Chapter 16 ———

VESTIGES AND RECAPITULATION

You have no useless or unnecessary structures inherited from earlier life forms

This chapter is based on pp. 751-773 of Other Evidence (Volume Three of our three-volume Evolution Disproved Series). Not included in this book chapter are 46 statements in its appendix, along with specialized charts. You will find all this, plus much more, on our website: evolution-facts.org.

We will deal with two topics in this chapter.

First, there are supposedly *"vestigial organs.*" These are useless structures found in human embryos and adults.

Are there remnants of evolution in your body? The Darwinists say there are. These are said to be unneeded organs, which your animal "ancestors" used and then passed on to you. Obviously, the "proof" is that you have useless, no longer needed organs which are "vestiges" (left-overs) from your evolutionary ancestors.

<u>Second, there are supposedly "recapitulated organs</u>." You are supposed to have had these when you were growing in the womb. <u>These are said to be unnecessary structures found *only* in human embryos, which you inherited from creatures in your evolutionary past!</u>

In this chapter, we will carefully consider the claims of evolutionists in regard to both of these points. It is important that we do so; for, regardless of how foolish their claims may be, they are given prominent space in the textbooks that you and your friends read.

1 - VESTIGES

ORGANS FROM THE PAST—Evolutionists tell us that there are "vestiges" in people that prove the theory of evolution. <u>These</u> <u>vestiges are supposed to be human body parts that are no longer</u> <u>needed</u>, and are just castoffs from some earlier creature that we descended from. <u>Because earlier creatures needed them</u> <u>and we do not</u>—is supposed to prove that we descended from <u>those earlier life forms</u>. That is how the theory goes.

A vestigial organ, by evolutionary definition, is an organ that was once useful during a previous stage of your evolution; but, in the course of time, that organ was no longer needed and continued to remain in the body. To say it differently, changes in physical structure rendered certain organs redundant, but they still remain in the body.

The "theory of vestiges" has gained prominence as a major "proof" of evolution, only because there is no other evidence in either the present or the past of transition of one type of animal or plant to another. Yet, <u>in this chapter, we will learn</u> <u>that there are no vestiges</u>!

Frankly, the situation for evolutionists is a matter of desperation. When there is nothing else to turn to, Darwinists are willing to grasp at any possibility that might help their cause.

The vestiges argument was one of the few "scientific evidences" the evolutionists were able to present at the 1925 Scopes Trial. *Newman, a zoologist, made this statement on the witness stand for the defense:

"There are, according to Wiedersheim, no less than 180 vestigial structures in the human body, sufficient to make of a man a veritable walking museum of antiquities."—**Horatio Hackett Newman, quoted in The World's Most Famous Court Trial: The Tennessee Evolution Case (1990), p. 268.*

In the first half of this chapter we will deal with vestiges, and will answer two questions: (1) <u>Do we have any vestigial</u> <u>organs</u>? (2) <u>If we do, would they prove evolution</u>?

SOME OF YOUR USELESS ORGANS—What are all these useless organs that we are supposed to have within us? *Charles Darwin said they included **wisdom teeth**. *Robert Wiedersheim, a

German disciple of Darwin's, wrote a book in 1895 in which he listed 86 vestigial organs: including <u>valves in the veins</u>; the <u>pineal</u> <u>gland</u>; the <u>thymus</u>; <u>bones in third, fourth, and fifth toes</u>; <u>lachrymal (tear) glands</u>; and <u>certain female organs</u>. Later he expanded it to 180. Earlier Darwinists assumed that if they were ignorant of an organ's function, then it *had* to have no function.

School textbooks as recent as the 1960s listed over 200 vestigial (useless) structures in the human body, including the **thyroid** and **pituitary glands!**

To date, not one dedicated evolutionist has been willing to have all his "vestigial organs" removed. To do so, would require taking out most of his endocrine (hormonal) glands!

In reality, the list of "useless organs" has steadily decreased as scientific knowledge has increased. As our knowledge and understanding of physical structures has multiplied, we have arrived at the point where there are no more vestigial ones! <u>Today ALL organs formerly classed as vestigial are known to have</u> a function during the life of the organism!

The truth is that <u>the theory of useless organs as a proof of</u> <u>evolution was based on rank 19th-century ignorance of those</u> <u>organs!</u> No capable biologist today claims that any vestigial organs exist in human beings. But, unfortunately, that fact is not mentioned in the school textbooks. You will still find them talking about your "vestigial organs" which prove evolution!

EIGHT USELESS ORGANS—<u>Here are some of these suppos</u>-<u>edly useless organs in your body:</u>

1 - <u>The Tonsils</u>. Here is one of those "worthless organs," which we now know to be needed. These two small glands in the back of your throat help protect you against infections.

2 - <u>The Appendix</u>. This is the classic "useless" organ of evolutionary theory. Science recently discovered that man needs this organ; it is not useless after all. **It helps protect you from gastrointestinal problems in the lower ascending colon.** The appendix is now known to be an important part of what is called the *reticuloendothelial system* of the body. **Like the tonsils, the appendix fights infection.** "There is no longer any justification for regarding the vermiform appendix as a vestigial structure."—**William Straus, Quarterly Review of Biology (1947), p. 149.*

Because the appendix becomes swollen at times, it was said to be vestigial and useless. But people have far more problems with their lungs and stomachs than they have with their appendixes. We hope the evolutionists do not decide to call any more organs "vestigial" and begin cutting them out also!

