

Disclosure

of things evolutionists don't want you to know

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PUZZLING PENGUINS

Penguins make cute inflatable outdoor Christmas decorations, but penguins deflate the theory of evolution.

Evolution is the gift that keeps on giving. Every month the professional scientific literature gives us something to write about. The first sentence of a recent article in *Science* caught our attention.

Penguin feathers are highly modified in form and function, but there have been **no fossils to inform their evolution.**¹

This is typical of evolutionary prejudice. Penguin feathers are much different from other bird feathers, so they must have evolved a lot; but there is no fossil evidence to show that they did. Also typical is the authors' claim that they have found some evidence. They report their discovery of a new extinct penguin they call *Inkayacu* that supposedly lived 36 million years ago in Peru. Here's what they said,

All preserved feather types in *Inkayacu* record melanosomes of dimensions within the range for avian taxa other than extant [living] penguins. Although the length of extant penguin melanosomes was similar to other eumelanosomes, (mean of ~900 nm), their width (mean of ~440 nm) was far greater than all other Aves [birds] sampled (mean of ~300 nm) and in some cases approached their length (table S3). We thus analyzed them as a separate class in a discriminant analysis. We used four properties of melanosome morphology and

distribution—long-axis variation, short-axis skew, aspect ratio, and density—to estimate the color predicted from the fossil feather samples. All six *Inkayacu* samples were assigned a gray or reddish-brown color with high probability, and none clustered with extant penguin samples.²

Let's translate that into plain English. Their analysis is based on some cells called melanosomes.

Melanosomes, the pigment granules that provide tissues with colour and photoprotection, are the cellular site of synthesis, storage and transport of melanin pigments.³

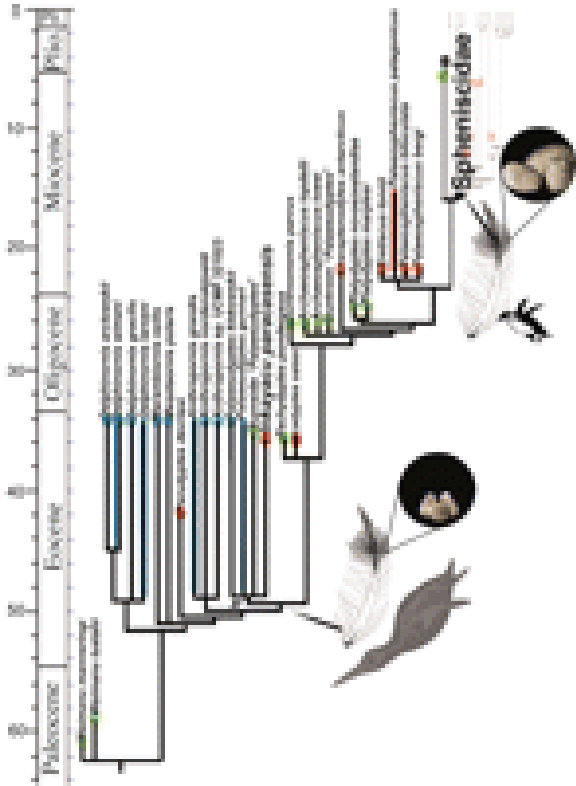
They found some feather fragments and looked at these cells under an electron microscope to measure their shape and size. Modern penguins have melanosomes about 900 nanometers long and 440 nanometers wide, but other birds have smaller ones (about 300 nanometers). These fossilized melanosomes were small, making them much closer to other kinds of birds than penguins. Based on the size and shape of these cells, they tried to estimate what color the extinct penguin feathers would have been. They concluded that the feathers would have been gray or reddish-brown, unlike modern penguins.

¹ Clarke, *et al.*, *Science*, 12 November 2010, "Fossil Evidence for Evolution of the Shape and Color of Penguin Feathers", pages 954-957

² *ibid.*

³ Wasmeier, *et al.*, *Journal of Cell Science*, December, 2008, "Melanosomes at a glance", pages 3995-3999, <http://jcs.biologists.org/cgi/content/full/121/24/3995>

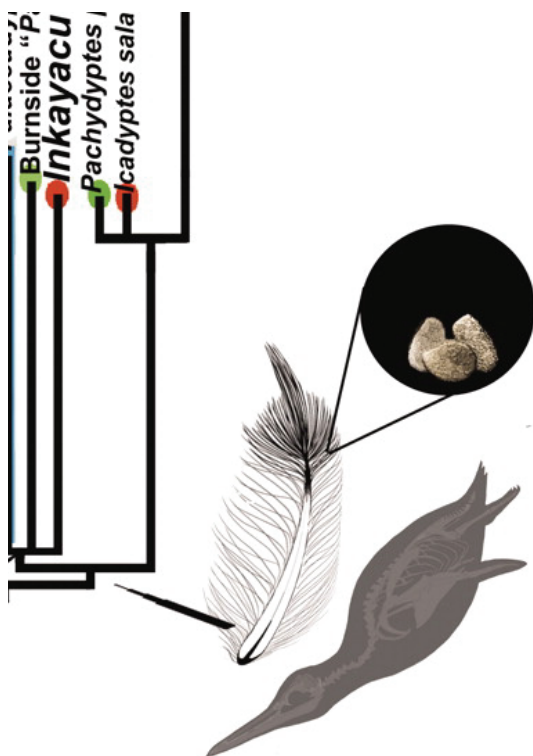
This sounds very impressive, but a picture is worth a thousand words. Their Figure 4 shows their postulated evolutionary tree.



Here are the conclusions they drew.

