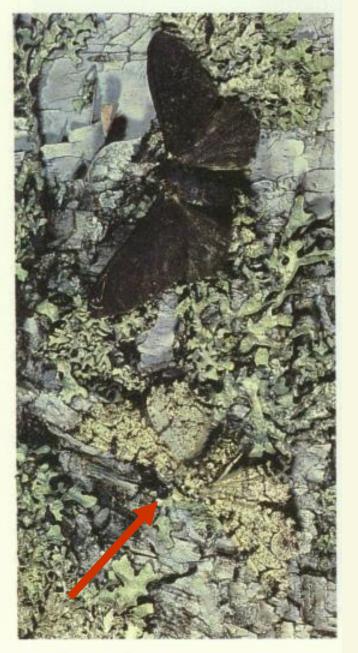
Daniel Dennett:

Concerning Parents Who Teach Their Children Something Other Than Evolution:

"Those of us who have freedom of speech will feel free to describe your teachings as the spreading of falsehoods, and will attempt to demonstrate this to your children at our earliest opportunity."

Darwin's Dangerous Idea (1995), (New York: Simon and Schuster), p. 519.



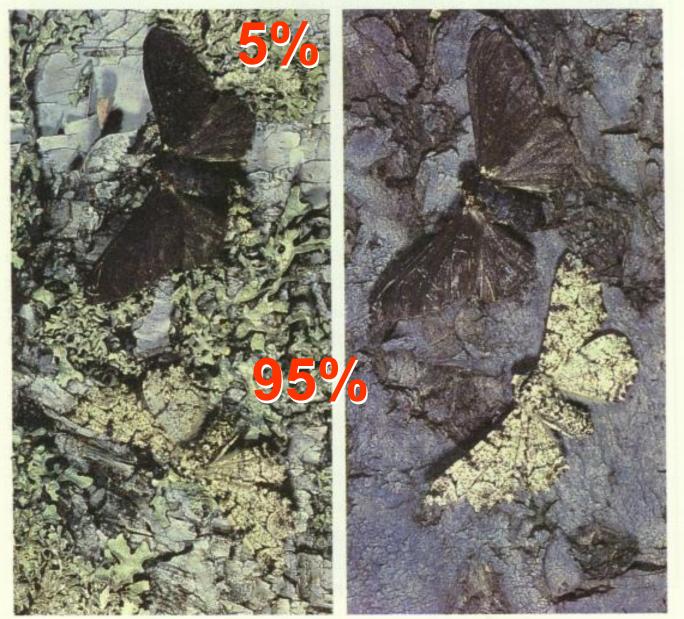


95%

Figure P-6 The lightcolored moths are better camouflaged on light-colored trees (left). The dark-colored moths are better camouflaged on darkcolored trees (right).

Biston betularia

Allyn and Bacon General Science 1989 p. 5



95%

5%

Figure P-6 The lightcolored moths are better camouflaged on light-colored trees (left). The dark-colored moths are better camouflaged on darkcolored trees (right).

Allyn and Bacon *General Science* 1989 p. 5 See: Melanism: Evolution in Action by Michael E. N. Majerus, Oxford University Press: 1998. 338 pp. In CSE/moth.

"You have to look at the audience. How convoluted do you want to make it for a first time learner?"

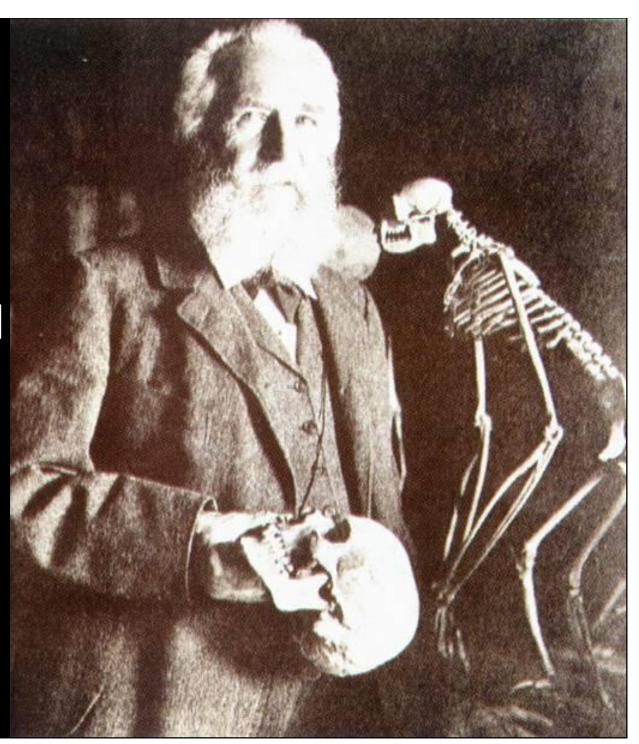
"The advantage of this example of natural selection is that it is extremely visual."

