

## DISTANT THUNDER

## All I want for Christmas...

**Geologist and science writer Nina Morgan examines some interesting ideas for educational Christmas presents**

With the holiday season approaching, many parents, relatives and friends may be giving some thought to that annual corundum: choosing entertaining, yet educational, toys for children. This sort of debate has been going on for a very long time.

In May 1854, the English sculptor and natural history artist, Benjamin Waterhouse Hawkins [1807–1894] read a paper to the Royal Society for the Encouragement of Arts, Manufacturers and Commerce titled: *On Visual Education as Applied to Geology*. In his lecture, he discussed the methods and motivation behind the life-size models of dinosaurs he created for display in the Crystal Palace Park in South London. These state-of-the-art models, devised in consultation with the leading experts of the day, including the anatomist and palaeontologist, Richard Owen [1804–1892], were designed to educate as well as entertain. Now restored and again open to public view, they create as much excitement today as they must have done when first installed in 1854.

### Educational ideas

Listening to Hawkins's lecture gave Richard Dawes [1793–1867] Dean of Hereford Cathedral, an idea. Dawes, a strong supporter of the teaching of science to children, declared that he:

"...should be glad to see those models multiplied at a price which enable them to be introduced into village and ordinary schools." As everyone could not visit the Crystal Palace, he therefore hoped that "specimens like those before them might be rendered attainable by those in remote and secluded districts, who would not have the advantage of witnessing the splendid and gigantic illustration of the extinct creation of the early ages of the world which would be there exhibited..."

This idea was favourably received by



others present, and suggestions for how this might be achieved were offered. One participant suggested that lighter and less brittle materials such as papier-mâché could be used, and that the models might be scaled down to a smaller size. For example:

"...the Iguanodon might, for instance, be reduced to the proportions of something like two or three feet in length, and the other animals in like proportion."

For his part, Hawkins stated his readiness to:

"lend his aid in carrying out the suggestions made for multiplying the models in a form which would render them attainable and useful to society at large..."

### Major expansion

It's not too much of an exaggeration to say the toy industry took up these educational ideas with gusto and ran with them. Scaled-down dinosaur models made of plastic, wood or other materials, along with an associated plethora of dinosaur books, games and dinosaur-themed merchandise designed for children sell in their millions. Seasonal dinosaur-themed merchandise will surely be popping up beneath a Christmas tree or in a shop window near you. Not that this is necessarily a bad thing. Many geologists and other scientists trace their early interest in science to gifts of similar sorts of educational toys.

### Risk assessment

But there is a catch. As a Mr Harry Chester, another (and perhaps more timid) member

of the Society pointed out in the discussion that followed Hawkins's lecture:

"...there was one form of illustration which he hoped this subject would not receive, but which he feared would be the case, that was, that these monsters would find their way into their carpets and paper hangings. He would ask what would be the consequence if a gentleman of not very strong nerves, on plunging into his bath found the bottom of it ornamented with some of these horrid-looking animals."

As all who have encountered the hard plastic of a stray Lego brick—a popular modern educational toy—while stumbling bare-footed across a living room floor in the dark will testify: Mr Chester makes a serious point. Educational toys can present a real danger to life and limb!

Best wishes to all for a safe and happy holiday season.

**End notes:** Sources for this vignette include: Hawkins, B. W., *J. Soc. Arts*, vol 2, pp 444–449, 19 May 1854; and Wikipedia entries for Benjamin Waterhouse Hawkins, Richard Owen and Richard Dawes. For information about visiting the Crystal Palace dinosaurs see: <https://cpdinosaurs.org/visit/>

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