the "Primitive precursor" of exact science. It was characterized by: (1) an aversion to experimentation and observation because they lead to limited explanation and (2) a striving after unlimited explanation which results in (3) an overloading of the facts far beyond what they can stand for. Exact science attempts to formulate truth statements about the environment; whereas when natural philosophy (4) makes statements about the environment the main criterion is that they be philosophically or intuitively pleasing, hence there is inevitable bias. All of this adds up to pure speculation masquerading as science; and, because it is speculation in order to convince others, the approach must necessarily be one of (5) persuasion rather than proof.

Some of Darwin's Other Theories

That Darwin was a natural philosopher is obvious, not only in his evolution theory, but also in three of his other abortive attempts to establish himself within the scientific community as a reliable theorist. These attempts involved hypotheses to explain the formation of coral reefs and atolls; the cause of the so called "parallel roads" formations in the Scottish Highlands; and an explanation as to how traits are inherited, which he called pangenesis. All three of these hypotheses were upset or found inadequate by later investigators. What is so important about these hypotheses is that they establish his *modus operandi* as an investigator.

Basically, Darwin tended intuitively to develop an *a priori* hypothesis and then would, by variety of machinations, fit all facts into the hypothesis or monger-in subsidiary hypotheses to explain away conflicting facts. The technique, which is explained in detail in the manuscript, I have named, covert intimidation. His *a priori* hypothesis always had precedence over the facts, rather than the other way around, as it should be, according to exact science.

In regard to the "parallel roads" which he hypothesized were ancient sea beaches caused by subsidence, he wrote to Sir Charles Lyell, "I have fully convinced myself (after some doubting at first) that the shelves are sea beaches although I could not find a trace of a shell; and I think I can explain away most, if not all the difficulties."² One year after his paper was presented before the Royal Society in 1839, two geologists, Agassiz and Burkland, discovered a more plausible explanation in the hypothesis that glaciers had dammed back the water that shaped the terraces. Years later he wrote that his "parallel roads" hypothesis had been "one long gigantic blunder from beginning to end." And that, "my error has been a good lesson to me never to trust in science to the principle of exclusion."³ Excluding alternative hypotheses is not a principle, rather a corruption of science. Unfortunately, the lesson was not applied when he wrote the *Origin of Species*. Special creation, or any alternative hypothesis similar in effect to special creation in relation to the evidences, are systematically excluded from consideration in favor of his *a priori* belief that life had evolved.

In regard to pangenesis, Nordenskiöld reports that, "Darwin is here, as so often elsewhere, a speculative natural philosopher, not a natural scientist."⁴ Pangenesis was strictly armchair speculation, whereas, Gregor Mendel's laws of heredity were established on the basis of experimental evidences. As for coral forma-

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tions, they have since been discovered to be considerably more complex than Darwin had imagined. His hypothesis, based upon subsidence, rather than being a panacea explanation, has been relegated to perhaps being an occasional factor in coral growth. Darwin, by the way, formulated his hypothesis prior to ever laying eyes on a coral formation.

Because natural philosophers strove after total explanation when investigating natural phenomena, it was common for them to think abstractly in terms of analogies and metaphors and to ignore observation and experimentation. It is this aspect of natural philosophy that must be considered when analyzing Darwin's alleged evolutionary natural selection mechanism.

The Notion Suggested by Reading Malthus

At this point, we must review how the evolutionary natural selection hypothesis crystallized in the minds of both Darwin and another naturalist, Alfred R. Wallace. Wallace was a self-made naturalist whose limited formal schooling was compensated by unlimited interest and enthusiasm. He traveled widely and endured numerous hardships in his zeal to collect specimens which he studied and sold. Like so many others in his day, he too was preoccupied with the idea of discovering a materialistic explanation for the origin of life. In January 1858, on the small unexplored island of Ternate, while ill with a fever, the natural selection hypothesis suddenly occurred to him:

One day something brought to my recollection Malthus's *Principle of Population*. . . . I thought of his clear exposition of the "the positive check to increase"—disease, accident, war, and famine. . . . It then occurred to me that these causes or their equivalence were continually acting in the case of animals also. . . . It occurred to me to ask the question, "Why do some die and some live?" . . . the best fitted lived. . . . this self-acting process would necessarily *improve the race*. . . .⁵

As soon as the fever had left him, Wallace spent a few days developing the hypothesis in more detail and sent it off to Darwin. Much to his disappointment, Darwin read an hypothesis almost identical to the one that he had been working on for some 20 years and at first assumed that priority for it would go to Wallace. Darwin's priority, though, was established by an 1844 sketch that he had written. In 1859, about a year after receiving Wallace's paper, Darwin published the *Origin*; but A. R. Wallace's name had become inseparably linked with Darwin's.

What one finds so interesting is that both men arrived at an identical hypothesis in an identical manner. It was immediately after reading, or thinking about, Thomas Malthus's *Essay on the Principle of Population* that the idea of natural selection or survival of the fittest occurred to them. After reading Malthus's *Essay*, Darwin reports, "It at once struck me that favorable variations would tend to preserve, and unfavorable ones would be destroyed."⁶

Malthus was writing about the human population when he pointed out that populations tend to grow according to a geometric progression, e.g., double each generation, while food supply may be increased only to

a limited extent. Famine becomes inevitable unless other catastrophes such as war and disease hold populations in check. Darwin and Wallace realized that the same potential for plant and animal populations to grow geometrically must also exist. What is holding their populations in check? The survival of the fittest: those with useful variations such as length of neck, or wings or color, etc., survives the struggle and the others die out. The result is that populations are maintained at a level appropriate for the available food supplies, while an evolutionary change progresses.