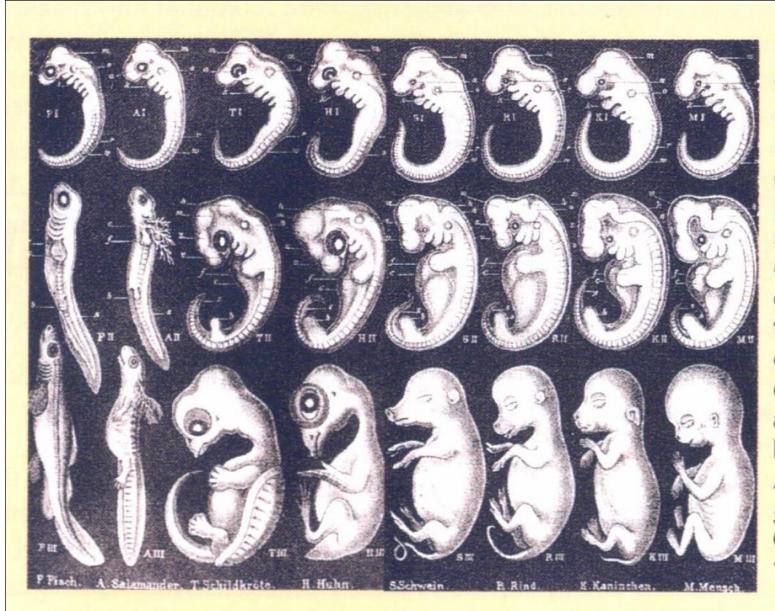
"We want to get across the idea of selective adaptation. Later on, they (high school students— KB) can look at the work critically."

Bob Ritter, a Canadian text-book writer who knew the moth pictures were frauds but used them anyway. Quoted in the April 5, 1999, *Alberta Report Newsmagazine* (See *Icons of Evolution*, by Jonathan Wells, p. 156-157.

Earnst Haeckel said the turning point in his thinking was when he read Charles Darwin's Origin of Species in 1860.

