

Close Encounters with the Truth
Review of Carl Sagan's: The Demon-Haunted World

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by Richard Dawkins

As I close this eloquent and fascinating book, I recall the final chapter title from one of Carl Sagan's earlier works, *Cosmos*. 'Who Speaks for Earth?' is a rhetorical question that expects no particular answer, but I presume to give it one. My candidate for planetary ambassador, my own nominee to present our credentials in galactic chancelleries, can be none other than Carl Sagan himself. He is wise, humane, polymathic, gentle, witty, well-read, and incapable of composing a dull sentence. I confess to the habit, when reading books, of underlining occasional sentences that I particularly like. *The Demon-Haunted World* forced me to desist, simply to save on ink. But how can I not quote Sagan's answer to the question why he bothers to work at explaining science? "Not explaining science seems to me perverse. When you're in love, you want to tell the world. This book is a personal statement, reflecting my lifelong love affair with science."

Buoyant and uplifting though much of the book is, its subtitle is 'Science as a Candle in the Dark' and it ends in foreboding. Science – not the facts of science but the scientific method of critical thought – "may be all that stands between us and the enveloping darkness". The dark is the dark of mediaeval and modern witch-hunts, of the pathological dread of nonexistent demons and UFOs, of humanity's wanton gullibility in the face of fatcat mystics and the obscurantist gurus of postmodern metatwaddle. One of Sagan's most chilling quotes is a call to arms against science, from a book published in 1995, which concludes: "Science itself is irrational or mystical. It's just another faith or belief system or myth, with no more justification than any other. It doesn't matter whether beliefs are true or not, as long as they're meaningful to you."

Truth has its enemies as Sagan documents. But, perhaps because he doesn't live in Britain, he overlooks a separate problem faced by science in our culture: a philistine double standard. When the *Daily Telegraph* reported a survey finding that a high percentage of adults think the Sun goes round the Earth, the then Editor inserted, "Doesn't it? Ed." One immediately thinks of Bernard Levin's preening delight in his own ignorance, or of the patronising snigger with which television announcers render science stories as the concluding 'joke' item at the end of the news. If a survey found that 50% of adults believe Shakespeare wrote *The Iliad*, what Editor would find it funny to insert a parenthetic "Didn't he? Ed."? That's the double standard. Again, when the aggressive habits of Rottweilers were being excitedly promoted by the news media a while ago, the responsible government minister went on the radio to reveal the disturbing extent of the problem. Dogs, she explained patiently, don't have DNA. Ignorance on such a scale would not be countenanced in a Minister of the Crown, were the subject anything other than science.

Among the gifts science has to offer is, in Sagan's words, a baloney detection kit. His book is in part a manual for using the kit. Here is how to test the credentials of the superhuman extraterrestrials who annually swarm to Earth in UFOs and abduct humans for sexual experiments (to the victims' considerable profit when they sell their stories to the inexhaustibly gullible – or cynical – press).

"Occasionally, I get a letter from someone who is in 'contact' with extraterrestrials. I am invited to 'ask them anything'. And so over the years I've prepared a little list of questions. The extraterrestrials are very advanced, remember. So I ask things like, 'Please provide a short proof of Fermat's Last Theorem'. Or the Goldbach Conjecture. . . I never get an answer. On the other hand, if I ask something like 'Should we be good?' I almost always get an answer. Anything vague, especially involving conventional moral judgements, these aliens are extremely happy to respond to. But on anything specific, where there is a chance to find out if they actually know anything beyond what most humans know, there is only silence".

Scientists are sometimes suspected of arrogance. Sagan commends to us by contrast the humility

of the Roman Catholic Church which, as early as 1992, was ready to pardon Galileo and admit publicly that the Earth does revolve around the Sun. We must hope that this outspoken magnanimity will not cause offence or 'hurt' to "the supreme religious authority of Saudi Arabia, Sheik Abdel-Aziz Ibn Baaz" who, in 1993, "issued an edict, or fatwa, declaring that the world is flat. Anyone of the round persuasion does not believe in God and should be punished". Arrogance? Scientists are amateurs in arrogance.

Moreover, they have a modicum to be arrogant about: Scientists . . .

". . . can routinely predict a solar eclipse, to the minute, a millennium in advance. You can go to the witch doctor to lift the spell that causes your pernicious anaemia, or you can take Vitamin B12. If you want to save your child from polio, you can pray or you can inoculate. If you're interested in the sex of your unborn child, you can consult plumb-bob dangles all you want . . . but they'll be right, on average, only one time in two. If you want real accuracy . . . try amniocentesis and sonograms. Try science."

I wish I had written *The Demon-Haunted World*. Having failed to do so, the least I can do is press it upon my friends. Please read this book.

END

Richard Dawkins is the first holder of Oxford's newly endowed Charles Simonyi Chair in the Public Understanding of Science. His new book, *Climbing Mount Improbable*, will be published by Viking in April