But Does Selection Actually Occur in Nature?

Both theorists were confronted with the same problem—they could not prove that slight differences in a characteristic make a plant or animal more or less fit for survival. In other words, they could not report actually observing a variation being selected against and actually eliminated from a gene pool (the word, of course, is newer) of a species. Both theorists decided to use the same deceit. As a substitute for the unobserved natural selection, they made their hypothetical natural selection mechanism analogous to artificial selection.

Analogy Substituted for Observation

At this point, there is a parting of the ways in their thinking. The two theorists use their analogy differently. Artificial selection refers to the selection by man of domestic plants and animals in order to accentuate certain traits. Darwin's analogy goes something like this: If feeble man can make horses, for example, run faster by artificial selection, nature, being more powerful than man, could eventually change horses into new kinds of animals. He does not dwell on the fact that man only accentuates traits and does not create new kinds.

Wallace approaches the analogy this way: He concedes that man does not create new kinds by artificial selection. In fact, when domestic plants and animals are returned to their natural environment they will either become extinct or return to their original condition. Somehow this was supposed to prove that natural selection could change organisms into new kinds.⁷ In other words, plants and animals are immutable as far as artificial selection is concerned; seemingly illogical conclusions by both Darwin and Wallace.

What is the status of analogy among present day logicians?

. . . arguments from analogy may be fertile but they are all invalid.⁸

Metaphors, like analogy, are dangerous, since they are double-edged.⁹

It is unwise to stretch analogies too far. The result of our reasoning with analogy must be checked against reality to make sure that they hold.¹⁰

Although there is a legitimate tendency for people instinctively to think in terms of analogy, by relating the unknown to something familiar, it is being used in a false and misleading fashion when carried too far. Should we claim ignorance of the misleading potential of analogies for Darwin and excuse him on those grounds? No, the analogy is too skillfully and deliberately fashioned to have been written by someone

who was naive about their dangers. Darwin, I am convinced, knew the weakness of his argument when he wrote chapter IV in the *Origin*, where he introduced his alleged natural selection mechanism. For in the conclusion of the *Origin*, where he discusses whether life descended from four or five progenitors, or a single prototype, he makes this revealing comment: "But analogy may be a deceitful guide."¹¹

Imagine, if you will, the enormous problem that confronted Darwin while writing the *Origin*; how could he convince the public that his mechanism, evolutionary natural selection, was really functioning in the environment when he could not report observing it in action? How could he convince people that the fit were surviving the competition and the less fit were being eliminated? Or more specifically, how could he convince people that nature had the selective power to eliminate absolutely some variations and to perpetuate others? It would be necessary for him to create an appearance of a mechanism and to hand this out to readers.

Let us make ourselves familiar with Darwin's method for making artificial selection the mental stand-in for evolutionary natural selection. After discussing in the first 3 chapters, topics such as selective breeding, variations under nature, and a struggle for existence caused by the potential for populations to increase geometrically, he introduces the natural selection mechanism in chapter IV. In the first 3 sentences he boldly begins making artificial selection analogous to natural selection. Chapter IV is about 36 pages long and has approximately 37 references making natural selections and artificial selections analogous. Here is a sample:

Can it, then, be thought improbable, seeing that variations useful to man have undoubtedly occurred, that other variations useful in the same way to each being . . . should occur If such do occur, can we doubt . . . that individuals having any advantage . . . would have the best chance of surviving and procreating their kind.¹²

Frequent references to the artificial selection—natural selection analogy are made throughout the book. Here is one from chapter III: "I have called this principle, by which each slight variation, if useful, is preserved, by the term Natural Selection But the expression often used by Mr. Herbert Spencer of the Survival of the Fittest is more accurate . . . is a power incessantly ready for action, and is immeasurably superior to man's feeble efforts"¹³

Faced with this mental slight-of-hand technique, the less critical reader is apt to accept artificial selection as proof of natural selection and not demand the obvious proof, which Darwin could not deliver: observation of the mechanism in action, in the environment.

Critique of the Analogy

As usually happens when analogies are applied, similarities are emphasized while differences are ignored. There are two things wrong with the natural selection-artificial selection analogy. First, man does not create new kinds by artificial selection; and second, we observe limited variability, not unlimited variability. Consequently, the analogy shows, if anything, that a

change from one kind to another kind would be impossible. It is one of the great ironies of this controversy, and it also demonstrates an ambivalence common among all of the founders of evolution theory, that Thomas Henry Huxley, Darwin's "bulldog", should be the one to reject Darwin's analogy and explicitly use artificial selection as a test against natural selection. His test is exact science; it places the burden of proof where it belongs, on the theorist. The evolutionists are required to prove that the unlimited variability that we do not observe, but which the theory requires, does exist. Huxley's test reads as follows:

Mr. Darwin, in order to place his views beyond the reach of all possible assault, ought to be able to demonstrate the possibility of developing from a particular stock by selective breeding, two forms, which should either be unable to cross one with another, or whose cross-bred offspring should be infertile with one another . . . it has not been found possible to produce this complete physiological divergence by selective breeding . . . if it should be proved, not only that this *has* not been done, but that it cannot be done I hold that Mr. Darwin's hypothesis would be utterly shattered.¹⁴

Here we have a prime example of natural philosophical thoughts versus exact science supplied by the two leaders of the evolution movement. Darwin extrapolates as follows: If feeble man can make horses run faster by selective breeding, Nature, which is more powerful than man, can transform horses into new creatures. Huxley does not buy the analogy, the extrapolation, or the relative strength or weakness of man and Nature. He turns it against Darwin by proposing a test which is to say that, if man cannot create new kinds by artificial selection why should we think Nature can? Weird isn't it? Darwin, the author of the theory, uses artificial selection to prove natural selection; while Huxley, the grand promotor of the theory, turns it around and uses artificial selection to disprove natural selection.