Creation March-May 1996 p. 33

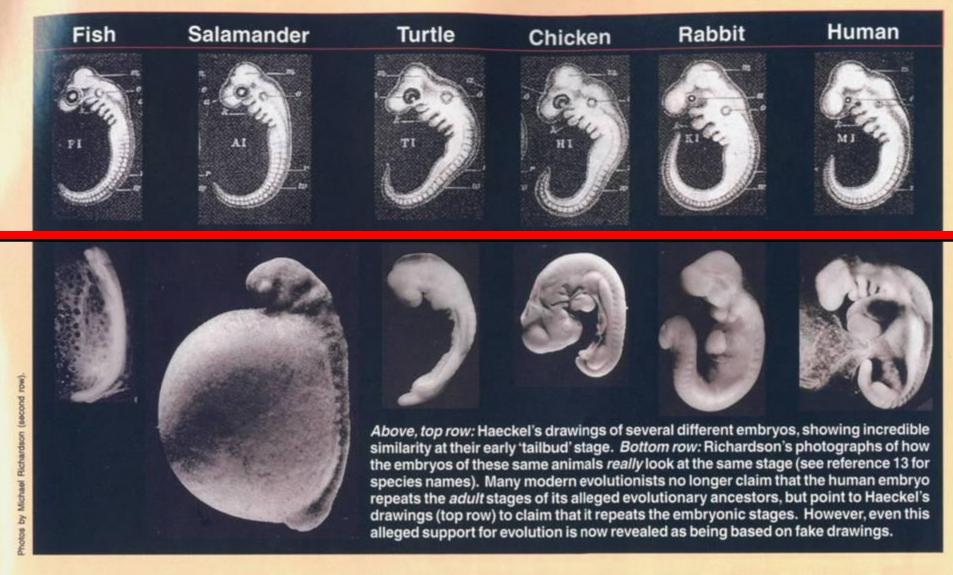




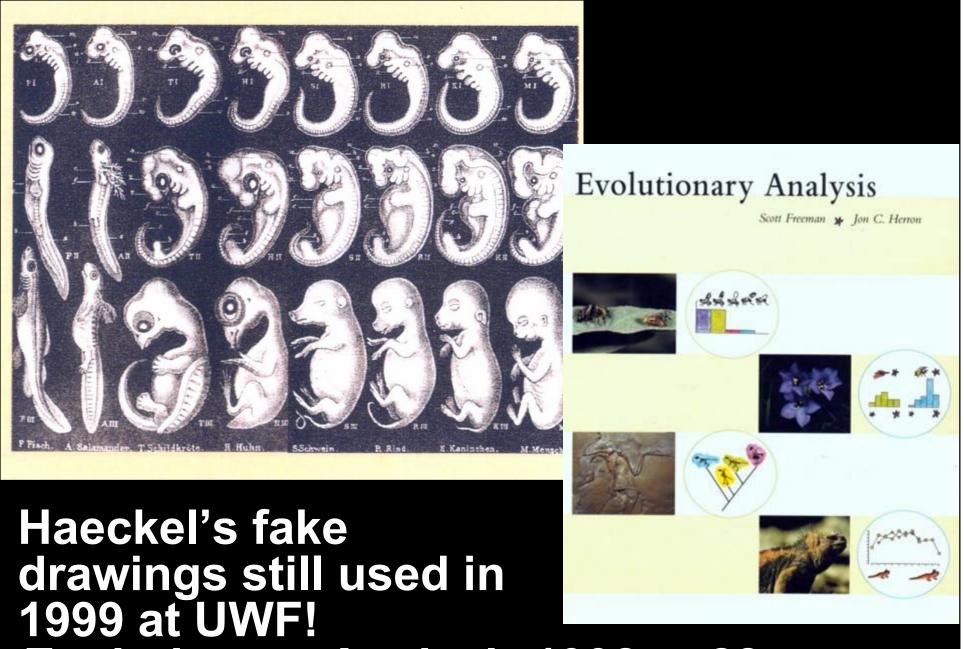
Haeckel's famous (infamous) set of 24 drawings purporting to show eight different embryos in three stages of development, as published by him in Anthropogenie, in Germany, 1874.

Haeckel's drawings, 1874 Creation ex nihilo Mar-May 1998 p. 51

Haeckel's drawings on top.



Actual photos on bottom. Creation ex Nihilo Mar-May 1998 p.51



Evolutionary Analysis 1998 p. 28

Abscheulich! (Atrocious!)

Haeckel's distortions did not help Darwin.

By Stephen Jay Gould

Revolutions cannot be kind to prominent and unreconstructed survivors of a superseded age. But the insight and dignity of vanquished warriors, after enough time has elapsed to quell the immediate passions of revolt, often inspire a reversal of fortune in the judgment of posterity. (Even the most unabashed Northerner seems to prefer Robert E. Lee to George McClellan these days.)

This essay details a poignant little drama in the lives of three great central European scientists caught in the intellectual storm of Darwin's Origin of Species, published in 1859. This tale, dormant for a century, has just achieved a vigorous second life, based largely on historical misapprehension and creationist misuse. Ironically, once we disentangle the fallacies and supply a proper context for understanding, our admiration must flow to Darwin's two most prominent opponents from a dispersed and defeated conceptual world: the Estonian (but ethnic German) embryologist and general naturalist Karl Ernst von Baer (1792-1876), who spent the last forty years of his life teaching in Russia; and the Swiss zoologist, geologist, and paleontologist Louis Agassiz (1807-1873), who decamped to America in 1846 and founded Harvard's Museum of Comparative Zoology, where I now reside as curator of the collection of fossil invertebrates that he began. By contrast, our justified criticism must fall upon the third man in the topsy-turvy drama, the would-be hero of a new

world order: German naturalist Ernst Haeckel (1834–1919), the primary enthusiast and popularizer of Darwin's great innovation. Haeckel's forceful, eminently comprehensible, if not always accurate, books appeared in all major languages and surely exerted more influence than the works of any other scientist, including Darwin and Huxley (by Huxley's own frank admission), in convincing people throughout the world about the validity of evolution.

Cynic that I am, I nonetheless confess to hero worship for the raw intellectual breadth and power of three great men: Darwin, who constructed my world; Antoine-Laurent Lavoisier, because the clarity of his mind leaves me awestruck every time I read his work; and Karl Ernst von Baer, who lived too long and became too isolated to win the proper plaudits of posterity. T. H. Huxley, who ranks fourth on my list, regarded von Baer as Europe's greatest pre-Darwinian naturalist.

