

alternatives to the complex and expensive Zeiss systems. An interesting aspect of this story is the reaction of the directors of Zeiss planetaria to the arrival of competing systems. The book details how these influential individuals were able to stifle the propagation of less expensive planetaria until after the Second World War. It was then that Armand Spitz created and marketed a projector system that was smaller, simpler and more affordable than the Zeiss system. Spitz's legacy was to make planetaria much more numerous and hence more accessible to the public. Although attacked by Zeiss purists, the Spitz system was aided by a lack of direct competition and the dawning

of the space age. Spitz went on to become the world's largest producer of planetaria.

But *Theaters of Time and Space* is about more than just machinery. Marché touches on the human issues behind the birth of this industry. The book describes the emergence of the planetarium professional, a discipline containing elements of scientist, technician, teacher and entertainer. The history of women in the field is also examined, revealing the early difficulties they had breaking into this male-dominated profession. The book follows the careers of pioneering female planetarium directors and illustrates the growth of opportunities for women that came with the success

of the Spitz system. Marché also describes how the spiritual nature of astronomy inspired early philanthropic sponsorship of planetaria.

The book is a well written, thorough and enjoyable tribute to planetaria. It demonstrates their importance in encouraging interest in space science, providing communication between astronomers and the public, and promoting scientific literacy. It would be interesting to know how many astronomers can trace the inspiration that sparked their career to a planetarium visit.

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## Dying for a drink

Evolution goes backwards in the latest Guinness advertisement.

**Martin Kemp**

Three young men in a bar are enjoying pints of Guinness, the dark Irish stout. Without warning, time reverses as they go on a dramatic journey back through evolutionary history. They are metamorphosed at dizzying pace into Edwardian gents who successively become Saxon, bronze-age cavemen, and, with a brief freeze in the Ice Age, apemen and apes. Then they become flying squirrels, terrestrial and aquatic mammals, fish, flightless birds, diminutive dinosaurs, and the mudskipper-like amphibians shown here — not exactly the correct ancestral line but it makes the point. During this helter skelter, Sammy Davis Jr intones the song *Rhythm of Life* from the musical *Sweet Charity*.

Finally, the mudskippers drink from their stagnant pool and one of them emits a disgusted burp. "Good things come to those who wait," we are told, as three pints of the dark stuff loom up, the central one labelled 'Guinness'. This latest arty offering from Guinness will saturate TV screens and cinema advertising, in Britain at least, for months to come.

Readers of Richard Dawkins will be reminded of *The Ancestor's Tale* (Weidenfeld Nicolson, 2004), in which the evolutionary story is told in reverse. The advert is of course linear, whereas Dawkins had complex trees to head each of his chapters, but the dust-jacket of the hardback edition parades just such a sequence.

Guinness advertising has for a long time been self-consciously promoted as an art form. The famous toucan with a pint perched precariously on its beak first appeared in



1935, designed by John Gilroy with copy written by Dorothy L. Sayers, noted scholar and author of detective tales: "Just think what Toucan do!" The punchline of the current ad, "Good things come to those who wait", is a knowing revival of an earlier slogan used in several campaigns. The company's website, [www.guinness.com](http://www.guinness.com), makes no bones about exploiting the reputation of its famous ads, which have included the relatively recent "Pure genius" series.

The present dash through 3 billion years in a minute, and through a reputed million pounds of Guinness's advertising budget, is the responsibility of the ad agency AMV BBDO. Framestore created the dynamic visuals, under the direction of Daniel Kleinman, whose credits include James Bond movie titles.

The seamless morphing of creatures and settings involves an astonishing variety of techniques, ranging from compounds of dough and breakfast cereals cooked up at home to the most sophisticated laboratory programmes for three-dimensional animations. Location filming included a trip

to Iceland. The levels of visual consistency and conviction are startlingly high, whatever the nature of the original source material. Space, colour, light and shade, texture and motion conspire to blend the real and the artificial inseparably. For instance, real mudskippers were filmed in the studio sipping their muddy water. They were subsequently endowed with back fins and reanimated in a way that is not apparent to anyone who is not closely acquainted with the creatures.

The tone is humorous and ironic, both visually and in the implication that our ancestors were glumly waiting over the long years for the advent of a good pint. But viewers with different frameworks of belief are reacting in very different ways. For those educated to accept darwinian evolution as a fact of life, the whole sequence is seen as a virtuoso and memorable jeu d'esprit, centring on a tongue-in-cheek message about the true goal of natural selection.

For those who not only reject the validity of evolution and object to it being taught as a proven theory, appreciation of the wit will be obscured by hostility. The narrative will be seen as bowing to the scientific conspiracy to take godless evolution as fact. It isn't difficult to see how it could be criticized by those who are fuelling the current climate of anti-darwinism.

For a product marketed internationally, anything that grates on local sensitivities must be a matter of concern. All this reminds us that our own biological assumptions may be someone else's *bêtes noires*.

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