Limitations to Artificial Selection

Considering the length of time that man has been selectively breeding plants and animals, not many people, even those favorably disposed toward evolution theory, will harbor the belief that new kinds can be created by artificial selection. The theory is disproved by the test. Huxley did not take this test lightly. He proposed it early in his career and later in his book of essays on evolution theory entitled, *Darwiniana*, he again makes special reference to it.

How did Darwin react to limited variability which would make evolution impossible? He simply ignored that conflicting fact: "That a limit to variation does exist in nature is assumed by most authors, though I am unable to discover a single fact on which this belief is grounded."¹⁵ Darwin, like everyone else, observed limited variability, but imaginatively concluded unlimited variability.

Do Evolutionary Natural Selectors Exist?

Huxley, and Asa Gray, the Harvard professor of botany, add a new dimension to the evolutionary

natural selection hypothesis by questioning the existence of *natural selectors*. In this case it is not unlimited variability that is being questioned, but Darwin's assumption that nature, given unlimited variability, can select like man. In this quote Huxley describes the mechanism in a true Darwinian fashion:

The Darwinian hypothesis . . . may be stated in a very few words; all species have been produced by the development of variety from common stock . . . by the process of natural selection, which process is essentially identical with that artificial selection by which man has originated the races of domestic animals . . .¹⁶

But then he becomes the skeptical scientist:

"Without the breeder there would be no selection, and without the selection no race . . . it must be proved that there is in Nature some power which takes the place of man, and performs a selection *sua sponte*."¹⁷

Man's efforts at selection are *consciously* directed. Can Nature *spontaneously* do likewise? He later reiterates his skepticism:

"The question is, whether in nature there are causes competent to produce races, just in the same way as man is able to produce by selection such races of animals as we have already noticed."¹⁸

Gray, in the following quote, seems to be thinking along the same lines as Huxley: challenging Darwin's assumption, based upon analogy, that there is anything in nature that can select like man:

The assertions are, no doubt, backed by alleged facts; but almost everyone of these "facts" gives occasion for controversy . . . the worth of these may be understood when we affirm, that Mr. Horner's Nile-Mud hypothesis is one of them. Besides, . . . the views brought out in this chapter . . . are all associated with the presence of man's intelligence. But . . . it is not within the range of our belief, that, even though you affirm a personality to "Nature", while you banish God from the scene, this to some all-potent, *she*, would equal to these results.¹⁹

This throws a different light on alleged evolutionary natural selection; grant the theory unlimited variability and useful-for-survival mutations, can nature select upon it? Can nature, like man, perpetuate some variations and eliminate others? If the reader will bear with me now, we can prove that evolutionary natural selection is naturally impossible, because there is nothing in the environment that can select like man.

Gray and Huxley seem to realize that artificial selection and the alleged evolutionary natural selection are two different entities, but to expose them as such is something they could not or would not do. The names themselves tell us that artificial selection cannot be analogous to natural selection; artificiality must, in fact, be the antithesis of naturalness.

What About Artificial Selection?

Artificial selection or selective breeding is really a technological endeavor. The dictionary gives this definition for technology—"the totality of the means employed to provide objects necessary for human

sustenance and comfort." Technology is an effort by man to exploit or somehow utilize nature for his particular needs or desires. Artificial selection is a form, perhaps one of the oldest forms, of technology whereby man exploits the genetic variability of some domestic plants and animals to satisfy his needs or desires. In that sense, then, all domestic plants and animals are products of a technological effort, and consequently may be considered not natural but technological forms. They exist only so long as man is present to maintain them as technological products; remove man from the scene and technological organisms will revert to an original type.

Technological animals and plants are maintained under artificial conditions; man's presence is required to feed and protect them and above all make certain that varieties of the same kind are always interbreeding. Golden retriever dogs, for example, only exist as long as man is present to make sure that they mate with their own kind; mongrels become a common variety when random mating is permitted.

Artificial selection, if the breeder is to acquire a degree of success, requires the rigid adherence to two basic rules. These rules are so simple and obvious that any breeder will instinctively apply them. Breeders do not need to be told what to do, although they may advise one another as to how best to accomplish their goals.

The Unwritten Rules for Artificial Selection

1. Prevent random mating of the selected individuals with individuals having undesirable traits. With animals, this usually requires some form of restraint such as pens or fences. With plants, the breeder may prevent undesirable cross-pollination by covering the pistil.

2. Prevent the random destruction of mature and immature individuals having the desirable traits.

The net result of the strict enforcement of these rules is to make man a persistent and consistent selector with the ability to make micro-changes in certain desirable directions. The failure to enforce these rules is to prevent any change and to preserve the status quo. Success requires a constant enforcement of the rules. A breeder cannot expect to make any progress if for several generations horses are bred up for speed and then for even one generation are allowed to mate indiscriminately. The persistence and consistence required by artificial selection may be illustrated by the British, who at one time had a law requiring the destruction of all horses under a certain size. This, of course, was to ensure an increase in horse size.