The fact that tonsils can be cut out without apparent harm is a major reason for calling them "vestigial." But you will also survive if your eyes and arms are cut off; and no one considers them "vestigial," or useless organs.

It would be well to clarify the special role of the tonsils and appendix: **The human alimentary canal is a long tube leading from mouth to anus. Near each opening, the Designer placed an organ to protect your entire gastrointestinal tract from pathogenic invasion while you were an infant.** The appendix was crucial during your first months, and your tonsils during your first several years. In later years, you do not have as urgent a need for either your tonsils or your appendix as you did while you were a small child.

According to *Science News, March 20, 1971, both the tonsils and appendix are now believed to guard us against Hodgkin's disease.

3 - <u>*The Coccyx*</u>. Another organ declared useless, by evolutionists, is the *coccygeal* vertebrea (the coccyx). This is the bottom of your spine.

Scientists have found that important muscles (the *levator ani and coccygeus*) attach to those bones.

Without those muscles, your pelvic organs would collapse; that is, fall down. Without them you could not have a bowel movement, nor could you walk or sit upright.

4 - <u>The Thymus</u>. Try cutting this one out, and you will be in big trouble! It was once considered a worthless vestigial structure, but scientists have discovered that **the thymus is the primary central** gland of the lymphatic system. Without it, T cells that protect your body from infection could not function properly, for they **develop within it.** We hear much these days about the body's "immune system," but without the thymus you would have none.

"For at least 2,000 years, doctors have puzzled over the function of the thymus gland. Modern physicians came to regard it, like the appendix, as a useless, vestigial organ, which had lost its original purpose, if indeed it ever had one. In the last few years, however.. men have proved that, far from being useless, the thymus is really the master gland that regulates the intricate immunity system which protects us against infectious diseases.. Recent experiments have led researchers to believe that the appendix, tonsils and adenoids may also figure in the antibody responses."—* "The Useless Gland that Guards Our Health," in Reader's Digest, November 1966.

5 - *<u>The Pineal Gland</u>*. This is a cone-shaped structure in the brain, which secretes critically needed hormones, including, for example, melatonin which inhibits secretion of luteinizing hormone.

6 - <u>The Thyroid Gland</u>. Many years ago, surgeons found that people could live after having their thyroid cut out, so it was decided that this was another useless organ. Ignorance breeds contempt. Yes, you may survive without your thyroid, but you will not do very well. **The thyroid gland secretes the hormone**, *thyroxin*, which goes directly into the blood. This hormone is essential to normal body growth in infancy and childhood. Without it, an adult becomes sluggish. Either an oversupply or an undersupply of thyroxin will result in over-activity or under-activity of many body organs. Deficiency of this organ at birth causes a hideous deformity known as *cretinism*. *Thyroxin* triggers cell batteries (the mitochondria) to provide energy to the cell for all its functions.

7 - <u>The Pituitary</u>. Once claimed to be vestigial, this organ is now known to ensure proper growth of the skeleton and proper functioning of the thyroid, adrenal, and reproductive glands. Improper functioning can lead to Cushing's syndrome (gigantism).

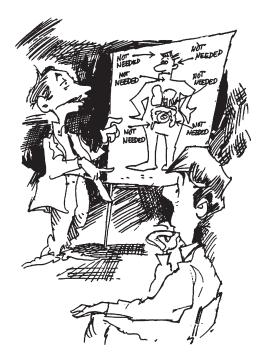
8 - *The Semilunar Fold of the Eye.* *Charles Darwin, and others after him, claimed that the little fold in the inner corner of your eye is a vestige of your bird ancestors! But contemporary anatomy books describe it, not as a vestige, but as a very necessary part of your eye. It is that portion of your conjunctiva that cleanses and lubricates your eyeball.

9 - <u>Other Organs</u>. There are many more such organs in your body which, at one time or another, evolutionists declared

Science vs. Evolution



"But, Dr., it says in my biology book that my thyroid and pituitary are useless organs. So they need to come out."



"Until we find something better, the best proof of evolution is the useless organs in our body."



"We could only have descended from rabbits, African apes, Australian wombats, or American opposums, for they are the only other ones with appendixes."



"We're looking for volunteers that we can operate on and remove all their 200 useless vestigial organs."

to be worthless. Well, such organs are not useless as was thought. Gradually the list of "vestigial organs" lessened as their function was discovered. For example, it was said by one scientist (Wiedersheim) that <u>ear muscles</u> were totally unnecessary. Later research disclosed that without those tiny muscles within the inner ear, you would not be able to hear properly.

"Many of the so-called vestigial organs are now known to fulfill important functions."—**Encyclopedia Britannica Vol. 8 (1946 ed.), p. 926.*

The more we study into these "useless" vestiges, the more we find ourselves in awe before a majestic Creator who carefully made us all.

A better name for some of these supposedly vestigial organs, of which evolutionists make so much, would be "organs of unknown function." Fortunately, in our time knowledge is taking the place of ignorance in regard to the reasons for the various structures of the human body.

A SPECIAL PURPOSE—All this talk about useless organs calls our attention to the fact that everything within us has a special and important purpose. It also emphasizes that Someone very intelligent designed our bodies! We did not just "happen" into existence.

Evolution teaches that all organs developed by chance, and that some eventually happened to have a reason for existence. Later on, quantities of these useless organs tagged along when one species evolved into a new one. Thus, <u>if evolutionary theory were true, there</u> <u>ought to be large numbers of useless organs in your body! But scientific research discloses that there is not one</u>!

