

Comment

Two stories about evolution on *The New York Times* and a strange “editorial balance”

Niles Eldredge

I would like to celebrate not one, but two major news stories about evolution that help further cast the forces of intellectual darkness — meaning creationism and intelligent design — back into the shadows where they belong.

The first hit the wires and newscasts on April 5, 2006 — and I was literally STUNNED to see it given lead, right-hand side front page headline status in Thursday morning’s *New York Times*. If a paleontological discovery made it to the lead headline in *The New York Times* ever before, it must have been way back in the days of Cope and Marsh, whose 19th century competitive exploits mining the fossil riches of the American west frequently showed up in the Times and other newspapers. Far as I can remember (and I have been a paleontologist since the mid 1960s—and a regular Times reader for longer than that), not even Don Johanson’s discovery of the hominid fossil Lucy, or any of the famous finds of the extended Leakey clan, was ever accorded this highest of newspaper honors.

So what was the discovery and why did it merit such treatment? Vertebrate paleontologist Neil Shubin and colleagues, after years of scouring Upper Devonian sediments in the far north, found the remains of a new species of fossil fish they have named *Tiktaalik roseae* (“Tiktaalik” is a local term meaning “large shallow water fish” — according to the news article).

The picture shows the head and part of the body of what looks to this invertebrate paleontologist’s eyes very much like the primitive amphibians found as fossils in many different sites around the world — in Upper Devonian and especially younger Carboniferous and Permian strata. It has fish flippers instead of fully formed feet. But the bony internal anatomy of the flippers turn out to be very much like the structures seen in fully-fledged true amphibians that were clambering around the landscape as the first terrestrial vertebrates.

Paleontologists have known for years that the skeletons of some Upper Devonian bony fishes are very similar to the first amphibians. What makes the current find so exciting is that the “missing link” nature of the intermediate-between-fish-and-amphibian nature of these fossils further strengthens the evolutionary transition story. And, of course, the discovery comes at a time when creationism/intelligent design advocates have been riding high (until very recently at least — when Judge John E. Jones III released his strongly worded opinion against intelligent design; and since we opened the Darwin exhibition at the American Museum of Natural History — both late last Fall). The *New York Times* story on the fossil fish discovery and its evolutionary implications received its prominent place precisely because of the current heated status of the “debate” engendered by the strident creationist attacks on evolution and on the teaching of science in our nation’s public schools.

The very next day there was another article — this time reporting the interesting results of a study on the evolution of complexity on the molecular level. The authors of the study pointed out that their results falsify so-called “irreducible complexity” at the molecular level — a hallmark claim of today’s proponent’s of “intelligent design”, who assert that natural selection cannot account for the development of systems they deem to be “irreducibly complex”. This study involved the evolution of two hormone receptors. In general, creationists focus on what seem to be the few remaining problems/mysteries in evolutionary biology (the transition from fish to amphibian was still considered one — until April 5!). But science grinds inexorably on, and one-by-one the mysteries are solved. The supposedly “irreducibly complex” structure of the bacterial flagellum turns out to be just one state of a whole spectrum of flagellar structures, spanning the spectrum of simple-to-complex: the unmistakable trail of evolution. This hormone study is a welcome further example that shows the always-premature and bogus nature of

claims that some anatomical or biochemical feature of organisms is “irreducibly complex” and so could not possibly have evolved through “Darwinian” processes.

But I was disturbed by the reporting of this second study, coming as it did the very next day after the amazing appearance of the fossil fish story as headline news. I felt that the second article watered down, if not entirely torpedoed, the implications of the hormone evolution story, by leaving the reader with a bad taste in the mouth, ending as it does with a series of negative assertions from an intelligent design advocate.

So I have written the following email to the “public editor” of the New York Times, expressing my concerns.

April 9, 2006
The Public Editor
The New York Times

I was stunned to see an article on the evolutionary implications of a paleontological discovery be accorded the status of lead headline on the front page of the edition of April 6, 2006. What a rare and wonderful treat for this paleontologist, a lifelong *Times* reader! Such things likely haven't happened since the glory days of Cope and Marsh in the late 19th century—if then!

And then to see the very next day another first-section story on evolution — with the very promising headline “Study, in a First, Explains Evolution’s Molecular Advance.” Now we’re really on a roll, I thought!

But hold on: the article on the Devonian fossil that links bony fish with the earliest amphibians followed the time-honored (if monotonously formulaic) ritual of quotations: first from the scientists involved; then from an approving scientist “not involved with the research,” followed by dissenting opinion (this time from the erstwhile leading creationist of a few decades ago) and back to ending on a happy note with more enthusiastic quotes from the paleontologists who made the discovery and published their results.

Not so the following day. The headline and early quotes — from the researchers and an outside scientist lending his stamp of approval — duly adhere to the same formula. So, too, does the quotation from the creationist, this time a leading spokesman for the more contemporary version of creationism known as “intelligent design”. But there the resemblance of the two articles ends. The creationist calls the results “piddling” (a surprisingly quasi-profane remark from someone on the record as saying he thinks God is the Intelligent Designer). No reversion to the glad tidings from the original researchers or to the thematic promise of the headline itself. Instead, the article ends with a series of repetitious assertions from the creationist that the research is meaningless.

I am sure the original version of the story was written in the usual way, but that the piece fell afoul of the editing process. And I suspect that the stated reason for the patently truncated account will be the usual “lack of space”.

But given your recent revelations of the “conservative beat” at the *Times*, I wonder if what we are really looking at here is a reflection of “editorial balance” rather than simple spatial editing constraints. It very much seems as if the *Times* could not bring itself to publish two on-balance pro-evolution articles on successive days. The *Times* giveth, but it also taketh away.

Author

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He is the Curator of the Division of Paleontology at the American Museum of Natural History. He was the curator-in-Chief of the American Museum's Hall of Biodiversity and has recently organized an international exhibition dedicated to Charles Darwin. He is the author of *Reinventing Darwin. The Great Debate at the High Table of Evolutionary Theory* (John Wiley and Sons, New York; English edition: Orion; Italian edition: Einaudi Editore); *Life in the Balance. Humanity and the Biodiversity Crisis* (Princeton University Press, Italian edition: Einaudi Editore, Turin, 2000); *The Pattern of Evolution* (W. H. Freeman and Co., N.Y.).