WHY I DARED WALK WITH TV DINOSAURS

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The series is over. The last *Tyrannosaurus* has lurched off into the blood-red sunset. Triceratops has breathed its last in the poisonous atmosphere of the latest Cretaceous. Was *Walking with the Dinosaurs* the biggest science documentary ever, or was it no more than media gimcrackery?

I was involved with the series from its early days, as palaeontological consultant for the first programme. Several of my colleagues from Bristol were also involved: David Unwin (now in Berlin) was main consultant on pterosaurs (the leathery flying ones), Donald Henderson (now in Baltimore) offered expert advice on the biomechanics of dinosaurian locomotion, and Jo Wright (now in Denver) was employed by the BBC full-time for a year as their in-house palaeontological consultant.

Did we sell our souls? Yes, according to some. We have been accused by a fellow palaeontologist (who was not himself involved in the series) of being seduced by the bright lights, of selling our expertise cheaply, of doing anything for money. He publicly called us prostitutes on an e-mail discussion list. His message reached thousands of professional palaeontologists around the world, particularly in North America. This has created an unusual situation since most of these overseas palaeontologists have not yet seen the series. It will be shown by the Discovery Channel in North America only in March or April next year. Other critics have been less harsh, and the criticism has become more muted as the programmes have rolled out, and as their true impact has been realised.

The critics have adopted a number of poses. One or two have been outright in their condemnation. They have equated WWD with the Godzilla movies, arguing that the animations are amateurish and the realism spurious. Their charge has been that Godzilla is presented as knock-about fun, which is fine, but WWD was shown as a pseudo-nature documentary, and so it will mislead the public horribly. These critics have offered no specific suggestions, however, about what is actually wrong with the animations, nor about how they, in their wisdom, would do it differently. In fact, they have gone curiously silent as they have seen more and more of the series.

The second category of critic, typified by Dr Henry Gee, a palaeontologist and an editor with *Nature* magazine, has not condemned the series outright. In his review, he wrote ‘What is worrying, though, is the mixture of fact and speculation melded into a seamless whole: this is fine for drama or science fiction, but I question whether it is entirely proper for something billed as a science programme.’ The pose of cynic is unassailable. Of course, WWD was not perfect, and he is quite right that fact and fiction are inextricably mixed. The huge pre-publicity by the BBC clearly raised expectations and virtually guaranteed that there would be a backlash. However, quite what Dr Gee expected, or what would entirely satisfy him has not been made clear. We are left with a lingering feeling that WWD was all a bit of fun, but it really needed a serious hand at the tiller to lend it some true authority. Or perhaps it should never have been attempted. Or who knows? The cynic is not obliged to be specific, merely to smile indulgently at the caperings of his fellow human beings, while muttering, 'Tut, tut.'

The third category of WWD-haters, the fact checkers, began compiling lists of

errors in the first week. These were gleefully circulated on the e-mail lists. For example, in the first programme, *Postosuchus* urinates copiously. There is no doubt that it does so on the programme, and this was a moment that my children relished. However, of course, living birds and crocodiles, the closest living relatives of the dinosaurs do not urinate. They shed their waste chemicals as more solid uric acid. Someone should have spotted this, and I include myself among those someones. Another purported error, or at least 'can't be sure', was that the little cynodonts are said to have pair-bonded for life. We can never know that of course from the fossil bones. Not an error, since it's possible, if not even likely, but a claim too far. Then, the fact checkers rather ran out of steam. They haven't said so, but they haven't actually found too many errors. They have found to their surprise that the BBC consulted 100 palaeontologists in various countries, and they have actually been quite careful about accuracy.

Is WWD merely a media event? It would be easy to draw that conclusion in retrospect. The programme attracted huge numbers of viewers, far more than any science documentary has ever done in the past. The first programme was rated 19th most popular ever on the BBC, beaten only by royal weddings, cup finals, and Eastenders. It was promoted last week as an example of the output of the new BBC, not concerned with ratings (of course), but seeking to innovate, and lead the world. The success of WWD has raised the profile of science and arts programmes at the BBC. Did media values come before scientific values? - any compromise to improve viewing figures and to recoup the millions that were spent?

I see WWD as a natural progression, both in the promotion of the public understanding of science and in the reconstruction of past life. From the time of the discovery of the first dinosaurs in the 1820s, palaeontologists have published popular accounts and illustrations. Geology and palaeontology were real hits with the serious reading public 170 years ago. In 1854, Waterhouse Hawkins' models of dinosaurs were unveiled at Crystal Palace. These showed life-sized sculptures of dinosaurs, literally in concrete form, and painted garishly. Cries of scientific anguish? Selling of souls for popular approbation? No. This may have had something to do with the fact that the models were sponsored by Sir Richard Owen, the leading natural scientist of his day, and they were backed by the Prince Consort. There were no complaints of trivialisation. Now we have moving pictures and computers, it is absolutely right to bring them into service to bring dinosaurs back to life. Sir Richard Owen would have done so, and so should we.

Moving dinosaurs are a natural end-point of the palaeontological endeavour. When a palaeontologist has the good fortune to find a new dinosaur (something I have never been able to do), the normal procedure (ask your children or grandchildren) is to remove the bones from the rock, string them together in a lifelike pose, reconstruct the muscles from scars on the bones, clothe the body in skin, and commission an artist to make a lifelike painting. The overall body shape is pretty much factual, but the colours and patterns are informed guesswork. No palaeontologist can afford to pay for computer animation. So, in my view, the BBC has done the palaeontological world a marvellous service, in presenting a multi-million pound research grant to help us do this work. Roll on the next series!

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