Darwin claims this for his mechanism: "It may metaphorically be said that natural selection is daily and hourly scrutinizing, throughout the world, the slightest variation; rejecting those that are bad, preserving and adding up all that are good; silently and insensibly working, *whenever and wherever opportunity offers*, at the improvement of each organic being in relation to its organic or inorganic conditions of life."²⁰

First Analogy, Now Metaphor

The reader will notice that Darwin claims that Nature is selecting only in a *metaphorical* sense. In other words, Nature is not literally selecting for some traits and eliminating others; natural selection is merely a figure of speech. Darwin elaborated on this when he wrote that: "In the literal sense of the word, no doubt, natural selection is a false term." He goes on to say that: "Everyone knows what is meant and is implied by such metaphorical expressions; and they are almost necessary for brevity . . . I mean by Nature only the aggregate action and product of many natural laws, and by laws the sequence of events as ascertained by us." He closes by assuring the reader that this is nothing to be concerned about: "With a little familiarity such superficial objections will be forgotten."²¹

In regard to natural selection as a metaphor, Macbeth notes the following: "If the reader is surprised to find natural selection disintegrating under scrutiny, I was no less so. But when we reflect upon the matter, is it so surprising? The biologists have innocently confessed that natural selection is a metaphor, and every experienced person knows that it is dangerous to work with metaphors. As the road to hell is paved with good intentions, so the road to confusion is paved with good metaphors. Perhaps the sober investigator should not have staked so much on a poetic device."²²

What does all of this mean: suddenly to learn that natural selection is merely a figure of speech, a poetic metaphor. In Darwin's definitions of natural selection, we obviously were led to believe that nature was in a literal sense preserving and eliminating variations. We were further led to believe this by a carefully calculated effort to make natural selection analogous to artificial selection. In a literal sense, there is artificial selection: man does preserve some variations and eliminate or at least suppress others with his constant vigilance.

What is the status of metaphors in scientific method? It is acknowledged that they are not applicable; they are as useless and dangerous as analogies, (which, of course, they resemble.) Metaphors have a literary value, but are useless in science. They are, in fact, a throwback to the natural philosopher's desire for total explanation:

Any theories based on metaphors are highly hypothetical.²³

Metaphors, like analogies are dangerous, since they are double-edged. While they have a legitimate heuristic use, and are also suggestive, the suggestions they make are often the source of errors which would otherwise have been avoided.

Metaphorical statements are not true or false, but merely apt or inapt, appropriate or inappropriate. Scientific statements make truth claims and therefore cannot be metaphorical.²⁴

Also, "to mistake the metaphorical for the fact is to be the victim of the metaphor, and this is perhaps only another way of saying that we must not accept the metaphor as true."²⁵ And, "an unresolved metaphor consists of a false ("nonsensical") identification or attribution."²⁶

So. It all comes down to this: Evolution theory, allegedly one of the greatest scientific theories of all

times, the foundation for many philosophies, religions, and political systems, is merely a metaphor "proved" by an analogy, an abomination of science. Those who believe it have been over-influenced by the clever persuasion tactics of a natural philosopher.

Analysis of the Natural Selector- Artificial Selector Analogy

It is within the capability of scientific analysis to prove the impossibility of evolutionary natural selection. Science, as we have learned, takes words in a literal sense; therefore in order to bring natural selection into the realm of science we must find a way to analyze it in a literal sense.

Whenever anyone uses the phrase natural selection or when we read in a book that this or that organ or organisms evolved by means of natural selection, the speaker or writer is really using a cliché to express his ignorance. Natural selection is supposed to be comprehended by analogically associating it with artificial selection. The writer or speaker understands literally, exactly and specifically how man, the selector, accomplishes his tasks, but cannot literally, exactly and specifically describe the factors or forces in nature that allegedly accomplishes its task. Natural selection is comprehended metaphorically and analogically, not literally. Let us prove now what Huxley and Gray suspected; that there is nothing in nature that can select as man can.

To do this, we must reduce both artificial selection and evolutionary natural selection to the same common denominator. Failure to do this has permitted this false analogy to live. When the phrase artificial selection is used, we immediately identify man as the *selector*. Man's success as a selector, although limited by limited variability, is a result of his being a persistent and consistent selector. A desultory, haphazard, random selector would merely preserve the status quo. And we know that man is a persistent and consistent selector because he has the intelligence to enforce the two basic rules of artificial selection, which is really a form of technology.

The problem comes when we use the phrase natural selection. We have permitted evolutionists to identify nature, or the environment, as the selector analogous to man. But nature is a connotation too vague and ephemeral for scientific use; it represents an "aggregate" of alleged selectors. In order to overcome this incorrect comparison, we must do with the phrase natural selection what we have done with the phrase artificial selection; namely, identify and specify the selector.

You may recall that the real test for evolutionary natural selection would be to observe it in the environment. As a substitute for observation, Darwin made the mechanism seem analogous to artificial selection by proposing imaginary examples. Direct observation however would make analogy and imagination unnecessary.

Imaginary Examples of Natural Selection

Let us analyze his imaginary examples and reveal how unrealistic they are. The first one is an example of

macroevolution, how Darwin thought bears could be transformed into whale-like animals: "In North America the black bear was seen by Hearne swimming for hours with widely opened mouths, thus catching, like a whale, insects in the water. Even in so extreme a case as this, if the supply of insects were constant, and if better adapted competitors did not already exist in the country, I can see no difficulty in a race of bears being rendered, by natural selection, more and more aquatic in their structure and habits, with larger and larger mouths, till a creature was produced as monstrous as a whale."²⁷

As explained earlier, whether the analogy is true or false can only be determined by identifying the selector in the environment. The selector in the example just described is the insects in the water. Man has only accomplished microevolution in his selection; but according to Darwin's analogy, the insects, functioning spontaneously, can transform bears into whale-like animals! The example may seem ridiculous, absurd, and fantastic in the highest degree, but according to evolution theory it would be a commonplace occurrence.