Shifts in penguin plumage coloration indicated by the fossil may be linked to differences in ecology, thermoregulatory demands, or the more recent, predominantly Neogene, diversification of their primary mammalian predators. However, they do not explain the aberrant melanosome morphology associated with extant penguin brown-black color. Indeed, rather than selection for color, these changes may represent an unanticipated response to the hydrodynamic demands of underwater propulsion. Low aspect ratio, large size, and clustered melanosome distribution may affect melanin packing and feather material properties. Melanin confers resistance to fracture, which is important to materials like feathers subjected to cyclical loading. Selective pressures for the color and material properties of penguin feathers could thus have led to nanoscale changes in melanosome morphology.⁴

You can't really see what you need to see in the drawing at that scale. What they did was to compare the cells in the two black circles (enlarged below) and then drew some conclusions.



In plain English, they think these cells MAY have changed size and shape because of climate change or to avoid predators (despite the fact that it doesn't really explain the brown-black color of modern penguins). But MAYBE the changes in color are somehow related to swimming in water rather than flying. That's because the color MAY be a byproduct of the feather's other properties, such as density and stiffness, which MAY have evolved to improve the ability to swim.

These nine authors deserve a great deal of credit for being able to get a three-page article

⁴ Clarke, *et al.*, *Science*, 12 November 2010, "Fossil Evidence for Evolution of the Shape and Color of Penguin Feathers", pages 954-957

with such a pretentious title (“Fossil Evidence for Evolution of the Shape and Color of Penguin Feathers”) published in a prestigious journal with so little actual evidence. One can only conclude that the authors are either very smart or very stupid.

FOR THE BIRDS

Since they brought up the subject, let’s talk about what we really “know” about bird evolution. A recent article of bird evolution begins this way:

Abstract

Deep avian evolutionary relationships have been difficult to resolve as a result of a putative explosive radiation. Our study examined ~32 kilobases of aligned nuclear DNA sequences from 19 independent loci for 169 species, representing all major extant groups, and recovered a robust phylogeny from a genome-wide signal supported by multiple analytical methods. We documented well-supported, previously unrecognized interordinal relationships (such as a sister relationship between passerines and parrots) and corroborated previously contentious groupings (such as flamingos and grebes). Our conclusions challenge current classifications and alter our understanding of trait evolution; for example, some diurnal birds evolved from nocturnal ancestors. Our results provide a valuable resource for phylogenetic and comparative studies in birds.

Although well studied, the evolutionary relationships among major avian groups are contentious. Recovering deep evolutionary relationships in birds is difficult, probably reflecting a rapid divergence early in their evolutionary history that has resulted in many distinctive, morphologically cohesive groups (e.g., owls, parrots, and doves) with few, if any, extant intermediary forms linking them to other well-defined groups. This extreme radiation also makes it difficult to place fossil taxa, which further contributes to the difficulty in precisely timing avian divergences.

Only two nodes at the base of the avian tree are consistently supported by both molecular and morphological phylogenetic studies.⁵

In other words, evolutionists have had a hard time classifying birds because they are so different. This, they believe, is because of “a putative explosive radiation.” In other words, they think birds evolved so rapidly there was

insufficient time for evidence to be left in the fossil record. Furthermore, there are “few, if any, extant intermediary forms linking them to other well-defined groups.” That is to say, because birds evolved so rapidly and so much, there are few, if any, obvious connections between living families of birds. As a result, opinions about which bird groups are most closely related to other bird groups “are contentious.”

The other important point to note is that the DNA analysis isn’t consistent with traditional classification. Back in the 20th century, this was news! Longtime readers of this newsletter will remember that we reported “The DNA Dilemma” in July of 1999⁶. The scientific journals of 1998 and 1999 were filled with alarming stories about how the DNA analysis wasn’t consistent with traditional classification based on body shape and structure. This was disturbing to evolutionists because they knew that the theory of evolution depends upon the notion that the most closely related creatures should have the most closely related DNA. But, for more than a decade, study after study has shown this isn’t true. So now, when DNA analysis (“molecular phylogenetic study”) doesn’t agree with traditional classification (based on “morphological study”), it is shrugged off.

In the case of birds, only two (of many) branches of the traditional evolutionary tree of birds agree with DNA analysis. It’s no big deal (but we better not confuse biology students by telling them that)! ☺

One of our most important findings was that several well-accepted orders were not monophyletic.⁷

In case you aren’t familiar with the jargon, orders and phyla are classification groups. “Monophyletic” means “all in the same group.” So, one of their most important findings was that some creatures that were previously classified as being in the same biological category really belong in different biological categories.

How do they explain the previous incorrect classification? They trot out their old standby—convergent evolution. They claim that unrelated species happened to evolve features similar to other unrelated species, causing them to be incorrectly classified. That is, different creatures converged on the same solution to particular survival problems.

⁵ Hackett, *et al.*, *Science*, 27 June 2008, “A Phylogenomic Study of Birds Reveals Their Evolutionary History”, pp. 1763-1768, <http://www.sciencemag.org/content/320/5884/1763.full>

⁶ *Disclosure*, July 1999, “The DNA Dilemma”, <http://scienceagainstevolution.org/v3i10f.htm>

⁷ Hackett, *et al.*, *Science*, 27 June 2008, “A Phylogenomic Study of Birds Reveals Their Evolutionary History”, pp. 1763-1768, <http://www.sciencemag.org/content/320/5884/1763.full>

Modern birds occupy a wide diversity of niches and exhibit a variety of behaviors. The broad structure of our phylogeny suggested diversification along general ecological divisions, such as water birds, shorebirds, and land birds. However, adaptations to these environments clearly arose multiple times, because many aquatic birds were not part of the water bird clade (e.g., tropicbirds, flamingos, and grebes) and terrestrial birds were found outside of the land bird clade (e.g., turacos, doves, sandgrouse, and cuckoos). Our phylogeny also indicated several distinctive niches, such as nocturnal (owls, nightjars, and allies), raptorial (falcons, hawks, eagles, New World vultures, seriema, and owls), or pelagic (tubenosed birds, frigatebirds, and tropicbirds) lifestyles, have evolved multiple times.⁸