As the leading embryologist of the early nineteenth century, von Baer discovered the mammalian egg cell in 1827 and, in 1828, published the greatest monograph in the history of the field: Über Entwickelungsgeschichte der Thiere (On the Developmental History of Animals). He then suffered a mental breakdown and never returned to the field of embryology. Instead he moved to Saint Petersburg in 1834 (a common pattern for Central European scientists, because Russia, lacking a system of modern education, imported many of its leading professors in scientific subjects). There he enjoyed a long

and splendid second career as an Arctic explorer, a founder of Russian anthropology, and a geomorphologist credited with discovering an important law relating the erosion of riverbanks to the Earth's rotation.



In Ernst Haeckel's drawing, the early embryos (top row) of a pig. dog. monkey, and human are nearly identical.

Von Baer's theories of natural history allowed for limited evolution among closely related forms but not for substantial transformation between major groups. Moreover, he held no sympathy for Darwin's mechanistic views of evolutionary causality. Darwin's book shook the aged von Baer from decades of inactivity in his former zoological realm, and this great man—whom Agassiz, in his last (and posthumously published) article of



Stephen Jay Gould "We should therefore not be surprised that Haeckel's drawings entered an ineteenthitect and propagandist for a famous argument that science century textig agies, But only that have have the pidnt to be both astonished rand sounds mellifluous: nderfully arcane and mellifluous: "c edges phylogeny, otherwse know ashan Seory recyclingithat has ledet dath expensistence of their evolutionary history (or "climb their own family these drawings, in a large number, if not majoritylogianodernatextbooks" (p. 45, emp. added) (2000, "Abscheulich! (Atrocious)," Natural History, vol. 109,

no. 2, pg. 44).



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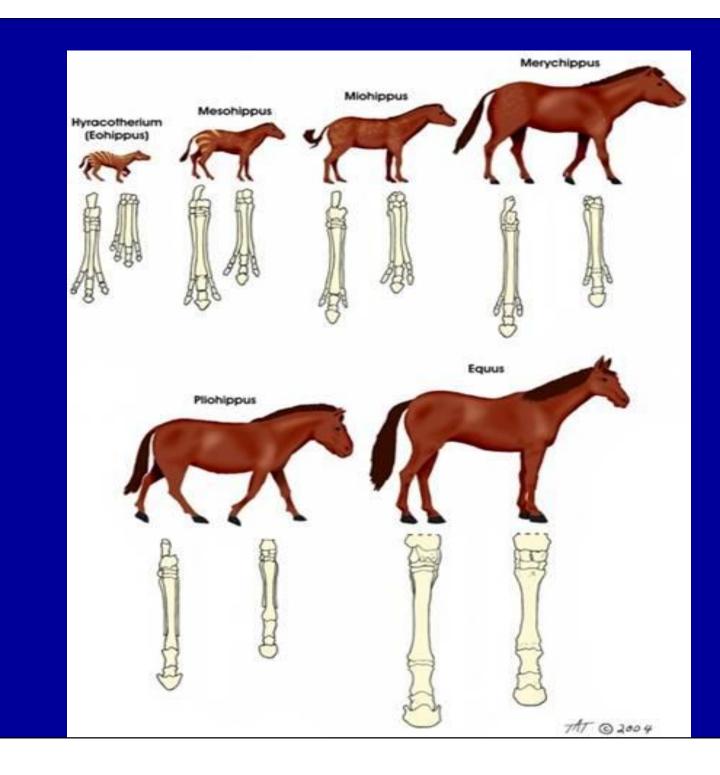
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BIOLOGY The Unity and Diversity of Life

STARR AND TAGGAST



Heribert Nilsson

The family tree of the horse is braut and ontinuous he horse is ogether from a continuous transformation of the horse is braut and the horse is ogether from a continuous transformation of the horse is ogether from a continuous transformatis transformation of the horse is ogether

"The uniform, continuous transformation of *Hyracotherium* into *Equus*, so dear to the hearts of generations of textbook writers, **never happened in nature.**"

(George Gaylord Simpson, *Life of the Past* (New Haven, CT: Yale University Press), 1953, p. 125, emp. added)

Stephen Jay Gould

"Once ensconced in textbooks, misinformation becomes cocooned and effectively permanent, because, as stated above, textbooks copy from previous texts. (I have written two essays on this lamentable practice: **one on the amusingly perennial description of the eohippus**, or "dawn horse," as the size of a fox terrier, even though most authors, including yours truly, have no idea of the dimensions or appearance of this breed.)"

(2000, "Abscheulich! (Atrocious)," *Natural History*, vol. 109, no. 2, pg. 45).