I maintain that the insects are not persistent and consistent selectors like man, and to entertain the idea that they are is unreal. Darwin admits, "in the case of methodical selection, a breeder selects for some definite object; and if the individuals be allowed freely to intercross, his work will completely fail."²⁸ There is no way that the insects can prevent random mating of ordinary bears in the territory with the bears that are supposed to evolve. Insects cannot enforce the first rule of artificial selection and consequently cannot make any changes in the natural status quo, which is a phenotype of bears some with slightly larger or smaller mouths and bears with ordinary paws and bears with incipient (very slightly) fin-like paws. The exceptionally large mouths and fins, even if we concede that such dramatic traits can occur, would have to begin as incipient forms and, because of random mating, could never develop into anything of any survival advantage. Man, as a persistent and consistent selector must be constantly vigilant; while the insects, according to the analogy, are supposed to accomplish more than man by simply being passively in existence in the water.

Macroevolution, the change from one kind to another, is what we are challenging. Macroevolution would require unlimited variability as well as a persistent and consistent selector. It is interesting to note that the bear to whale-like transformation was the only example of selection involving macroevolution that I could find. This example was in the first edition of the *Origin*; but Darwin was advised to remove it, probably because it put too much strain on the credibility of the theory. Yet, according to the theory, the example should be considered commonplace. In the remaining editions of the *Origin*, the example was revised to read as follows: "In North America the black bear was seen by Hearne swimming for hours with widely opened mouth, thus catching, almost like a whale, insects in the water."²⁹ As you can see, the second important sentence is omitted and the reader is left to imagine that the sentence that remains is some sort of evidence for evolution.

The remaining examples of selection that will be analyzed, some of which have actually been observed, apply to microevolution, a change within a kind, the possibility of which is not being questioned, when man is the selector. But even this seems to be more than any natural selector can accomplish. Artificial selection, to achieve microevolution, is a technological technique and seems to be more than a natural selector can duplicate. We are not challenging selection *per se*. Some sort of selection must be holding the populations in check; but it is not evolutionary natural selection, leading to macro changes.

Darwin imagined that giraffes acquired long necks because it was a survival advantage for food-getting. Critics of this imaginary example pointed out that, if long necks are of significant survival advantage, why do we not have a large number of quadrupeds with long necks? Darwin could only answer with vague conjecture.

The example of how giraffes are believed to have acquired a long neck is given in most of the high school textbooks. It is illustrated in a series of pictures to compare Darwin's theory with Lamarck's defunct theory. Lamarck, according to the pictures, would say that giraffes *needed* a long neck and, by stretching their necks to reach the vegetation, their offspring would somehow end up with longer necks.

According to Darwin's theory, the first picture shows several giraffes, some with long necks and some with shorter necks. The second picture shows long-necked giraffes feeding while on the ground lies a dead giraffe, presumably a starved short-necked one. The third and final picture shows several uniformly long-necked giraffes. The alleged example creates more questions than it answers. For example, it does not explain how all giraffes originally would have come to have necks long enough to make slight differences in lengths a survival factor.

When we analyze these pictures in class, I ask the students what the natural selector is and they tell me it is the vegetation. I ask them if they think the lack of vegetation can eliminate short-necked giraffes—they think not. They seem to think that the amount of available vegetation at lower levels would always be sufficient to sustain short-necked giraffes; therefore the status quo of the first picture would have been preserved. Vegetation is a random factor, the quantity and availability of which may vary from place to place and time to time. The randomness of the factor forbids it from ever being a persistent and consistent selector. It would ever and always permit mating of short-necked giraffes with long-necked giraffes.

On at least two occasions students have commented, and several authors have pointed this out also, that, if the lack of low vegetation could rigorously destroy adult short-necked giraffes, than the offspring from the long-necked giraffes would also be rigorously destroyed. We see immature giraffes surviving after being weaned and can assume then that short-necked adult giraffes could also. The example disintegrates under close analysis.

Sometimes a student will suggest in reply, that perhaps long-necked adult giraffes pull vegetation

down to within range of their offspring. The student has a perfect right to formulate that hypothesis; but should realize that he or she is simply mongering-in an hypothesis with no basis in fact, as a natural philosopher would do, to save the theory.

May I reiterate that besides limited variability, evolutionary natural selection is impossible because according to Darwin's own analogy, no natural selector can eliminate some traits and perpetuate others: Natural selectors can only preserve the genotypic status quo or temporarily alter it. This is exemplified in the following example from the *Origin*: "... of the best short-beaked tumbler-pigeons a greater number perished in the egg than are able to get out of it Now if nature had to make the beak of a full-grown pigeon very short for the bird's own advantage . . . there would be simultaneously the most rigorous selection of all the young birds within the egg, which had the most powerful and hardest beaks . . . or more delicate and more easily broken shells might be selected" ³⁰

This example of selection involving microevolution reveals Darwin's lack of mental rigor as a theorist. We see also how Darwin personified nature, giving it the capability to make decisions like man. In this example he suggests that nature can determine at the embryonic stage what kind of beak would be useful for birds as adults. The natural selector in this example is the hardness of the egg shell. Obviously egg shells cannot eliminate one kind of beak and perpetuate another kind. He plainly states that the thickness of the egg shells vary at random (not persistently and consistently) as do kinds of beaks. Well then, if the selector varies at random and the trait varies at random, the status quo will be preserved and no change will occur in any direction. We have here a perfect example of the randomness that seems to pervade nature. Nordenskiöld explains it this way: "The variations are certainly guided by laws . . . not, however, in any given direction but in all possible directions, and they are influenced, depending upon every chance, quite incalculably by natural selection. But if, then, natural selection were guided by chance it would exclude the possibility of any law-bound phenomenon in existence. Herein really lies the greatest weakness of the Darwinian Doctrine of selection." ³¹

