Conclusion

The failure of the levee at London Avenue, New Orleans, during Hurricane Katrina illustrates how flowing water can produce geologic changes rapidly. The splay deposits provide insights into the sorts of sedimentary structures that can be created within short timeframes. Extending the limited processes at New Orleans to the global scale of Noah's Flood has implications for the way in which ancient geological deposits are interpreted, particularly the scale of sedimentary deposits, depositional environments and areas once covered by ancient 'oceans'.

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Feathery flight of fancy: alleged 'protofeathers' fail under close scrutiny

Shaun Doyle

Sinosauropteryx prima (figure 1) has been one of the most prominent fossils put forward in the last decade in support of dinosaur-to-bird evolution. It was first reported in *Science* in 1996,[1] and was excitedly hailed (along with certain other fossils) by evolutionists as prime evidence that feathers evolved in dinosaurs, who declared that 1996 was 'a good year for finding fossils that tell us about the origin of birds.'[2] The cause of the controversy and media attention was the presence of hard, bristly fibres in the skin on the back of the neck and on the tail of the *Sinosauropteryx* fossil.

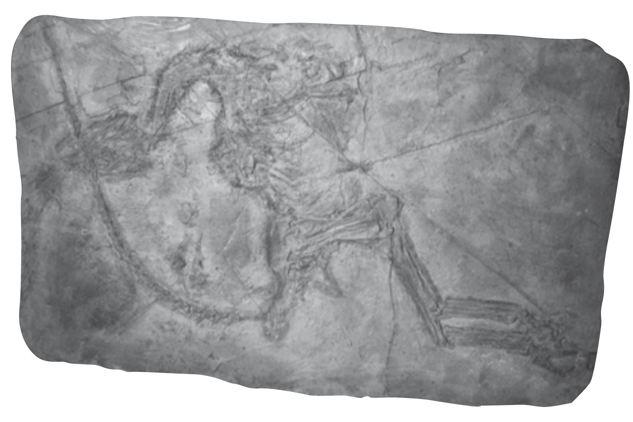

Figure 1. *Sinosauropteryx prima* was a find hailed by evolutionists as evidence for feather evolution in dinosaurs.

Even then, there was much debate among evolutionists about whether these fossils, especially *Sinosauropteryx*, provided evidence for dino-to-bird evolution. Just a year later Larry Martin suggested that the fibres found on the back of the neck and tail of *Sinosauropteryx* were likely 'frayed collagenous fibers under the skin'.[3] Since then, further research has suggested that the 'protofeathers' of *Sinosauropteryx* were not protofeathers at all.[4]

Now, a team of researchers led by Prof. Theagarten Lingham-Soliar from the University of KwaZulu-Natal in Durban, South Africa has added to the mounting body of evidence that shows that *Sinosauropteryx* is *not* a dino-to-bird intermediate fossil that possesses 'protofeathers'. The research team also included ornithologist Alan Feduccia, a well known critic of dino-to-bird evolution. They reported in *Proceedings of the Royal Society B* that the filamentous structures in the skin of a recently discovered *Sinosauropteryx*—often touted as 'protofeathers'—are nothing more than structural collagen.[5]

Lingham-Soliar *et al.* are also aware that many evolutionists will be very sceptical of their findings because of a strong attachment to the evolutionary dino-to-bird paradigm. Therefore, they have sought to counter a likely objection: that the method (standard light microscopy) they used to identify the filamentous structures as collagen is inadequate for identifying dermal collagen.[6] They listed in the 'Materials and Methods' section of their paper numerous examples and references of successful identification of dermal collagen in a wide variety of animals, both fossil and modern, thereby demonstrating that standard microscopy was 'more than adequate' for the task.

These findings have sent orthodox dino-to-bird believers into damage control. David Unwin, dinosaur expert at the University of Leicester, UK, is convinced that the work of Lingham-Soliar *et al.* is solid. However, he also said, 'There's no need to panic. This doesn't in any way challenge the idea that dinosaurs had feathers and that dinosaurs gave rise to birds.'[7] This completely flies in the face of the report by Lingham-Soliar *et al.*:

> 'The pervasiveness of the beguiling, yet poorly supported, proposal of protofeathers in *Sinosauropteryx* has been counterproductive to the important question of the origin of birds.'

Lingham-Soliar *et al.* are more right than they would probably care to admit. Despite the fatal blows their latest paper inflicts on a widely-held evolutionary idea, they're not about to question the evolutionary paradigm itself.[8] This shows once more that although evolutionists continue to demolish one another's hypotheses, they fail to come to terms with the underlying problem of their fossil investigations—the materialist worldview. Once again, these well preserved fossils prove to be wonderfully consistent with rapid burial in the global Flood.

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Migrating planets and migrating theories

Wayne Spencer

For many years the accepted theory of planet formation has been the 'Nebular Hypothesis'.[1] This holds that all the planets in our solar system formed—in the regions where they are now located—from a disk of gas and dust. In recent years, astronomers have entertained, among other ideas, the possibility that some planets in our solar system formed nearer to the sun and then 'migrated' outward to their current orbital positions in the first few million years after the planets formed. After years of study of extrasolar planets, a variety of scenarios have been considered for how Uranus and Neptune formed. The near circular orbits of Jupiter, Saturn, Uranus and Neptune, as well as their relatively large distances from the sun, make them rather unusual compared to other planetary systems around other stars. Long accepted naturalistic origins models for our solar system did not work for extrasolar planetary systems, and models for extrasolar planetary systems did not work for our solar system. This led planetary scientists to modify existing theories for our solar system. The Nebula hypothesis always had scientific problems and still does, but today there are new attempts to refine origins models so that planet formation theories are capable of explaining both our solar system and other planetary systems.[2]

There are valid principles of physics at work in the planet origins models but these models are limited by the assumptions built into them. In a protosolar nebula, where there are planetary bodies forming and there is gas and solid objects in the disk surrounding the sun, gas drag tends to cause solid objects to spiral into the sun. This is true for both small solids and planet-sized bodies.

Naturalistic origins models have examined theoretically by computer simulations what happens to the protosolar disk and planetary bodies embedded in the disk. How planetary bodies migrate (such as inward or outward) in such a disk depends on the characteristics of the disk such as its size, density, the size of the objects in it and density of gases in it. A very large disk would more likely make planets migrate outward for instance, depending on the planet's orbits. The disk must have enough material in it long enough to allow the planets to form. The disk provides the source of gas and solid objects that accrete onto the forming planets.

In our solar system, Jupiter and Saturn are located at distances from the sun that seem to fit accepted models that say they formed where they are by accreting gas and matter from the disk. But for Uranus and Neptune the same process is problematic because of their greater distance from the sun. Uranus and Neptune are farther from the sun than many observed extrasolar planets. At the greater distance from the sun than Jupiter or Saturn, Uranus and Neptune would accrete matter at a slower rate and the disk would likely dissipate before these two planets could become as large as we find them today. Thus scientists now consider it possible Uranus and Neptune originally formed nearer to the sun and migrated outward to their present positions.

Other solar systems

In the past 10 years astronomers have found evidence of planets orbiting other stars.[3] These 'extrasolar' planets are often detected by measuring the 'wobble' of their star. Some have been detected by other methods, such as studying the changes in the star's light as the planet passes in front of the star.

Exoplanets, as they are sometimes called, have raised difficult questions for scientists trying to explain their origin.[43] These extrasolar stellar systems sometimes have planets similar to the giant planets of our solar system. However, many exoplanets are located very near their star and they often follow very elongated elliptical orbits.