

Of fossils and fusilli

Nature's insight into what makes scientists tick.

Summarize yourself in the form of a title of a paper in Nature.

Awkward palaeobiologist proved wrong on multiple counts continues to spin out ideas even others find interesting.

Who has been the most important mentor in your career?

Harry Whittington. By the greatest good fortune he was lured from Harvard, so the Burgess Shale campaign ended up in the other Cambridge.

What makes a good scientific mentor?

One who reminds you that patience and an eye like an eagle are no bad things; that the success of others is a matter for rejoicing; and who gives space on the same runway.

Whose graduate student would you most like to have been?

William Buckland, reader in geology at Oxford around 1830. One of the great Georgian eccentrics, he made a determined attempt to eat his way through the animal kingdom.

What scientific event changed your career path?

Looking at Charles Walcott's Burgess Shale papers in the geology department at the University of Bristol — a tip-off from my teacher Crosbie Matthews, another unsung hero.

What underrated discovery changed the science in which you work?

The recognition that, incredibly, organisms and parts thereof, which ought to disappear in less than a day, can fossilize. The windows may be narrow, but the views are superb. Second, that the archetypes and hypothetical common ancestors in the text-books bear about as much resemblance to reality as I do to a martian.

What's the one thing about science that you wish the public understood better?

That it is one of the two great human adventures, that it reveals the world as more extraordinary than we can believe (and yet know), and it opens to us more than ever the choices of doing the right (or wrong) thing. Science is part of our humanity.

Is there a 'tyranny of reductionism' in how scientists are trained today?

Given reductionism works most of the time, nobody is going to forfeit the benefits, until we remember we always end up in a cul-de-sac. How to jump over the wall? Read omnivorously, keep computers at bay, and remember that despite appearances the Universe is a rational place. Puzzles die in cul-de-sacs.

What book has been most influential in your scientific career?

Bob Clark's *Dynamics in Metazoan Evolution*; now rather out of date, but presented with a clarity that combined beautifully the ideas of function and evolution. Very close seconds are books by Steve Vogel, on biomechanics, and James Gordon, on structures. Both write with clarity, humour and verve.

What gives you the most job satisfaction now?

What are your major frustrations?

Watching the pieces fall together, yet knowing that in ten years' time most of it will be out of date and forgotten. Frustrations? Journal cuts, ever more stupid bureaucracy, creeping manager-think, and flat-earthers of all types.

What literary character would you employ as a postdoc?

Jim Dixon, hero of *Lucky Jim* by Kingsley Amis. Anarchic surveyor of the absurdities of the academic scene.

What's your favourite conference destination, and why?

Almost anywhere in Italy. Why? Good heavens, don't you know?

What music heads the playlist in your car or lab?

Missa Salve Intemerata by Thomas Tallis.

What was the worst/most memorable comment you ever received from a referee?

"Don't publish — your 'graptolite' is part of a huge arthropod."

What book is currently on your bedside table?

Bruno Bettelheims' *The Uses of Enchantment*; Mary Midgley's *Beast and Man*; Tom Wright's *Matthew for Everyone*; Marion Mill Preminger's *The Sands of Tamanrasset*; Adam Nicolson's *Sea Room*; and about 15 others. Exclusions? No science.

Where and when would you most liked to have lived or worked?

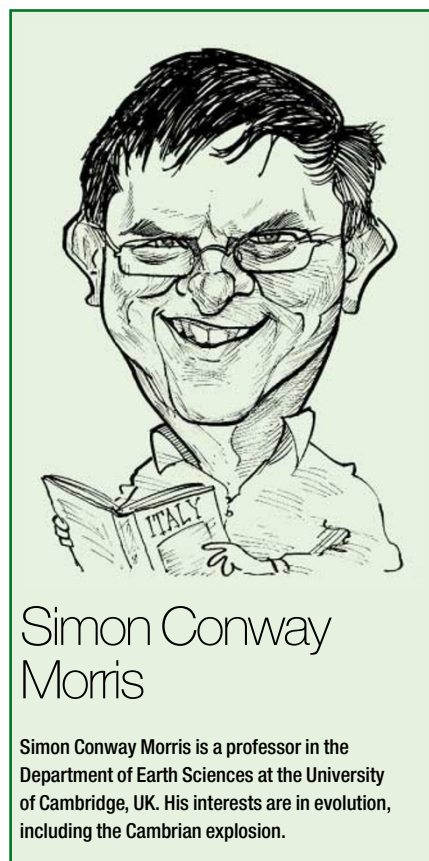
Venice, around 1570.

Assuming the dead can be raised and/or time travel exists, who from the world outside science would you most like to have dinner with?

G. K. Chesterton or — if he's busy chatting to Hilaire Belloc — Fra Paolo Sarpi, friend of Galileo and genius-priest of the Venetian Republic.

What's the best piece of advice you've ever received?

Greenland is quite safe, but orange helicopters definitely are not.



You are on a plane behind two students obviously going to the same conference, who start to talk about your work. What do you do? Ask for a double gin and tonic, and return to my book.

What would you have become, if not a scientist? Thirty years ago, a bookseller; today, probably a theologian.

Harry Potter or Lord of the Rings?

One exists, the other is just fantasy.

What single discovery, invention or innovation would most improve your life?

A device that made all cars travel at 4 mph.

Name one extravagance you can now get away with because of your eminence.

Taking time off to dream that one day I might own a painting by Paul Nash or Samuel Palmer.

What music would you have played at your funeral?

John Taverner's *Funeral Ikos*, followed by *Sortie in E flat* by Lefébure-Wély.

How would you like to be remembered?

As someone who slipped through the net of the world.

What's just around the corner?

Something very, very surprising that all of us knew was going to happen. ■