This example of selection involving microevolution occurred about the turn of the century in England. A Professor Bumpus collected a sampling of sparrows of the species, *Passer domesticus*, which were killed during a February sleet and snow storm. Measurements were made of the weight, length of beaks and skulls, length of humerus, etc. The general conclusion from the study was, "that when nature selects, through the agency of winter storms of this particular severity, those sparrows which are short stand a better chance of surviving." ³²

The selector in this example is the February storm. Obviously it is not a persistent and consistent selector. In fact, the inconclusive results of this study could not be verified because of the infrequent occurrence of that kind of storm in a given area. Storms rarely occur in consecutive years in the same areas and of comparable severity. The storm may have temporarily altered the genotypic and phenotypic status quo in an isolated area, but random mating of the surviving sparrows

within that area and possibly the surrounding areas will prevent a micro-change to smaller sparrows.

The Much-Mentioned Pepered Moth

When I ask students to check the literature for examples of evolutionary natural selection, they frequently cite the example of the moths near Manchester, England. Evolutionists have gotten a great deal of mileage out of this study; and on the surface it appears to be a valid example. The actual results, however, prove what has been concluded from the other examples, that natural selectors cannot select persistently and consistently as man can. The selectors fail because they cannot eliminate one trait while preventing random mating.

This study was conducted in the 1950's by Dr. H. B. D. Kettlewell. Back in the 1800's it was noted that there was a dark pigment and a light pigment form of the Pepered Moth, *Biston betularia*. The phenotypic status quo in the vicinity of Manchester in 1848 was about 1% of the dark form to 99% of the light form. This ratio was believed to be the result of birds preying on the moths as they rested on the lichens growing on the bark of the trees in the woodland. The dark moths were more conspicuous against the light background of the lichens, so they were eaten most frequently.

As a consequence of industrial development, the natural habitat was altered by soot and chemical gases from the factories so that the bark of the trees in these areas was darkened. Conditions were now reversed: the light moths had the pigment that was most conspicuous. At the time Kettlewell conducted his study in the 1950's the dark moths had become the dominant phenotype.

The natural selectors in this example are the birds that prey upon the moths. In the unpolluted habitat the birds apparently were unable to eliminate the dark moths, probably because there were always enough dark areas on the tree bark where dark moths would tend to rest and become inconspicuous. In the polluted habitat where man actually, inadvertently but nevertheless, was co-selector with the birds, the light moths could not be eliminated. Probably the reason was the same as that given for the unpolluted habitat; also there would be a continual movement of light-colored moths into the area from adjacent unpolluted areas.

Recent environmental concern has brought about a reduction in the amount of soot and gases that formerly polluted the area. Predictably, the tree bark has returned to its natural color, and the ratio of dark to light moths is again being reversed. One thing is certain: the natural selectors were unable, in either the natural or the artificial habitat, permanently to alter the genotypes of moths in any one direction.

Now, if man were to eliminate one form of the Pepered Moths by artificial selection, he would have to isolate a portion of the population to prevent random mating with migrating moths and then systematically remove all off-spring over many generations having the undesirable color. Theoretically, the desired form would breed true as long as the artificial selection persisted.

In these analyses, we have made careful distinctions, in order to avoid gross assumptions. It is a blatant

deception for evolutionists to claim any kind of selection as evolutionary natural selection when it obviously falls short of what the theory requires.

Speculation vs. Fact About Wolves

The following quote from the *Origin* is another imaginary example of selection involving microevolution which explained to those who wanted to believe it, how wolves became swift and agile. The example also demonstrates the advantage scientific observation has over natural philosophical speculation. It is unique in that what Darwin imagined can be contrasted with actual observation:

Let us take the case of a wolf, which preys on various animals, securing some by craft, and some by strength, and some by fleetness; and let us suppose that the fleetest prey, a deer for instance, have from any change in the country increased in numbers Under such circumstances, the swiftest and slimmest wolves would have the best chance of surviving and so be preserved or selected I can see no more reason to doubt that this would be the result, than that man should be able to improve the fleetness of his greyhound by careful and methodical selection³³

In this example Darwin, true to form, attempts to make it credible by analogically comparing it to man's selection of greyhound dogs. The selector in this example is the swiftness of the deer. Although wolves feed on other prey, the reader is left with the impression that the deer-wolf prey-predator relationship is of evolutionary importance. If one were to carry this example to its logical conclusion, the wolf would in turn be considered a selector to make deer faster by eliminating the slower ones. The wolves would not then be gaining an advantage from an increased speed, since, hypothetically, every slight increase in speed on the part of the wolves would be offset by an increase in the speed of the deer.

Now let us discover what is really happening in the great outdoors. In the late 1950's Farley Mowat, a trained biologist, was sent by the Canadian government into the Arctic region to determine the cause of a rapid depletion of the caribou herds. Mowat concluded that wolves, the prime suspects, were not the cause, but more likely over-zealous hunters were. He became intimately familiar with a wolf family, and was able to study their habits closely and even to learn how wolves hunt their prey. Contrary to what Darwin speculated, slight differences in speed among the caribou were not of any significance, since the slowest healthy caribou could easily outdistance a wolf. Wolves instead select their prey on the basis of vigor versus infirmity.