The Dawn of Man

The discovery of a handful of bones in Ethiopia brings scientists tantalizingly close to the time, 6 million years ago, when our most ancient ancestors took their first upright steps. A look at the juncture when chimps and man went their separate evolutionary ways

Ardipithecus ramidus kadabba

Researchers, "haven't collected enough bones to reconstruct with precision what *kadabba* looked like" (p. 57).



Ardipithecus ramidus kadabba

"In all, the team eventually found 11 specimens—from at least five different individuals—in a cluster of sites" (p.56)

Ardipithecus ramidus kadabba



THIS TOE BONE PROVES THE CREATURE WALKED ON TWO LEGS

[Michael D. Lemonick and Andrea Dorfman, "One Giant Step for Mankind," *Time*, 158[3]:54-61, July 23, 2001, toe bone picture (with text) is from p. 59]

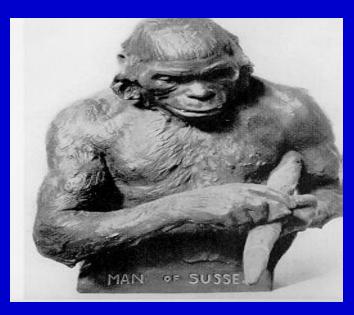
Ardipithecus ramidus kadabba



"...not only is it (the toe bone) separated in time by several hundred thousand years, but it was also found some 10 miles away from the rest."

[Michael D. Lemonick and Andrea Dorfman, "One Giant Step for Mankind," *Time*, 158[3]:54-61, July 23, 2001, p. 61]

Piltdown Man



This fossil find was proposed to be the "missing link" between humans and apes.

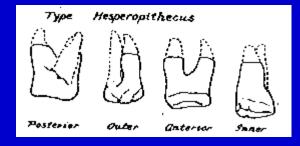
Forty years later scientists discovered that the fossil had been "reconstructed" using the skull from a human and the jawbone of an orangutan.



Nebraska Man

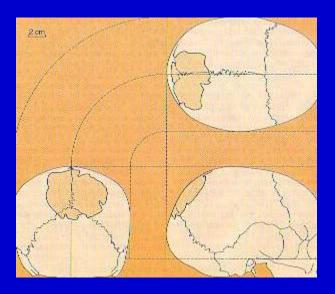
From a single fossilized tooth, an entire species was manufactured.





The only problem was the tooth was later identified as a tooth from an **extinct pig!**

Orce Man



A single skull bone was found near the village of Orce in Spain. Based on this one bone, some over eager scientists took artistic freedom and reconstructed an entire man.

Later, to the embarrassment of many, the bone was correctly identified as being the skull cap belonging to a six-month old donkey! (see D. Gish, *The Amazing Story of Creation*, p. 82)



Neanderthal Man

Probably the most well known "missing link" between humans and apes

At the International Congress of Zoology (1958), Dr. A.J.E. Cave said that his examination of the famous Neanderthal skeleton found in France over 50 years ago proved that it was simply an old man who suffered from arthritis!



Flipper Man

A single "collar bone" was found in the Libyan Desert in 1979. This fossil was dated (based on the estimates of some fossil marine plankton nearby) at 5 million years old! The "shape" of this "collar bone" indicated this creature walked upright.

However, this "collar bone" was later determined to be a rib bone. And not even a human rib bone at that.





Colin Patterson (Senior Paleontologist, British Museum)

"I think always before in my life when I've got up to speak on a subject I've been confident of one thing that I know more about it than anybody in the room, because I've worked on it. Well, this time it isn't true. I'm speaking on two subjects, evolutionism and creationism, and I believe it's true to say that I know nothing whatever about either of them."

Colin Patterson (Senior Paleontologist, British Museum)

"One of the reasons I started taking this anti-evolutionary view, or lets call it a non-evolutionary view, was that last year I had a sudden realization. For over twenty years I had thought I was working on evolution in some way. One morning I woke up and something had happened in the night, and it struck me that I had been working on this stuff for more than twenty years, and there was no one thing I knew about it."

Colin Patterson, cont.

"It's quite a shock to learn that one can be misled for so long. Either there was something wrong with me or there was something wrong with evolutionary theory. Naturally, I know there is nothing wrong with me, so for the last few weeks I've tried putting a simple question to various people and groups. Question is: Can you tell me anything you know about evolution? Any one thing, any one thing that is true?"

(Quoted in Tom Bethell, "Agnostic Evolutionists," *Harper's,* February, 1985, p. 50)