Instead, careful investigation reveals that every part of you is very special, very important, and carefully planned. All the other creatures and plants in the world were carefully planned also. There is a special purpose for each of their organs also.

It took an extremely intelligent Master Designer to accomplish all of these biological wonders we call "plants" and "animals." Chance formation of molecules into various shapes and sizes could never produce what was needed.

FOUNDED ON IGNORANCE—How did such a foolish idea become accepted in the first place? It happened in a time of great ignorance. The whole idea of *"vestigial organs"* was originally conceived back in the early 1800s, at a time when physicians were still blood-letting in order to cure people of infection. But, since that time, there has been an immense quantity of research in every imaginable field. There is now no doubt by competent biologists that every large and small part of the human body has a special function during the life of the individual.

It strongly appears that <u>the *true*</u> "vestigial organ," in earlier times, was an ignorant mind</u>—a mind that did not know why organs were in the body and was too impatient and lazy to do the laborious work needed to identify functions.

HINDERS SCIENCE—Reputable scientists now recognize that the evolutionary teaching of "vestigial organs" actually retarded scientific knowledge for decades. Instead of finding out what the *appendix* was for, it was called "vestigial" and was cut out. Researchers were told it was a waste of time to study any possible use for it.

For the same reason, lots of children have had their tonsils removed, when they really needed them!

"The existence of functionless 'vestigial organs' was presented by Darwin, and is often cited by current biology textbooks, as part of the evidence for evolution . . An analysis of the difficulties in unambiguously identifying functionless structures . . leads to the conclusion that 'vestigial organs' provide no evidence for evolutionary theory."—*S.R. Scadding, "Do 'Vestigial Organs' Provide Evidence for Evolution?" Evolutionary Theory, Vol. 5 (May 1981), p. 394.

APPENDIX ANCESTRY—The appendix is the special body structure pointed to by evolutionists as a prime example of a vestigial organ an organ used by our ancestors, which we do not now use. Well, if that is true, then we ought to be able to trace our ancestors through the appendix in a direct line! In addition to man, which animals have an appendix? Here they are: rabbits, apes, wombats, and opossums! Take your pick: All four are totally different from each other. Which one descended from which? Oh, the evolutionist will say, we descended from the ape. Well, did he descend from the wombat?

PROOF OF DEGENERATION—(*#1/6 Scientists Speak about Vestigial Organs*) Would vestigial organs prove evolution? Actually, <u>if</u> we had useless organs in our bodies, they would prove degeneration, not evolution! The Darwinists have their theory backward. They claim we are moving upward, and then point to supposedly degenerate organs in our bodies to prove it. Here is an example of this backward thinking:

"If there were no imperfections, there would be no evidence to

favor evolution by natural selection over creation."—*Jeremy Cherfas, "The Difficulties of Darwinism," New Scientist, Vol. 102 (May 17, 1984), p. 29. (Cherfas was reporting on a lecture series by *Steven Jay Gould at Cambridge University.)

"No evidence." *Cherfas, an expert in his field, is essentially saying this: There is no evidence anywhere in the plant and animal kingdom pointing to evolution of one species to another, and there are no such findings among fossil discoveries indicating plant or animal evolution in the past. All we can rely on is vestigial organs! There is no other evidence!

We might mention here an interesting idea of some evolutionists. They think that all our "vestigial organs" once worked, but later became dysfunctional. They say that we then invented other organs to take their place. But if this is true, then we are devolving downward; for we used to have more complex bodies with many organs, and now we keep having less complex organs—and many of them are no longer functioning!

Darwinists claim that some of our organs are falling into disuse. Yet, in contrast, the evolutionists provide us with not one NEW, developing organ to take their place! Not one evidence of evolution is to be found by anyone. In contrast, the "vestigial organs" idea, if it could be true, would only prove the opposite: devolution!

2 - RECAPITULATION

Evolutionists tell us that there are two important proofs of evolution from one species to another. These are "vestigial organs" and "recapitulation." We have examined the foolish claim that "vestigial organs" exist in our bodies.

Let us now turn our attention to *"recapitulation."* For years, evolutionists declared that this was one of their most invaluable proofs of evolution. What is this "outstanding evidence" of evolutionary theory?

EMBRYONIC SIMILARITIES—<u>The concept of "recapitulation"</u> is based on the fact that there are similarities among embryos of people, animals, reptiles, birds, and fish.

It is true that embryonic similarities do indeed exist. Babies, before they are born, look quite a bit alike during the first few weeks. This includes people babies, raccoon babies, robin babies, lizard babies, and goldfish babies. They all begin as very tiny round balls. Then, gradually arms, legs, eyes, and all the other parts begin appearing. At one stage, there is just a big eye with skin over it and little flippers. (An *embryo* is an organism in any of the various stages of its development after fertilization and before hatching or birth. The human embryo is called a *fetus* after the first five or six weeks of development. Animal embryos in their later stages of development are also called fetuses.)

PURPOSE AND PLANNING—Each part of every embryo was designed and made according to a definite purpose. But <u>when animals are</u> just beginning to form—and while they are very, very small,—there is only one ideal way for them to develop.