Here is their summary:

Given the number of nonmonophyletic groups in our study, we compared our results with major classifications [supporting online material (SOM) text]. Unexpectedly, roughly the same percentage (35%) of orders defined by different classifications was not monophyletic relative to the results of our study (Fig. 4). Some orders, such as Gruiformes and the broadly encompassing Ciconiiformes, were particularly problematic. Other traditional orders were not monophyletic because of the exclusion or inclusion of one or a few taxa (e.g., placing *Turnix* within Charadriiformes contradicts all three classifications). Only six orders were defined consistently across taxonomies and monophyletic in our study (Fig. 4). Given our results, conclusions from comparative studies that depended upon these classifications may need to be re-evaluated in light of this understanding of avian evolution.

Deciphering the roots of the avian tree of life has been a lingering problem in evolutionary biology. The inclusion of multiple loci with diverse rates of evolution, particularly the large proportion of rapidly evolving introns, yielded a well-supported phylogenetic tree at multiple taxonomic depths. Although some higher-level avian relationships remain unresolved, simulations suggest that additional sequence data from rapidly evolving loci may resolve these remaining questions. It is also evident that future classifications will change dramatically, based on our phylogenetic study, and that our results will stimulate comparative studies to address the growing number of questions regarding the evolution of birds.⁹

MARCH OF THE PENGUINS.

You may have seen the 2005 movie, *March of the Penguins*, which won the Academy Award for Best Documentary. In case you didn't here is an excellent summary.

Each winter, alone in the pitiless ice deserts of Antarctica, deep in the most inhospitable terrain on Earth, a truly remarkable journey takes place as it has done for millennia. Emperor penguins in their thousands abandon the deep blue security of their ocean home and clamber onto the frozen ice to begin their long journey into a region so bleak, so extreme, it supports no other wildlife at this time of year. In single file, the penguins march blinded by blizzards, buffeted by gale force winds. Guided by instinct, by the otherworldly radiance of the Southern Cross, they head unerringly for their traditional breeding ground where--after a ritual courtship of intricate dances and delicate maneuvering, accompanied by a cacophony of ecstatic song--they will pair off into monogamous couples and mate. The females remain long enough only to lay a single egg. Once this is accomplished, exhausted by weeks without nourishment, they begin their return journey across the ice-field to the fish-filled seas. The male emperors are left behind to guard and hatch the precious eggs, which they cradle at all times on top of their feet. After two long months during which the males eat nothing, the eggs begin to hatch. Once they have emerged into their ghostly white new world, the chicks can not survive for long on their fathers' limited food reserves. If their mothers are late returning from the ocean with food, the newly-hatched young will die. Once the families are reunited, the roles reverse, the mothers remaining with their new young while their mates head, exhausted and starved, for the sea, and food. While the adults fish, the chicks face the ever-present threat of attack by prowling giant petrels. As the weather grows warmer and the ice floes finally begin to crack and melt, the adults will repeat their arduous journey countless times, marching many hundreds of miles over some of the most treacherous territory on Earth, until the chicks are ready to take their first faltering dive into the deep blue waters of the Antarctic.¹⁰

Evolutionists have become very skillful at inventing stories that explain how behaviors evolved through natural selection. You've probably heard stories about how clumsy animals fell out of trees. The ones with feathers glided to

⁸ *ibid.*

⁹ *ibid.*

¹⁰ *Sujit R. Varma,*

<http://www.imdb.com/title/tt0428803/plotsummary>

AN EVOLUTION CAROL

I have endeavoured in this Ghostly little book, to raise the Ghost of an Idea, which shall not put my readers out of humour with themselves, with each other, with the season, or with me. May it haunt their houses pleasantly, and no one wish to lay it.

*Their faithful Friend and Servant,
DWJ, December, 2010.*

STAVE 1: DARWIN'S GHOST

Creationism was dead: to begin with. There is no doubt whatever about that. The register of its burial was signed by every university and person of above average intelligence. Creationism was as dead as a door-nail. Scrooge knew it was dead. Of course he did. How could it be otherwise? This must be distinctly understood, or nothing wonderful can come of the story I am going to relate.

Oh! But he was a closed mind at the lectern, Dr. Scrooge! A pompous, know-it-all, old sinner! Hard and sharp as flint, from which no steel had ever struck out a new idea. He froze out anyone who disagreed; and he didn't thaw out one degree at Christmas. New data had no influence on Scrooge.

Once upon a time -- of all the good days in the year, on Christmas Eve -- old Scrooge sat busy in his office at the university. The door of Scrooge's office was open that he might keep his eye upon his graduate student, who in a dismal little cell beyond, was grading papers.

"A merry Christmas, uncle! God save you!" cried a cheerful voice. It was the voice of Scrooge's nephew, who came upon him so quickly that this was the first intimation he had of his approach.

"Bah!" said Scrooge, "Humbug!"

"Christmas a humbug, uncle!" said Scrooge's nephew. "You don't mean that, I am sure."

"I do," said Scrooge. "Merry Christmas! What right have you to be merry? What reason have you to be merry? You're stupid enough."

"Come, then," returned the nephew gaily. "What right have you to be dismal? What reason have you to

the ground, so they weren't killed. The best gliders survived and eventually learned how to fly. They think that any plausible explanation is proof of evolution. We've never heard any plausible explanation for the march of the penguins.