Mowat learned that a healthy adult caribou, and even a three-week old fawn, can easily outrun a wolf. Knowing it was a senseless waste of energy to attempt to run down a healthy caribou, the wolves would rather systematically test the state of health of the deer in order to find one that was not up to par. This was done by rushing each band and putting them to flight. If an inferior beast was not revealed, they would give up the chase and test another band.³⁴

When the testing finally revealed an inferior beast, "the attacking wolf would . . . go for its prey in a

glorious surge of speed and power . . . the deer would begin frantically zigzagging . . . this enables the wolf to take shortcuts and close the gap more quickly."

Mowat also reports that, "most of these carcasses showed evidence of disease or serious debility . . . on a number of occasions I reached a deer almost as soon as the wolves had killed it Several of these deer were so heavily infested with external and internal parasites that they were little better than walking menageries, doomed to die soon in any case."³⁵

From this observed example of selection we learn that it has no evolutionary significance. There is no way that deer can eliminate the genes for slowness in the gene pool of wolves. Randomness is the overriding factor in the deer-wolf prey-predator relationship. It is not a life or death struggle, as Darwin imagined, slight differences in speed determining the outcome. Besides, the slowest wolves can participate and share in a kill equally with any slightly faster wolves among the pack. The genotype of the pack is preserved. Apparently under the sun, the race is not to the swift nor the battle to the strong, but time and chance happen to them all.

The wolf predation actually benefits the caribou herd; it results in the maintenance of a high reproductive vigor among the caribou by eliminating the diseased and aged members who would consume food but probably would not reproduce.

A similar study was conducted of the moose-wolf prey-predator relationship on Isle Royale in Lake Superior. An analysis of the skeletal remains of wolf-killed moose revealed that in this instance also the wolves were taking individuals that were old and arthritic. Selection was based upon vigor versus infirmity, not upon variations in speed.

Any Selection in Nature is Commonly Random

Let us pass on to one final example of alleged evolutionary natural selection. This example deals with the common snail, *Cepaea nemoralis*, which is frequently preyed upon by thrushes. The shells of the snails are colored dark brown or pinkish or else yellow (greenish when the animal is within). To this colored surface up to five blackish bands may be added. A study of shell remains revealed that, "they destroy relatively few of the least conspicuous types; yellow (greenish) upon grass; brown upon leaf litter in woods; banded shells upon a diversified background, as mixed herbage; and unbanded in a relatively uniform environment." The author says that the thrushes do not select at random, but in the next paragraph states that, "Yet though the inappropriate colours and patterns are constantly being eliminated in nature, the populations do not become invariable."³⁶

Obviously, the selection was random to a degree that one or more colors or patterns could not be eliminated. The thrushes could not cause microevolution. How could they? The snails are constantly moving, the backgrounds are constantly changing, seasonally and from place to place; and the snails are randomly mating. A color or pattern that was favored at one time and in one area may not be so in another area at a different time. The author attributes the persistent variability of colors and patterns, not to the randomness of the thrushes as

selectors, but the genetic make-up of the snails—a super-gene that resists the elimination of a trait, which only adds to the numerous objections already confronting the alleged mechanism.

Summary of the Natural Selector-Artificial Selector Analogy

We have now completed an analysis of the alleged evolutionary natural selection mechanism. We have noted that it fails the test of observation, and have gone on to explain that natural selectors lack the persistence and consistence necessary to favor one variation to the exclusion of others. You may recall that Darwin's mechanism was developed as follows:

- (fact) 1. Variations exist—no two members of a species are exactly alike.
- (fact) 2. Populations *tend* to increase geometrically—2, 4, 8, 16, 32, 64, etc., e.g.

The salient question, then, is what is holding populations in check? Darwin's answer was the evolutionary natural selection mechanism. But because of limited variability, lack of useful-for-survival-mutations,³⁷ random selectors, and a failure to observe the mechanism in action, Darwin's guess as to what is holding the population in check must be incorrect. Conversely, because of limited variability, lack of useful-for-survival mutations, and successful observation of random natural selection in action, random natural selection, at least random to the degree that traits are not eliminated, must be what is holding populations in check. Therefore this alternative to Darwin's hypothesis should be included in the textbooks:

What is holding populations in check?

- 3. No selectors in nature can choose to eliminate some variations and perpetuate others.
- (observed) 4. Chance selection holds populations in check, resulting in no macro-evolution.

Now I know evolutionists will insist that both kinds of selection, random natural selection and evolutionary natural selection, are occurring in the environment. In fact, Darwin has already conceded random selection:

... there must be much fortuitous destruction, which can have little or no influence on the course of natural selection. For instance, a vast number of eggs or seeds are annually devoured, and these could be modified to natural selection only if they varied in some manner which protected them from their enemies. Yet many of these eggs or seeds would perhaps, if not destroyed, have yielded individuals better adapted to their condition of life than any of those which happened to survive... a vast number of... animals and plants, whether or not they be the best adapted to their conditions, must be annually destroyed by accidental causes...³⁸

The point is that we have no reason at all to believe that his alleged evolutionary natural selection plays a part in holding populations in check, and every reason to believe that fortuitous destruction or random natural selection is the only kind of selection that is functioning in the environment. In other words, a double standard

exists; the evolutionary natural selection mechanism is credible according to natural philosophy, but is disproved according to exact science.

What Difference Does Time Make?