The problem here is one of size and packaging. Literally hundreds of thousands of parts are developing inside something that is extremely small. **There are simply too many extremely tiny organs clustered in one near-microscopic object. When creatures are that tiny, there are only a very few ideal ways for them to be shaped, in order to develop efficiently.**

<u>Ongoing "change" is a basic dictum of evolution. If that is so,</u> <u>then by now—after millions of years of evolving—all those embryos</u> <u>ought to look very different from each other!</u>

But instead we see fixity of species throughout nature today, as well as in the fossil record. Advance planning was required on the part of Someone who carefully thought it through. And that Person designed ALL of those babies—whether they are pigs, frogs, bats, people, pigeons, or cows. The fact that embryos are alike in their earlier weeks reveals they were all designed and made by the same Creator.

But keep in mind that <u>we are only talking about appearance, not</u> <u>structure and function</u>. Even though a finch embryo and a tiger embryo look alike, everything else about them is different!

CHICKENS, LIZARDS, AND FISH—In place of such a glorious ancestry, the evolutionist says "*No, it cannot be so! Humans surely must have evolved from peculiar creatures,*—for why would their embryos have a yolk sac like a chicken, a tail like a lizard, and gill slits like a fish?"

The recapitulation theory is that human embryos have organs that are leftovers from ancestors. For example, gill slits like a fish! What good are fish gills in your body? Such organs are useless, totally useless to people, so they must be "vestiges" from our ancestors. Since those organs were needed by earlier creatures, but not by us, that proves that we are descended from those lower forms of life. So <u>human embryos are said to *repeat* or "recapitulate" various stages of their</u>

<u>ancestors (such as the fish stage)</u>; and this recapitulation is declared to be an outstanding evidence of evolution.

<u>The two key points in the above argument</u> of the Darwinists are these: (1) <u>Human embryos have organs which scientific research has</u> <u>proven to be useless</u>. We know they are useless because they have no relation to any human function. (2) <u>These useless organs in human em-</u> <u>bryos are actually special organs used by lower animals</u>. The conclusion is that these useless, recapitulative organs prove that we evolved from fish, lizards, and similar creatures.

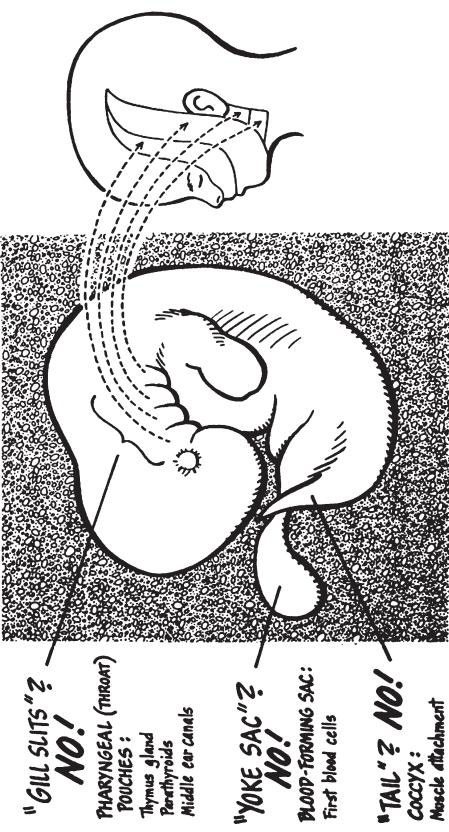
That is how the theory goes. We have here a variation on the "vestiges" (useless organs) theme, plus the strange notion that embryos repeat (recapitulate) their evolutionary past as they develop in eggs or inside their mother.

RECAPITULATION—Reading in scientific books, you will come across the word, "*recapitulation*," the theory that human embryos are really little better than the left-over parts of fish, chickens, lizards, and other animals.

Did you ever notice that big words are sometimes used as proof in themselves? Because it is a big word, therefore it must be true. The phrase the evolutionists use to describe their "recapitulation theory" is this: "Ontogeny (on-TAH-jen-ee) recapitulates (ree-cah-PIH-chulates) phylogeny (fil-AW-jen-ee)." A very learned phrase indeed. "Ontogeny" is the history of the development of an organism from fertilization to hatching or birth, and "phylogeny" is the imagined evolutionary development of life forms. But these big words only cover over a very foolish theory.

CHICKEN SAC—<u>This is the so-called "yolk sac" in your body</u>. In a baby chick, the yolk sac is the source of nourishment that it will continue to live on until it hatches. This is because the chick embryo is in an eggshell and has no connection with its mother. But **in a baby human being, this little piece of bulging flesh has no relation to a chick yolk sac, except for the shape.** <u>It is a small nodule attached to the bottom</u> **of the human embryo, even before it develops feet.**

A very tiny human being is connected to its mother and receives nourishment from her; therefore it does not need a yolk sac, as a baby chick does. But <u>a human embryo needs a means of making its</u> <u>own blood until its bones are developed</u>. Although nourishment passes from the mother to the embryo,—blood does not. That tiny human being must make its own. You and I make our blood in the marrow of our bones.



Embryos are only beginning to form their bones and the marrow within them. **Because they do not yet have bones to make their blood, embryos, for a time, need another organ elsewhere to fulfill that function.**

The first blood in your body came from that very tiny sack-like organ, long before you were born. When it is removed from an embryo, death immediately follows.

The problem is that it takes blood to make the bones that will make the blood! So a wonderful Designer arranged that, for a short time in your life, a little nodule, for many years called a "useless organ" because scientists were ignorant of its purpose, would make the red blood your body needed until your bones were made!

LIZARD TAIL—Well, that eliminates the "yolk sac." What about the *"lizard tail?"* Even though it looks like a "tail" in a human embryo—it later becomes the lower part of the spinal column in the child and adult. But why then is it so much longer in the embryo?