Creationists can invent stories, too. They can suggest that God gives the penguins the instinct to do this to teach us a lesson about how God cares for His creatures even in the most difficult situations. Or, they might say God invented this complex mating ritual just to perplex evolutionists. No matter how convincing these stories, they must be accepted by faith. Stories aren't science.

We began this essay reviewing an article published in a respected scientific journal. That article inferred penguin feather color and characteristics based on the smallest (literally) bits of fossil evidence. From the inferred color and texture, they suggested a story about how these changes might have given penguins a survival advantage. It's just a story that one must accept by faith. It's no different from a story a creationist might offer to explain the march of the penguins. If a story is told by a scientist it doesn't become a scientific fact—it's still just a story. Let us remind you of a quote we printed earlier in this essay. When you read it this time, don't try to understand what they are saying. This time, ask yourself, "Is this a story or a fact?"

Shifts in penguin plumage coloration indicated by the fossil may be linked to differences in ecology, thermoregulatory demands, or the more recent, predominantly Neogene, diversification of their primary mammalian predators. ... Indeed, rather than selection for color, these changes may represent an unanticipated response to the hydrodynamic demands of underwater propulsion. Low aspect ratio, large size, and clustered melanosome distribution may affect melanin packing and feather material properties. Melanin confers resistance to fracture, which is important to materials like feathers subjected to cyclical loading. Selective pressures for the color and material properties of penguin feathers could thus have led to nanoscale changes in melanosome morphology.¹¹

It sounds scientific, but it's just speculation about what might have happened. It's not falsifiable. It isn't based on experimental data. There's no reason to believe that it is true, other than the authority of the person who is saying it. It is a perversion of science.

¹¹ Clarke, *et al.*, *Science*, 12 November 2010, "Fossil Evidence for Evolution of the Shape and Color of Penguin Feathers", pages 954-957

be morose? You're smart enough."

Scrooge having no better answer ready on the spur of the moment, said "Bah!" again; and followed it up with "Humbug."

"Don't be cross, uncle!" said the nephew.

"What else can I be," returned the uncle, "when I live in such a world of fools as this? Every idiot who celebrates Christmas and goes about with 'creation' on his lips, should be boiled with his own pudding, and buried with a stake of holly through his heart. He should!"

"Uncle!" pleaded the nephew.

"Nephew!" returned the uncle, sternly, "keep your beliefs about creation to yourself, and let me keep mine."

His nephew left the room without an angry word, notwithstanding. He stopped at the outer door to bestow the greetings of the season on the graduate student, who cold as he was, was warmer than Scrooge; for he returned them cordially.

This graduate student, in letting Scrooge's nephew out, had let two other men in. They had books and papers in their hands, and bowed to Scrooge.

"At this festive season of the year, Dr. Scrooge," said one gentleman, taking up a pen, "it is more than usually desirable that we should make some slight provision for the teaching of creation, sir."

"The insane asylums?" demanded Scrooge. "Are they still in operation?"

"They are. Still," returned the gentleman, "I wish I could say they were not."

"Oh! I was afraid, from what you said at first, that something had occurred to stop them in their useful course," said Scrooge. "They can continue teaching creationism there!"

Seeing clearly that it would be useless to pursue this point, the gentlemen withdrew. Scrooge returned to his lesson plans with an improved opinion of himself, and in a more facetious temper than was usual with him.

Scrooge took his melancholy dinner in his usual melancholy tavern; and having read all the liberal newspapers, went home. Quite satisfied, he closed his door, and locked himself in, which was his custom. Thus secured against any new revelation, he took off his cravat; put on his dressing-gown and slippers, and his nightcap; and sat down before the fire to take his gruel.

The fireplace was an old one, built by some Dutch merchant long ago, and paved all round with quaint Dutch tiles, designed to illustrate the Scriptures. There were Cains and Abels, Pharaohs' daughters; Queens of Sheba, Angelic messengers descending through the air on clouds like feather-beds, Abrahams, Belshazzars, Apostles putting off to sea in butter-boats, hundreds of

figures to attract his thoughts – all of which reminded him of that creation nonsense.

"Humbug!" said Scrooge; and walked across the room. As he sat down, his glance happened to rest upon a bell, a disused bell, which hung in the room, and communicated for some purpose now forgotten with a chamber in the highest story of the building. It was with great astonishment, and with a strange, inexplicable dread, that as he looked, he saw this bell begin to swing. It swung so softly in the outset that it scarcely made a sound; but soon it rang out loudly, and so did every bell in the house.

This might have lasted half a minute, or a minute, but it seemed an hour. The bells ceased as they had begun, together. They were succeeded by a clanking noise, deep down below; as if some person were dragging a heavy chain over the casks in the wine merchant's cellar. Scrooge then remembered to have heard that ghosts in haunted houses were described as dragging chains.

The cellar-door flew open with a booming sound, and then he heard the noise much louder, on the floors below; then coming up the stairs; then coming straight towards his door.

"It's humbug still!" said Scrooge. "I won't believe it."

His colour changed though, when, without a pause, it came on through the heavy door, and passed into the room before his eyes. Upon its coming in, the dying flame leaped up, as though it cried, "I know him; Charles Darwin's Ghost!" and fell again.

Though Scrooge looked the phantom through and through, and saw it standing before him; though he felt the chilling influence of its death-cold eyes; and marked the very texture of the folded kerchief bound about its head and chin, which wrapper he had not observed before: he was still incredulous, and fought against his senses.

"How now!" said Scrooge, caustic and cold as ever. "What do you want with me?"

"Much!" – Darwin's voice, no doubt about it.

"You don't believe in me," observed the Ghost.

"I don't," said Scrooge.

"What evidence would you have of my reality, beyond that of your senses?"

"I don't know," said Scrooge.

