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## Big birdosaur blues: new fossil creates problems for dino-to-bird evolution

Shaun Doyle

The media has recently been buzzing with the latest claims of a dino-to-bird missing link, a 1,400-kg so-called ‘bird-like dinosaur’ from China dubbed *Gigantoraptor erlianensis* (meaning ‘giant thief from Erlian’ [a city in Inner Mongolia in China]).<sup>1,2</sup> However, perusing the report in *Nature*<sup>3</sup> reveals that *Gigantoraptor* seems to confuse evolutionists more than confirm dino-to-bird evolution.

First, the sheer size of *Gigantoraptor* presents a problem for the orthodox dino-to-bird story, which the researchers themselves admit:<sup>3</sup>

‘Interestingly, the comparatively less “bird-like” species of most coelurosaurian sub-groups, such as of Alvarezsauroidea, Troodontidae and Dromaeosauridae, are in general larger in size than the more “bird-like” species of each clade, unlike the situation in the Oviraptorosauria where the gigantic *Gigantoraptor* independently evolved many “bird-like” features absent in its smaller relatives.’<sup>4</sup>

In most dinosaur lineages alleged to be closely related to birds, the smaller dinosaurs tend to have more birdlike features.<sup>5</sup> However, *Gigantoraptor* reverses this trend. It exhibits more birdlike characteristics than either *Caudipteryx zoui* or *Protarchaeopteryx robusta*, two of its supposed closest relatives, yet it is 300 times larger than either of them (figure 1).<sup>6</sup> This is explained by invoking homoplasy,<sup>7</sup> which is a poor contingency plan to common descent used by evolutionists to when common descent fails.<sup>8</sup>

*Gigantoraptor* has been portrayed as a dinosaur with feathers, both by the researchers<sup>3</sup> and the media.<sup>1,2</sup> Xu *et al.* even go so far as to say

that their feathers were used for protecting eggs during brooding.<sup>3,7</sup> However, their reasons for believing that *Gigantoraptor* had feathers are nothing more than speculation because no feathers were found with the fossil. Note, *no feathers were found!*

They assume *Gigantoraptor* had feathers because its apparent closest relatives, *Caudipteryx* and *Protarchaeopteryx*, appear to have feathers.<sup>5</sup> However, the status of these two fossils as *dinosaurs* is disputed. Some believe them to be flightless birds based on the feathers and other anatomical evidence.<sup>9–11</sup> However, *Gigantoraptor* appears to have more birdlike features than even *Caudipteryx* and *Protarchaeopteryx*:

‘*Gigantoraptor* has disproportionately the longest forelimb among oviraptorosaurs, a manus resembling basal eumaniraptorans, birdlike hind limbs, and many other advanced features.’<sup>6</sup>

This means it may in fact be a bird, in which case one would expect it to have feathers without having to postulate feathered dinosaurs. Therefore, to assume that they are feathered dinosaurs in order to prove they had feathers is not only begging the question, it also ignores other possible paths to the same conclusion.

However, no amount of speculative reasoning will prove that *Gigantoraptor* had feathers. Even though *Gigantoraptor* is said to be a close relative of *Caudipteryx* and *Protarchaeopteryx*, it would still have been about 300 times their size, and it possesses many other unique features that set it apart from them both.<sup>3</sup> Therefore, unless we actually find a *Gigantoraptor* fossil *with feathers attached* we cannot know if it had feathers and all claims that it did are mere speculation.

Moreover, *Gigantoraptor* doesn’t fit the evolutionary timeline for dino-to-bird evolution. *Gigantoraptor* was found in strata ‘dated’ as Upper Cretaceous (85–65 Ma ago),<sup>3</sup> but *Archaeopteryx*, which is a recognizable bird, is dated at about 150 Ma; and *Confuciusornis*, a beaked bird, supposedly existed 135Ma ago. Therefore, *Gigantoraptor* can’t be