The spinal column is full of very complicated bones, and <u>the</u> total length of the spine starts out longer in proportion to the body than it will be later. This is just a matter of good design. There are such complicated bones in your spine that it needs to start out larger and longer in relation to the body. Later, the trunk grows bigger as internal organs develop.

But there is a second reason—the complex nerves in your spine: Scientists have recently discovered that <u>another reason the spine is longer</u> <u>at first than the body is because the muscles and limbs do not de-</u> <u>velop until they are stimulated by the spinal nerves! So the spine</u> <u>must grow and mature enough that it can send out the proper sig-</u> <u>nals</u> for muscles, limbs, and internal organs to begin their growth. For this reason, the spine at first is bigger than the limbs, but later the arms and legs become largest.

Would you rather have your well-functioning backbone, knowing that, when you were tiny, it was slightly longer than the rest of your trunk? Or would you rather it had been the same size back then? If so, it would be degenerate now, and you would have to lie in bed all day. And the rest of your organs would never have developed properly. *Come now, what is all this talk about "useless organs?" What organ could be more necessary than your spine!*

FISH GILLS—The third item in the embryo that the evolutionists claim to be useless vestiges are, what they call, "gill silts" in the throat

of each tiny human being. They say that these "slits" prove that we are descended from fish. But the theory, that people in their embryonic stage have gill slits, is something that knowledgeable scientists no longer claim. Only the ignorant ones do.

In the embryo there are, for a time, three small folds to be seen in the front of its throat. These three bubble outward slightly from the neck. Examining these folds carefully, we find <u>no gills to extract</u> <u>oxygen out of water, and <u>no gill slits (no openings)</u> of any kind. These are folds, not gill slits! There are no slits and no gills. More recent careful research has disclosed that the <u>upper fold</u> contains the apparatus that will later develop into the <u>middle ear canals</u>, the <u>middle fold</u> will later become the <u>parathyroids</u>, and the <u>bottom fold</u> will soon grow into the <u>thymus gland</u>.</u>

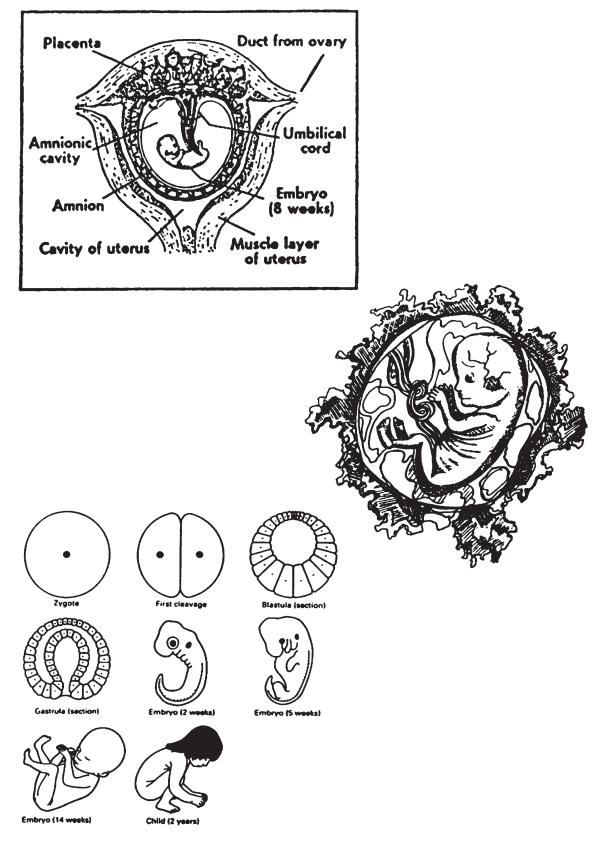
"The *pharyngeal* arches and clefts [creases] are frequently referred to as *bronchial* arches and bronchial clefts in analogy with the lower vertebrates, but since the human embryo never has gills called '*bronchia*,' the term pharyngeal arches and clefts has been adopted for this book."—*Jan Langman, Medical Embryology, 3rd ed. (1975).

So once again the evolutionists are shown to be incorrect. For years they claimed that those three small throat folds were "gill slits," proving that we descended from *fish*; the bulb at the bottom of the embryo was a "yolk sac," proving that we descended from *chickens*; and the lower part of the spine is a "tail," proving that we are descended from *lizards or something else with a tail*!

Remember again, it is a matter of packaging a lot into a very small space. Embryos do not need to look handsome, but they need to function and grow in an extremely small space. There simply is not enough room for such a tiny one to look different or beautiful and still develop properly. The Designer solved this problem very nicely.

Frankly, as we consider all that we have learned about *Similarities*, *Vestiges*, and *Recapitulation*, <u>it is remarkable that</u> (1) <u>men can be so</u> ignorant, (2) <u>that they can criticize so freely such marvelous work-manship as is found in the embryo and the human body, and (3) <u>that such ignorant men are considered by so many others to be wise men of science.</u></u>

A ROUND BEGINNING—Yes, it is true that we begin our lives as "small round things," but this does not prove that we are descended from bats because they start their lives as "small round things" also! If we only look on the outside appearance of the small round things, then perhaps we are related to marbles, BBs, and ball bearings! Indeed,



that is what this idea of "gill slits," "yolk sacs," and "tails" is all about: <u>The theory is just looking at outside appearances instead of trying</u> to learn the real reason those structures are there.