"Why do you doubt your senses?"

"Because," said Scrooge, "a little thing affects them. A slight disorder of the stomach makes them cheats. You may be an undigested bit of beef, a blot of mustard, a crumb of cheese, a fragment of an underdone potato. There's more of gravy than of grave about you, whatever you are!"

"Man of the worldly mind!" replied the Ghost, "do you believe in me or not?"

"I do," said Scrooge. "Even though I am a scientist, I must. But why do spirits walk the earth, and why do they come to me?"

"Hear me!" cried the Ghost. "My time is nearly gone."

"I will," said Scrooge.

"I am a victim of my unbelief," pursued the Ghost. "I am here to-night to warn you, that you have yet a chance and hope of escaping my fate."

"You were always a good friend to me," said Scrooge. "Thank `ee!"

"You will be haunted," resumed the Ghost, "by Three Spirits. Without their visits," said the Ghost, "you cannot hope to shun the path I tread. Expect the first tomorrow, when the bell tolls one. Expect the second on the next night at the same hour. The third upon the next night when the last stroke of twelve has ceased to vibrate. Look to see me no more; and look that, for your own sake, you remember what has passed between us!"

The apparition walked backward from him; and at every step it took, the window raised itself a little, so that when the spectre reached it and went out, it was wide open.

Scrooge closed the window, and examined the door by which the Ghost had entered. It was locked, as he had locked it with his own hands, and the bolt was undisturbed. He tried to say "Humbug!" but stopped at the first syllable. And being, from the emotion he had undergone, or the fatigues of the day, or his glimpse of the Invisible World, or the dull conversation of the Ghost, or the lateness of the hour, much in need of repose; went straight to bed, without undressing, and fell asleep upon the instant.

STAVE 2:

THE FIRST OF THE THREE SPIRITS

When Scrooge awoke, it was so dark, that looking out of bed, he could scarcely distinguish the transparent window from the opaque walls of his chamber. He was endeavouring to pierce the darkness with his ferret eyes, when the chimes of a neighbouring church struck a deep, dull, hollow, melancholy One. Light flashed up in the room upon the instant, and the curtains of his bed were drawn aside; and Scrooge, starting up into a half-recumbent attitude, found himself face to face with the unearthly visitor who drew them: as close to it as I am now to you, and I am standing in the spirit at your elbow.

It was a strange figure -- like a child: yet not so like a child as like an old man, viewed through some supernatural medium, which gave him the appearance of having receded from the view, and being diminished to a child's proportions. But the strangest thing about it was, that from the crown of its head there sprung a

bright clear jet of light, by which all this was visible; and which was doubtless the occasion of its using, in its duller moments, a great extinguisher for a cap, which it now held under its arm.

"Are you the Spirit, sir, whose coming was foretold to me?" asked Scrooge.

"I am."

The voice was soft and gentle. Singularly low, as if instead of being so close beside him, it were at a distance.

"Who, and what are you?" Scrooge demanded.

"I am the Ghost of Evolution Past."

Perhaps, Scrooge could not have told anybody why, if anybody could have asked him; but he had a special desire to see the Spirit in his cap; and begged him to be covered.

"What!" exclaimed the Ghost, "Would you so soon put out, with worldly hands, the light I give?"

Scrooge reverently disclaimed all intention to offend. He then made bold to inquire what business brought him there.

"Your welfare," said the Ghost. The Spirit put out its strong hand as it spoke, and clasped him gently by the arm. "Rise. And walk with me."

As the words were spoken, they passed through the wall, and stood upon an open country road, with fields on either hand. The city had entirely vanished. Not a vestige of it was to be seen. The darkness and the mist had vanished with it, for it was a clear, cold, winter day, with snow upon the ground.

"Good Heaven!" said Scrooge, clasping his hands together, as he looked about him. "I was bred in this place. I was a boy here. This is my school."

"Do you remember what you learned here?" asked the Ghost.

"Of course. I learned Piltdown Man was the missing link between ape and man. And look! Over there! There is the model of Stanley Miller's experiment that showed how life began."

A young boy, standing before a chart of skulls and hooves was explaining how the horse evolved. Scrooge smiled with satisfaction as he watched himself educating his classmates. He was only mildly annoyed when the Ghost asked, "How many of the things you learned back then were true?"

Scrooge gave his customary defense. None of them were true, but that didn't matter. Science is progressive. Old truth is constantly being replaced by new truth. The details were all wrong, but the general concept was true. All living things evolved from a common ancestor. The explanation of how they evolved changes from day to day, and year to year; but the truth of evolution remains eternal.

The Ghost smiled thoughtfully, and waved its hand: saying as it did so, "Let us see another Christmas!"

Although they had but that moment left the school behind them, they were now in the busy thoroughfares of a city, where shadowy passengers passed and repassed; where shadowy carts and coaches battle for the way, and all the strife and tumult of a real city were. The Ghost stopped at a certain door, and asked Scrooge if he knew it.

"Know it!" said Scrooge. "I got my doctorate here!"

They went in. At sight of an old gentleman in a Welsh wig, sitting behind such a high desk, that if he had been two inches taller he must have knocked his head against the ceiling, Scrooge cried in great excitement:

"Why, it's old Fezziwig! Bless his heart; it's Fezziwig alive again! He was my thesis advisor!"

Dr. Fezziwig was working on Christmas Eve, reading Scrooge's thesis, in which he proved dinosaurs were cold-blooded reptiles, in no way related to birds. During the whole of this time, Scrooge had acted like a man out of his wits. His heart and soul were in the scene, and with his former self. He corroborated everything, remembered everything, enjoyed everything, but then underwent the strangest agitation. It was not until now, when the modern articles about dinosaurs dawned upon him that he remembered the Ghost, and became conscious that it was looking full upon him, while the light upon its head burnt very clear.