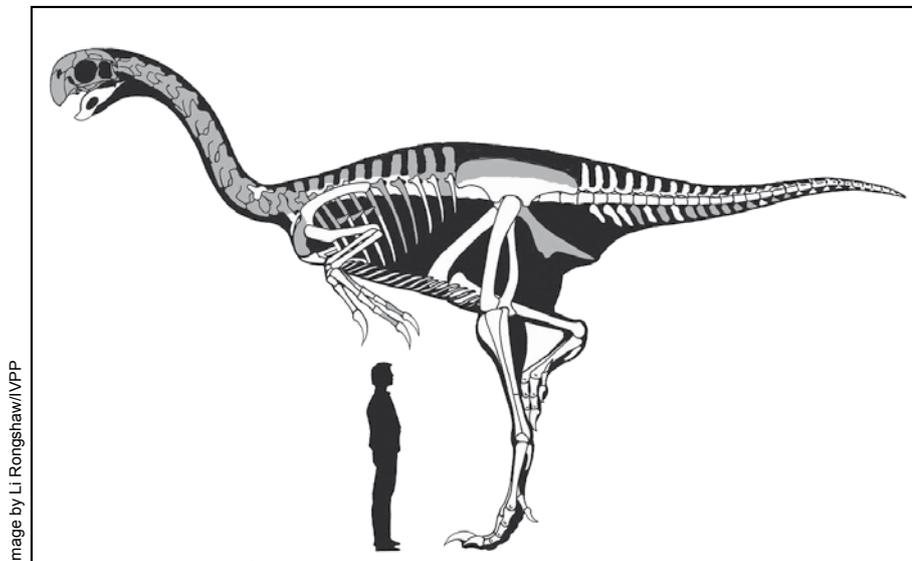


Image by Li Rongshaw/IVPP

**Figure 1.** Estimated size of *Gigantoraptor* in comparison with a man. The bones actually found by Xu *et al.*<sup>3</sup> are shown in white.

classed as an intermediate between dinosaurs and birds because the dates are all wrong. This is a common problem in dino-to-bird theory; the dinosaurs that have the most birdlike features are younger than the first true birds *in the evolutionists' own scheme*.<sup>5</sup>

One thing we can agree on with the evolutionists is that they've found a unique creature that's hard to fit into the traditional evolutionary picture. *Gigantoraptor* seems to be a new creature, which provides no problems for creationists but creates headaches for evolutionists trying to fit it into their conjectures on how dinosaurs evolved into birds. While the media have paraded *Gigantoraptor* as yet another feather in the cap of dino-to-bird evolution, by the evolutionists own admission the feathers are missing and *Gigantoraptor* is eating the cap.

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## Naracoorte Caves: an archive in the dark

Emil Silvestru

### Location and setting

Naracoorte Caves in Victoria, Australia, represent the only fossil site inside caves that is registered on the World Heritage list. Several of the 26 caves in the area contain fossils, Victoria Fossil Cave (VFC) being the uncontested star. Within it there are 5 chambers with significant fossil deposits: The Main Fossil Chamber, Grant Hall, Butch and Lake Chamber, Spring Chamber and The Ossuaries (Upper and Lower). There is also another bone deposit in the newly discovered NW section of the caves. VFC is the largest in the World Heritage Area (WHA), with approximately 4 km of surveyed passages and chambers.<sup>1</sup>

### Geological and paleontological data

According to evolutionary thinking, the fossil record in the caves is believed to span about 500,000 years into the Pleistocene period. In several locations calcite flows (speleotherms) were found at the bottom of the deposits and covering them.<sup>1</sup> The speleotherms have been 'dated' by two different methods (uranium-series through thermal ionization mass-spectrometry or TIMS, and optically stimulated luminescence).<sup>2</sup> The age ranges yielded are presented in table 1.

The fossil inventory of the caves is impressive, the largest on the entire Australian continent. It comprises 102 species of vertebrates, of which 5 are amphibians, 13 reptiles, 17 birds and 67 mammals.<sup>1</sup> Mammal fossils belong to both small species (rodents, bats, marsupials) and large species from kangaroos and wallabies (both extant and extinct) to the ferocious 'marsupial lion' (*Thylacoleo carnifex*). Carnivorous activity, evidenced by