TOTALLY UNIQUE—Each of us began as something as small as a dot on a word on this page. Yet <u>if we examine that almost micro-</u> <u>scopic egg, we find that that human dot has totally different genes</u> <u>and chromosomes than the egg of any other type of animal or plant.</u> <u>Only the outside appearance may be somewhat similar to that of</u> <u>other embryos</u>. As it grows, its structures will continue to become more and more diverse from those of any other kind of plant or animal. Every species of animal and plant in the world has blood cells different from all others, and a totally unique DNA code.

"The fertilized egg cell contains in its tiny nucleus not only all the genetic instructions for building a human body, but also a complete manual on how to construct the complex protective armamentarium— amnion, umbilical cord, placenta and all—that makes possible the embryo's existence in the womb."—**Life, April 30, 1965, pp. 70, 72.*

ERNST HAECKEL—(*#2/30 Scientists Speak about Recapitulation [includes Haeckel's charts] / #3/9 Haeckel's Fraudulent Charts*) ***Ernst Haeckel was the man who, in 1866, first championed the strange idea of vestiges;** that, during the first few embryonic months in the womb each of us passes through various stages in which we have gills like a fish and a tail like a lizard. He called it the *Law of Recapitulation*, *or Biogenetic Law*.

"This theory is indispensable for the consistent completion of the non-miraculous history of creation."—**Ernst Haeckel, The History of Creation (1876), Vol. 1, p. 348.*

By the mid-20th century, reputable scientists recognized that *Haeckel's theory was without a scientific basis and ridiculous. But we are still waiting for the textbooks and popular magazines to learn the news.

"Seldom has an assertion like that of Haeckel's theory of recapitulation, facile, tidy, and plausible, widely accepted without critical examination, done so much harm to science."—**Gavin De Beer, A Century of Darwin (1958).*

<u>A carefully contrived fraud was involved in the promulga-</u> <u>tion of this theory.</u> *Darwin hinted at recapitulation in his 1859 *Origin of the Species;* so his devoted disciple, *Thomas H. Huxley, included a pair of drawings of canine and human embryos in an 1863 book he wrote. *Darwin placed those same drawings in his 1871 book, *Descent of Man.* *Ernst Haeckel, in Germany, seized upon Darwin's suggestion and announced his so-called "Biogenetic Law." In a two-volume 1868 set and its 1876 translation, *History of Creation,* and later in another book in 1874, *Haeckel published fraudulent charts to prove his "law." These charts have been faithfully reprinted by evolutionists since then (one of the latest was *Richard Leakey's *Illustrated Origin* in 1971).

*Haeckel had drafting ability, and <u>he carefully redesigned</u> actual embryo pictures so that they would look alike. For this purpose, he changed shapes and sizes of heads, eyes, trunks, etc. For his ape and man skeleton pictures, he changed heights and gave the ape skeletons upright postures.

On a nearby page, you will see two examples of *Haeckel's fraudulent pictures. *Top left:* Haeckel's dog and human fake embryos, both made to look alike when they actually are quite different. *Top right:* What a dog and human embryo really look like. *Center:* Haeckel made one woodcut, then had it printed three times with the titles "dog," "chicken," and "tortoise." *Bottom:* Haeckel made one ovum woodcut and had it printed three times, labeled "dog," "monkey," "man."

*Haeckel was later repeatedly charged with fraud. Wilhelm His, Sr. (1831-1904), a German embryologist, exposed the hoax in detail in an 1874 publication (Unsere Korperform) and concluded that Haeckel was dishonest and thereby discredited from the ranks of trustworthy research scientists. It is to be noted that Wilhelm His prepared the scholarly books on embryological development which are the foundation of all modern human embryology. Yet neither Haeckel's fraud, nor His exposé, has ever been widely discussed in English scientific publications, and never in any publication for the public eye.

"The biogenetic law has become so deeply rooted in biological thought that it cannot be weeded out in spite of its having been demonstrated to be wrong by numerous subsequent scholars."—*Walter J. Bock, Science, May 1969 [Department of Biological Sciences at Columbia University].

In 1915, *Haeckel's fraudulent charts were even more thoroughly exposed as the cheats they actually were.

"At Jena, the university where he taught, Haeckel was charged with fraud by five professors and convicted by a university court. His deceit was thoroughly exposed in *Haeckel's Frauds and Forgeries* (1915), a book by J. Assmuth and Ernest J. Hull. They quoted nineteen leading authorities of the day. F. Keibel, professor of anatomy at Freiburg Unviersity, said that 'it clearly appears that Haeckel has in many cases freely invented embryos or reproduced the illustrations given by others in a substantially changed form. L. Rutimeyer, professor of zoology and comparative anatomy at Basle University, called his distorted drawings a sin against scientific truthfulness deeply compromising to the public credit of a scholar.' "— *James Perloff, Tornado in a Junkyard, p. 112*.

It is of interest that, in 1997, *Dr. Michael Richardson, an embryologist at St. George's Medical School in London, assembled a scientific team that photographed the growing embryos of 39 different species. In a 1997 interview in the *London Times*, *Richardson said this about Haeckel:

"This is one of the worst cases of scientific fraud. It's shocking to find that somebody one thought was a great scientist was deliberately misleading. It makes me angry . . What he [Haeckel] did was to take a human embryo and copy it, pretending that the salamander and the pig and all the others looked the same at the same stage of development. They don't . . These are fakes."—*Michael Richardson, quoted in "An Embryonic Liar," The London Times, August 11, 1997, p. 14.