He felt the Spirit's glance, and stopped.

"What is the matter?" asked the Ghost.

"Nothing in particular," said Scrooge.

"Something, I think?" the Ghost insisted.

"No," said Scrooge, "No. I should like to be able to make a revision or two just now! That's all."

"I told you these were shadows of the things that have been," said the Ghost. "That they are what they are, do not blame me!"

"Remove me!" Scrooge exclaimed, "I cannot bear it! Leave me! Take me back. Haunt me no longer!"

He was conscious of being exhausted, and overcome by an irresistible drowsiness; and, further, of being in his own bedroom. He barely had time to reel to bed, before he sank into a heavy sleep.

STAVE 3:

THE SECOND OF THE THREE SPIRITS

Awaking in the middle of a prodigiously tough snore, and sitting up in bed to get his thoughts together, Scrooge had no occasion to be told that the bell was again upon the stroke of One. He felt that he was restored to consciousness in the right nick of time, for the especial purpose of holding a conference with the

second messenger dispatched to him. Now, being prepared for almost anything, he was not by any means prepared for nothing; and, consequently, when the Bell struck One, and no shape appeared, he was taken with a violent fit of trembling.

Five minutes, ten minutes, a quarter of an hour went by, yet nothing came save a dim light. At last, I say, he began to think that the source and secret of this ghostly light might be in the adjoining room, from whence, on further tracing it, it seemed to shine. This idea taking full possession of his mind, he got up softly and shuffled in his slippers to the door.

The moment Scrooge's hand was on the lock, a strange voice called him by his name, and bade him enter. "Come in!" exclaimed the Ghost. "Come in, and know me better, man."

Scrooge entered timidly, and hung his head before this Spirit. He was not the dogged Scrooge he had been; and though the Spirit's eyes were clear and kind, he did not like to meet them.

"I am the Ghost of Evolution Present," said the Spirit. "Look upon me."

"Spirit," said Scrooge submissively, "conduct me where you will. I went forth last night on compulsion, and I learnt a lesson which is working now. To-night, if you have aught to teach me, let me profit by it."

"Touch my robe."

Scrooge did as he was told, and held it fast.

The ringing bell called good people all to school, and away they came, flocking through the streets in their best clothes, and with their gayest faces. And at the same time there emerged from scores of by-streets, lanes, and nameless turnings, innumerable people, carrying their books to the classrooms, learning about evolution.

"Spirit," said Scrooge, after a moment's thought, "I wonder you, of all the beings in the many worlds about us, should allow creationists to cramp these people's opportunities of enlightenment."

"I?" cried the Spirit.

"Creationists would deprive them of their means of education every seventh day by telling that silly creation myth," said Scrooge. "Wouldn't they? You could not only prevent them from believing in God at school, but at church, too."

Perhaps it was the pleasure the good Spirit had in showing off this power of his, or else it was his own kind, generous, hearty nature, and his sympathy with all ignorant men, that led him straight to Scrooge's nephew's home; for there he went, and took Scrooge with him. Bob Cratchit had just returned from church with Tiny Tim.

"And how did little Tim behave?" asked Mrs. Cratchit.

"As good as gold," said Bob, "and better. Somehow he gets thoughtful sitting by himself so much, and thinks the strangest things you ever heard. He told me, coming home, that he hoped the people saw him in the church, because he was a cripple, and it might be pleasant to them to remember upon Christmas Day, who made lame beggars walk, and blind men see."

At this, Scrooge could barely contain himself. How could a relative of his allow his son to believe in miracles? If they would only teach Tiny Tim about evolution in school, he would not believe such nonsense.

Then Bob proposed: "A Merry Christmas to us all, my dears. God bless us."

Which all the family re-echoed.

"God bless us every one!" said Tiny Tim, the last of all.

"Spirit," said Scrooge, with an interest he had never felt before, "tell me if Tiny Tim will ever give up his foolish religion and learn."

"I see a vacant seat," replied the Ghost, "in the church, and a crutch without an owner, carefully preserved. If these shadows remain unaltered by the Future, the child's faith will die."

Scrooge reveled in the Ghost's prophecy, and thought how wonderful the world would be if Christianity could once and for all be extinguished. But he returned his attention to the vision at hand speedily, on hearing his own name.

"Dr. Scrooge!" said Bob; "I'll give you Dr. Scrooge, the Smartest Man Alive!"

"The Smartest Man Alive indeed!" cried Mrs. Cratchit, reddening. "I wish I had him here. I'd teach him a thing or two. He wouldn't be an atheist if he weren't an evolutionist!"

"My dear," said Bob, "he wouldn't be an evolutionist if he weren't an atheist."

"Should it be on Christmas Day," said she, "on which one drinks the health of such a stubborn, ignorant man as Dr. Scrooge? You know he is, Robert. Nobody knows it better than you do, poor fellow."

"My dear," was Bob's mild answer, "Christmas Day."

"I'll drink his health for your sake and the Day's," said Mrs Cratchit, "not for his. Long life to him. A merry Christmas and a happy new year! -- he'll be very merry and very happy, I have no doubt!"

The children drank the toast after her. It was the first of their proceedings which had no heartiness. Tiny Tim drank it last of all, but he didn't care twopence for it. Scrooge was the Ogre of the family. The mention of his name cast a dark shadow on the party, which was not dispelled for full five minutes.

"He's a comical old fellow," said Scrooge's nephew, "that's the truth: and not so pleasant as he might be. However, his offenses carry their own punishment, and I

have nothing to say against him. He said that Christmas was a humbug, as I live! He believed it too."

"I'm sure he is very smart," hinted Scrooge's niece. "At least you always tell me so."