In closing, it may be appropriate to consider the question of time available for evolution. Darwin confused the issue by relating infinite power for evolution to infinite time. Consequently, the concept of an extremely old earth is regarded, by less rigorous thinkers, as proof of evolution. Radiometric dating, which is supposed to indicate an old earth, is, however, a procedure open to question. If, for example, someone reports that a fossil or rock stratum is approximately one hundred thousand years old, one can only accept that date on the conviction that the test itself was conducted without error, and that the rate of radio-active decay has always been constant throughout time. There is no way to cross-check a date that old with the only logical test involving human witness—recorded history. An extremely old earth would not, indeed, in itself prove evolution. On the other hand, a young earth would be another factor disproving evolution theory. Other than that, the concept of time is not relevant to the theory. Besides several authors have pointed out that parts of an organism are correlated; therefore, organisms cannot change slowly, but would have to come into existence *en bloc* or not at all. So the gradual accumulation of variations, supposedly shrouded in the mists of time, is an impossibility even though eternity were granted. Also, the random relationship presently observed between natural selectors and variations could never have been a persistent and consistent relationship in the past, even an infinite past. A random relationship between selector and variations is the law-bound phenomenon in our environment. The concept of immense time is no defense of or evidence for an alleged mechanism which is obviously not functioning at the present time.

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This very evening, as I write this we have watched unprecedented rains and floods in Central Texas that caused great loss of life and property, after some 20 inches of rain, or more. Many Creationist scientists view the Genesis Flood as the sort of flood we are now watching in Texas, where rivers are swollen far above their flood water banks, but many times greater. If scientists would recognize the Biblical Flood for what Scripture describes it to have been, they would not have to call on the supposed impact of some asteroid to explain the undoubted signs of former catastrophic events.

The new science of plate tectonics has been proposed to explain assumed major movements of the continents of the earth. It has been contended that at one time all of the continents were joined into one supercontinent. India was believed to have traveled from the Antarctic area to its present position attached to the southern part of Asia. A newer development subdivides the continents into a number of plates, like the armadillo.

While some scientists, including some Creationists, accept this new science,⁷ some have doubts. Paul Wesson of the University of Cambridge, for instance, has shown some 74 arguments against this whole notion.⁸ One objection to this theory is that according to it the western shore-line of Africa has apparently moved eastward, while the eastern shoreline has moved westward!

Would a better explanation be that the shore-lines of continents were moved by the Flood of Noah? Manifestly before the great Flood the ocean level was perhaps thousands of feet lower than at present. This in itself would have greatly enlarged the surface areas of the continents, leaving the western shoreline of Africa much further west, and the eastern shoreline farther east. That is in my opinion the only explanation possible. Continental travel would not match the evidence nearly so well.

Coal beds, formed at or near sea-level, have been found in the Indian ocean at about 6,000 feet below the

surface, attesting to the tremendous volume of water that covered the earth at the time of Noah. Flood geology answers a host of earth problems much better than any explanation contrived by mere human reason.

References

- ¹The story of Atlantis is told in the dialogues *Timaeus* and *Critias*, which may be found in any edition of Plato's works.
- ²It has been suggested that documents, maybe in the form of tablets, may have been handed down by the patriarchs, and that Moses may have used them in editing *Genesis*. See Wiseman, P. J., 1946. New discoveries in Babylonia about *Genesis*. Marchall, Morgan, and Scott, London. If so, is it possible that such documents may even have included maps of the antediluvian world? Jacob might have taken such things, which were in his keeping, to Egypt; and while Moses evidently had many of them, or copies, others, or, again, copies, might have remained in Egypt even until Plato's time.
- ³For a critical discussion of the notion that Atlantis was really the island Thera, see Isaacson, Israel M., 1975. Some preliminary remarks about Thera and Atlantis. *Kronos* 1(2):93-97.
- ⁴For some similar thoughts along this line see Heyerdahl, Thor, 1979. Early man and the ocean. Doubleday and Co., Inc., Garden City, New York. Pp. 359-361.
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- ⁸Wesson, Paul S., 1972. Objections to continental drift and plate tectonics. *Journal of Geology* 80(2):185-197.
- (Editor's note.) As this item was being prepared for the press a further report about Atlantis appeared. A story on page 1 of the *Kingston Whig-Standard*, 3 April, 1979, states that Prof. A. A. Akshenov, a Russian oceanographer, reports finding, in the Atlantic off Gibraltar, a submerged group of flat-topped mountains, which, he believes, may once have been an archipelago. Moreover, there were what appear to be ruins of man-made structures.
- Dr. Burdick informs me that he has seen a similar account, originating in Moscow, and quoting Alexander A. Nesterenko, director of the Soviet Institute of Oceanography, and Andrei Akensov, an authority on underwater exploration.

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- ¹The well known film, *Footprints in Stone*, is distributed by the Films for Christ Association, North Eden Road, Elmwood, Illinois 61529.
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An Analysis of Darwin's Natural Selection (Continued from page 97)

- ¹⁸*Ibid.*, p. 433.
- ¹⁹Gray, A. 1860. The origin of species. *The North British Review*, Vol. 32:465.
- ²⁰Darwin, C. *Op. cit.*, p. 66.
- ²¹*Ibid.*, p. 64.
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- ²³Leatherdale, W. H., *Op. cit.*, p. 206.
- ²⁴*Ibid.*, p. 181.
- ²⁵*Ibid.*, p. 149.

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A New Kind of Evidence

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the branch fell into it. But the tracks in the rock must have been made in the mud only a very short time before it hardened, or else they would never have remained. So the tracks in the rock must be no more than about 12,000 years old.

Nobody, as far as I know, has disputed that the dinosaur tracks found at the river are genuine. Thus, there must have been dinosaurs living about 12,000 years ago. This conclusion, it will be noted, follows whether or not the human tracks which many have found are genuine. On the other hand, when the dinosaur tracks have been shown to be comparatively recent, there is no reason to doubt that human tracks might be found in the same place.