*Thomas Huxley, in England, and *Ernst Haeckel, in Germany, were *Darwin's leading late 19th-century defenders. Always a man of intense energy, Haeckel, at the age of 62, while his elderly wife lived at home with him, was in the midst of an almost-daily love affair which he had continued for years with an unmarried woman 34 years younger. At the same time he was conducting his enthusiastic public lectures on recapitulation, using fraudulent charts which he prepared for his lectures and books. When Haeckel rented a hall for a lecture, he would drape the front with charts of ape and human skeletons and comparative embryos. Nearly all of the pictures had been doctored up in some way, to show similarities.

IMPORTANT: You will find *Haeckel's charts, along with much

supporting data, on our website: evolution-facts.org

Yet, in spite of such full disclosure, *Haeckel's "biogenetic law" and fraudulent drawings have been printed in school textbooks down to the present day. Desperate for some kind of evidence for their pet theory, evolutionists cling to their dishonest champion.

HAECKEL'S LAW—<u>Even though *Haeckel called it a "law,"</u> recent scientists have less complementary words for it:

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ONE OF HAECKEL'S FRAUDULENT CHARTS

Science vs. Evolution

"[It is] a theory that, in spite of its exposure, its effects continue to linger in the nooks and crannies of zoology."—**G.R. De Beer and* **W.E. Swinton, in *T.S. Wastell (ed.), Studies in Fossil Vertebrates.*

In recent years, an instrument, called the *fetoscope*, has been developed which, when inserted into the uterus, permits observation and photography of every stage of the human embryo during its development. As a result of research such as this, <u>it is now known</u> that at every stage fetal development is perfect, uniquely human, and entirely purposive. There are no unnecessary processes or structures.

"As a law, this principle has been questioned, it has been subjected to careful scrutiny and has been found wanting. There are too many exceptions to it."—*A.F. Huettner, Fundamentals of Comparative Embryology of the Vertebrates, p. 48.

DEVELOPMENTAL DIFFERENCES—*<u>Haeckel's so-called</u> "law" teaches that all embryos not only look alike, but that they must all develop in the same way, thus proving their ancestry.

But, actual embryological growth of various species reveals many differences in development; so many that they entirely disprove Haeckel's "Recapitulation" theory. For example, what would Haeckel do with the crabs? One type hatches out of a larval form (the *zoeas*) which is totally different from the adult form. Yet other crabs hatch out directly as miniature crabs! Many other such oddities could be cited.

Skilled embryologists, such as *Huettner, tell us that the whole idea underlying recapitulation is utter foolishness. **The processes, rates, and order of development in the various species vary widely.** *Huettner, for example, explains that there never is a *true* blastula or gastrula in the mammals. Also, organs do not develop in the same order as they do in the smaller creatures. In the earliest fishes, there are teeth but no tongue. But in the mammalian embryos, the tongue develops before the teeth. Huettner says there are numerous other such examples.

According to recapitulation theory, the appearance of an embryo reveals its ancestry. **All frog embryos look identical, so how can it be that nearly all frogs lay eggs—while one of them**, the

Nectophrymoldes occidentalis of New Guinea, **brings forth its young live!** This requires a womb, a placenta, a yolk sac, and other modifications not found in the other frogs. Did that one frog descend from humans or vice-versa—*or what did it descend from*? Its embryo is just like all the other frog embryos. (Another frog is a marsupial.)

Similarly, **out of all the earwigs in the world, there is just one live-bearing earwig! Out of all the sharks in the world, there is just one that has a placenta!** Examination of their embryos provides no solution to these puzzles. The earwig embryos all look alike, and so do the shark embryos.

<u>Recapitulation theory is just too shallow to really explain</u> <u>anything. Only Creation can explain what we see about us in</u> <u>nature</u>. The similarities found in embryos point to a single Creator, not to a common ancestor.

DIFFERENT TYPES OF ORGANS—<u>According to the theory</u> <u>of recapitulation, the embryo-like parts of the adult repeat each</u> <u>stage of what its *adult ancestors* were like</u>. Which is a strange idea, is it not?

Here are some interesting facts about things, found in embryos, which are not to be found in their supposed "ancestors."

<u>Embryos frequently have two types of organs while their</u> <u>supposed "ancestors" only had one!</u>

First, some organs do not function until after the infant is born. Such organs do not change. Such an organ would be **the lungs**. For this reason people only develop one set of lungs in their lifetime.

Second, some organs have a special function prior to birth, as well as afterward. Such organs frequently change form two or three times. Examples would include the heart and kidneys.

If recapitulation were correct, such multi-changing hearts and kidneys should also be found in adult mice and minnows. But this never occurs in the adult form of animal life.

"The theory of recapitulation . . should be defunct today."— *Stephen J. Gould, "Dr. Down's Syndrome," Natural History, April 1980, p. 144.

The respiratory surface in the lungs develops late in an embryo, yet how could the earlier forms (which it is supposedly

copying) have survived without having it immediately.

DIFFERENT DEVELOPMENTAL SEQUENCE—<u>The sequence</u> <u>of embryonic development in a human is radically different</u> <u>from its supposed "ancestors</u>." If the human embryo really <u>did recapitulate its assumed evolutionary ancestry, the human</u> <u>embryonic heart should first have one chamber, then change</u> <u>it into two, then three, and finally four chambers.</u> For that is the arrangement of hearts in the creatures we are supposed to be descended from.

But instead of this, your heart first began as a two-chambered organ, which later in fetal development fused into a single chamber. This single chamber later, before birth, changed into the fourchambered heart you now have.