"What of that, my dear?" said Scrooge's nephew. "His knowledge is of no use to him. He don't do any good with it. He don't make himself comfortable with it.

"I have no patience with him," observed Scrooge's niece. Scrooge's niece's sisters, and all the other ladies, expressed the same opinion.

"Oh, I have," said Scrooge's nephew. "I am sorry for him; I couldn't be angry with him if I tried. Who suffers by his ill whims? Himself, always. Here, he takes it into his head to dislike us, and he won't come and dine with us. What's the consequence? He don't lose much of a dinner."

"Indeed, I think he loses a very good dinner," interrupted Scrooge's niece. Everybody else said the same, and they must be allowed to have been competent judges, because they had just had dinner; and, with the dessert upon the table, were clustered round the fire, by lamplight.

They then began a Game called Yes and No, where Scrooge's nephew had to think of something, and the rest must find out what; he only answering to their questions yes or no, as the case was. The brisk fire of questioning to which he was exposed, elicited from him that he was thinking of an animal, a live animal, rather a disagreeable animal, a savage animal, an animal that growled and grunted sometimes, and talked sometimes, and lived in London, and walked about the streets, and wasn't made a show of, and wasn't led by anybody, and didn't live in a menagerie, and was never killed in a market, and was not a horse, or an ass, or a cow, or a bull, or a tiger, or a dog, or a pig, or a cat, or a bear. At every fresh question that was put to him, this nephew burst into a fresh roar of laughter; and was so inexpressibly tickled, that he was obliged to get up off the sofa and stamp. At last the plump sister, falling into a similar state, cried out:

"I have found it out! I know what it is! It's your Uncle Scrooge!"

Which it certainly was. He thought himself to be nothing more than an evolved ape—and so he was.

It was a long night, if it were only a night; but Scrooge had his doubts of this, because the Christmas Holidays appeared to be condensed into the space of time they passed together. It was strange, too, that while Scrooge remained unaltered in his outward form, the Ghost grew older, clearly older. Evolution Present was dying before his eyes.

"My life upon this globe, is very brief," replied the Ghost. "It ends to-night."

"To-night!" cried Scrooge.

"To-night at midnight. Hark! The time is drawing

near. I leave behind only these children."

From the foldings of its robe, it brought two children; wretched, abject, frightful, hideous, miserable. They knelt down at its feet, and clung upon the outside of its garment.

They were a boy and a girl. Yellow, meagre, ragged, scowling, wolfish; but prostrate, too, in their humility. Where graceful youth should have filled their features out, and touched them with its freshest tints, a stale and shrivelled hand, like that of age, had pinched, and twisted them, and pulled them into shreds. Where angels might have sat enthroned, devils lurked, and glared out menacing. No change, no degradation, no perversion of humanity, in any grade, through all the mysteries of wonderful creation, has monsters half so horrible and dread.

Scrooge started back, appalled. Having them shown to him in this way, he tried to say they were fine children, but the words choked themselves, rather than be parties to a lie of such enormous magnitude.

"Spirit, are they yours?" Scrooge could say no more.

"They are Man's," said the Spirit, looking down upon them. "And they cling to me, appealing from their fathers."

The bell struck twelve.

Scrooge looked about him for the Ghost, and saw it not.

STAVE 4:

THE LAST OF THE SPIRITS

The Phantom slowly, gravely, silently approached. When it came, Scrooge bent down upon his knee; for in the very air through which this Spirit moved it seemed to scatter gloom and mystery.

It was shrouded in a deep black garment, which concealed its head, its face, its form, and left nothing of it visible save one outstretched hand. But for this it would have been difficult to detach its figure from the night, and separate it from the darkness by which it was surrounded.

He felt that it was tall and stately when it came beside him, and that its mysterious presence filled him with a solemn dread. He knew no more, for the Spirit neither spoke nor moved.

"I am in the presence of the Ghost of Evolution Yet To Come?" said Scrooge.

The Spirit answered not, but pointed downward with its hand.

"You are about to show me shadows of the things that have not happened, but will happen in the time before us," Scrooge pursued. "Is that so, Spirit?"

The upper portion of the garment was contracted for an instant in its folds, as if the Spirit had inclined its

head. That was the only answer he received.

"Ghost of the Future!" he exclaimed, "I fear you more than any spectre I have seen. But as I know your purpose is to do me good, and as I hope to live to be another man from what I was, I am prepared to bear you company, and do it with a thankful heart. Will you not speak to me?"

It gave him no reply. The hand was pointed straight before them.

"Lead on," said Scrooge. "Lead on. The night is waning fast, and it is precious time to me, I know. Lead on, Spirit."

The Phantom moved away as it had come towards him. Scrooge followed in the shadow of its dress, which bore him up, he thought, and carried him along.

The Spirit stopped beside one little knot of university professors. Observing that the hand was pointed to them, Scrooge advanced to listen to their talk.

"No," said a great fat man with a monstrous chin, "I don't know much about it, either way. I only know he's dead, so we no longer have to listen to his foolish, 19th century tales of how living things came to be."

"When did he die?" inquired another.

"Last night, I believe."

"It's likely to be a very small funeral," said the same speaker; "for upon my life I don't know of anybody who wants to admit to knowing him."

Speakers and listeners strolled away, and mixed with other groups. Scrooge knew the men, and looked towards the Spirit for an explanation.

The Phantom glided on into a street. Its finger pointed to two persons meeting. Scrooge listened again, thinking that the explanation might lie here.

He knew these men, also, perfectly. They were men of renown: very smart, and of great importance. He had made a point always of standing well in their esteem.

"How are you?" said one.

"How are you?" returned the other.

"Well!" said the first. "That old fool never learned."

"So I am told," returned the second. "Cold, isn't it?"

Not another word. That was their meeting, their conversation, and their parting.

Scrooge was at first inclined to be surprised that the Spirit should attach importance to conversations apparently so trivial; but feeling assured that they must have some hidden purpose, he set himself to consider what it was likely to be.

He looked about in that very place for his own image; but another man stood in his accustomed classroom, and though the clock pointed to his usual

time of day for being there, he saw no likeness of himself among the multitudes on the campus.

"These halls," said Scrooge, "through which we hurry now, is where my place of occupation is, and has been for a length of time. Let me behold what I shall be, in days to come."

The Spirit stopped; the hand was pointed elsewhere.

"But my office is yonder," Scrooge exclaimed. "Why do you point away?"

The inexorable finger underwent no change.

Scrooge hastened to the window of his office, and looked in. It was an office still, but not his. The furniture was not the same, and the figure in the chair was not himself. His books on evolution were gone. In their place were biology books containing only useful facts about how living organisms functioned, without any fanciful stories of how they came to be. Lacking also was the Tree of Life poster that had occupied such a prominent position on his wall.

The Phantom pointed as before.

He joined it once again, and wondering why and whither he had gone, accompanied it until they reached an iron gate. He paused to look round before entering.

A churchyard. Here, then, the wretched man whose name he had now to learn, lay underneath the ground. The Spirit stood among the graves, and pointed down to One. He advanced towards it trembling. The Phantom was exactly as it had been, but he dreaded that he saw new meaning in its solemn shape.

Scrooge crept towards it, trembling as he went; and following the finger, read upon the stone of the neglected grave his own name, DARWIN SCROOGE. Strangely, the letters "Dr" and "PhD", which had previously surrounded his name, protecting it from criticism, had been chiseled out, as if he no longer merited the title and respect.

"Good Spirit," he cried, as down upon the ground he fell before it: "Your nature intercedes for me, and pities me. Assure me that I yet may change these shadows you have shown me, by an altered life."

The kind hand trembled.

"I will honour Christmas in my heart, and try to keep it all the year. I will live in the Past, the Present, and the Future. The Spirits of all Three shall strive within me. I will not shut out the lessons that they teach. I will reject evolution. Oh, tell me I may sponge away the writing on this stone!"

Holding up his hands in a last prayer to have his fate aye reversed, he saw an alteration in the Phantom's hood and dress. It shrunk, collapsed, and dwindled down into a bedpost.

STAVE 5: THE END OF IT

Yes! and the bedpost was his own. The bed was his own, the room was his own. Best and happiest of all, the Time before him was his own, to make amends in!

"I will live in the Past, the Present, and the Future!" Scrooge repeated, as he scrambled out of bed. "The Spirits of all Three shall strive within me. Heaven, and the Christmas Time be praised for this!"

Running to the window, he opened it, and put out his head. No fog, no mist; clear, bright, jovial, stirring, cold; cold, piping for the blood to dance to; Golden sunlight; Heavenly sky; sweet fresh air; merry bells. Oh, glorious. Glorious!

"What's to-day?" cried Scrooge, calling downward to a boy in Sunday clothes, who perhaps had loitered in to look about him.

"To-day?" replied the boy. "Why, Christmas Day."

"It's Christmas Day!" said Scrooge to himself. "I haven't missed it. The Spirits have done it all in one night. They can do anything they like. Of course they can. Of course they can."

Running out into the street, he grabbed the first person he met and said, "We didn't evolve from apes!"

"Lord bless me!" cried the gentleman, as if his breath were taken away. "My dear Dr. Scrooge, are you serious?"

Scrooge was better than his word. He taught it all, and infinitely more; and to Tiny Tim, whose faith did not die, he was a second father. Some colleagues laughed to see the alteration in him, but he let them laugh, and little heeded them; for he was wise enough to know that nothing ever happened on this globe, for good, at which some people did not have their fill of laughter in the outset.

He had no further intercourse with Spirits, but lived strictly upon the Scientific Method, ever afterwards; dismissing baseless speculation about how living things came to be. And it was always said of him, that he knew how to study well, if any man alive possessed the knowledge. May that be truly said of us, and all of us! And so, as Tiny Tim observed, God Bless Us, Every One!

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by Lothar Janetzko

HOW TO TALK TO YOUR KIDS ABOUT EVOLUTION AND CREATION

<http://www.leaderu.com/orgs/probe/docs/cr-evol.html>

“You should only believe what there is evidence for.”

This month’s web site review looks at a site where a husband and wife discuss how to talk to kids about evolution and creation. The format of the discussion is that the wife’s questions and comments are in italics, and the husband’s answers follow in regular type. At the end of the discussion you will find detailed information about the authors of this web site.

The discussion begins with the wife asking, *“Why is there a problem with evolution in the first place?”* The answer given points out that there is no evidence to support the theory of evolution from amoeba to man.

The interesting part of the discussion takes place when the wife talks about their son’s eighth-grade biology textbook. Many parents have faced the problem of how to deal with the misinformation presented in many school textbooks. In discussing the biology textbook many different topics are addressed such as 1) The Evolution of the Horse, 2) Homologous and Vestigial Organs, 3) The Early Atmosphere of the Earth, 4) Phylogenetic Trees, 5) Natural Selection and Speciation, 6) Responding to Evolutionary Theory, 7) Genesis 1, 8) Early Human History, 9) Noah’s Flood, 10) Cavemen, 11) Racial Differences and 12) Dinosaurs.

The important point made during the discussion of the various topics is that before parents can talk to their kids about evolution, they must have a good understanding of evolution itself. Interesting insights are given as to how students ought to react when the theory of evolution is taught in science classes.

Disclosure

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