So <u>the actual sequence of heart chambers in a human fetus</u> is 2-1-4 instead of the one required by recapitulation: 1-2-3-4.

Another example would be <u>the human brain which, in the</u> <u>fetus, develops before the nerve cords</u>. But, in man's assumed ancestry, nerve cords developed before the brain.

Still another example is the fact that <u>the fetal heart develops</u> <u>before the blood vessels</u> while, in man's presumed forebears, it was the other way around.

"The theory of recapitulation was destroyed in 1921 by Professor Walter Garstang in a famous paper. Since then no respectable biologist has ever used the theory of recapitulation, because it was utterly unsound, created by a Nazi-like preacher named Haeckel."—*Ashley Mantague, debate held April 12, 1980, at Princeton University, quoted in L.D. Sunderland, Darwin's Enigma, p. 119.

When, during that debate, a comment was made just afterward that recapitulation was still being defended and taught in various colleges and universities, *Montague said this:

"Well, ladies and gentlemen, that only goes to show that many socalled educational institutions, so-called 'universities,' are not educational institutions at all or universities; they are institutes for miseducation."—*Op. cit., p. 120.

BASIC THEORY FAULTED—There is yet another inherent flaw in the recapitulation theory. <u>According to the theory, each crea-</u> <u>ture passes something on to the next species, which then tosses</u> <u>in something more to be passed on. But that has also been</u>



"Since ball bearings obviously evolved from BBs, truck wheels must have descended from tricycles."



"But, prof, if people have a chicken's yolk sac, lizard's tail, and fish's gill slits, then why do the chickens, lizards, and fish have each of the three also?"



"But, prof, I heard that those charts of Haeckel's were fakes and disproved by scientists decades ago!"



"The hearts of our ancestors had 1, then 2, then 3, and finally 4 chambers." "But, prof, if recapitulation is true, then

why does the human fetal heart now have 2, then 1, and then 4 chambers?"

proven to be untrue.

The fish passes its gills on to its descendant, the bird, as a vestige ever after to be in bird embryos. The bird passes both the gills and yolk sac on to the monkey, who thereafter has gills, yolk sac, and its own monkey tail. The monkey passes all three on to mankind as a legacy of embryonic useless organs. THAT is the theory.

Why then does the fish embryo have not only its own fish gills,—but also the animal, bird, and reptile embryos uniformly have the so-called "fish gill slits, the "bird yolk sac," and the "monkey tail"! The theory does not even agree with itself.

QUESTIONS—<u>Considering all that we have learned about</u> <u>embryos, we stand amazed</u>:

How can their DNA codes, each of which are totally different, provide each of them with look-alike embryos? Mathematically, their separate codes should not be able to do this—yet the DNA regularly does it.

Why do look-alike embryos grow into different species each species with different blood, etc., than all the others?

How can so much be packed into such small packages, and then grow into such totally different adult forms?

How can all there is in you begin with a dot smaller than the dot at the end of this sentence?

How can any man, having viewed such marvelous perfection in design and function, afterward deny that a Master Craftsman planned and made it?

EVOLUTION COULD NOT DO THIS

One research scientist, *T.A. McMahon, worked out the formula for the general size and height of trees. The mathematical formula goes something like this: "The diameter of trees will vary with height raised to the 3/2 power; that is the length times the square root of the length." That is surely a lot for a simple-minded tree, without any brains to keep track of. Here is more of the formula: "The mean height trees obtain is only about 25 percent of that which they could obtain and still not buckle. In other words, trees are designed with a safety factor of about four." Someone very intelligent did the designing. We should not expect that the trees went to college, took math, and figured all that out.

CHAPTER 16 - STUDY AND REVIEW QUESTIONS VESTIGES AND RECAPITULATION GRADES 5 TO 12 ON A GRADUATED SCALE

1 - Is this sentence true? "If we had useless organs in our bodies, they would prove degeneration, not evolution."

2 - Select one of the following, and write one or two paragraphs on the importance of it in the human body, why you need it, and how it helps you: (1) tonsils; (2) appendix; (3) coccyx; (4) thymus; (5) Pineal gland; (6) thyroid gland; (7) pituitary; (8) semilunar fold of the eye.

3 - Explain the size problem: why all embryos—human or otherwise—tend to look alike at an early age.

4 - Write a one-paragraph report explaining the importance of one of the following in the developing embryo: (1) "yoke sac," (2) embryonic "tail," (3) "gill slits." Show why they are not what the evolutionists claim them to be.

5 - Prepare a brief biography on Ernst Haeckel, his frauds, and how they were exposed. Go to our website and look at his fraudulent charts.

6 - Select one of the following and explain how it disagrees with the recapitulation theory: (1) development of the human heart, (2) development of the human brain, (3) timing of fetal heart vs. fetal blood vessels.

7 - Explain this sentence: "Why then does the fish embryo have, not only its own fish gills but also the bird yolk sac and the monkey tail?"

EVOLUTION COULD NOT DO THIS

If it was not for the sunbird, the African mistletoe would very quickly die. Yet both have been doing just fine since they were first created. When the sunbird comes to the mistletoe flower, it has to tell the flower to open up! Otherwise it would remain forever closed. Carefully, the bird puts its long bill inside a slit in the flower. This triggers the flower,—and it opens instantly and shoots out its anthers, which hits the bird with pollen all over its feathers. Then the bird goes to the next flower, repeating the process, and pollinating it in the process.