

Tony Jones on a scheme that says we should check theories before we buy them

# It's beyond belief

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**O**UT OF Russia something new. According to Tass, a troupe of 12-foot aliens, complete with ray gun and robot, strutted around in front of a popeyed populace before returning to their spaceship and flying away. Tass stands by the story. Should we believe it? And how do we decide?

You could ask at your local Astronomy Department but you would probably be disappointed. Life is short. Scientists do not lounge in their offices like Sherlock Holmes waiting for clients to bring them mysteries to solve. They have better things to do. Any active researcher has a long waiting list of projects that he would do if time and funding permitted. Astronomers have little interest in astrology and UFOs, not because they have closed minds but because they have more productive and rewarding ways to spend their time.

But if people cannot turn to scientists for guidance in matters which appear to be scientific, who can they turn to?

That's the question which John Mosley brooded over before he decided to do something about it. Mosley is Program Supervisor at the Griffith Observatory, an outpost of the Department of Recreation and Parks of the City of Los Angeles. Unlike most astronomical observatories, Griffith is dedicated not to research but to public education, and Mosley is used to handling public inquiries on everything from the Big Bang to earthquakes.

Earlier this year Mosley introduced a spectacular planetarium show to counter the waves of credulity and superstition which regularly sweep across California. "Visitors hear about a number of claims that sound scientific," says Mosley, "such as that the planets influence your lives, or Nostradamus was able to predict natural disasters, or that flying saucers visit from other planets. They learn about these things in a context that tries to help them sort sense from nonsense."

Despite some gentle mocking of the more ludicrous stories, there is no lofty condescension, or *ex cathedra* dismissals of honest beliefs. Mosley does not call down the wrath of science, but shows people how to think

critically about what they read, see and hear.

He thinks scientists can put themselves into defensive and potentially authoritarian positions by being too ready to see irrational beliefs as threats to their own disciplines. Some years ago a noted populariser of astronomy was one of the protagonists in a BBC radio debate on astrology. His thesis seemed to be that anyone who believed in astrology was in need of psychiatric attention. He got some laughs but the astrologers won the debate.

"You don't have to be mad to believe in astrology," says Mosley, "What you have to do is not really question it."

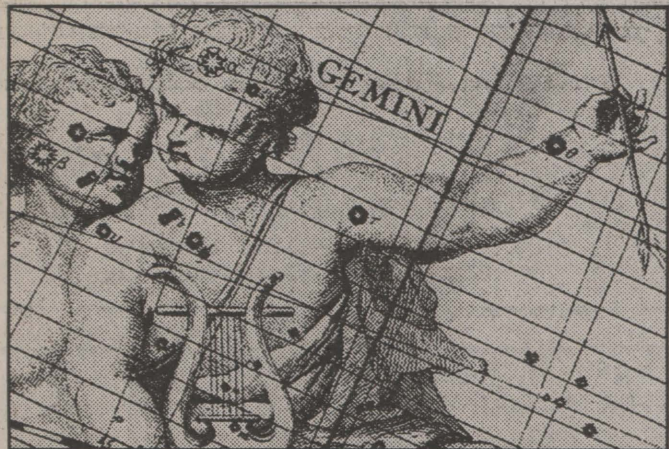
He believes scientists should be more patient with a poorly educated public. The real villains are the publishers, filmmakers and (in the US) TV producers who exploit public credulity to make easy profits. "People have not learned how to think. They are told what to think and how to do their jobs, but our school system doesn't foster a real questioning of belief."

It is rare for a scientific institution to face up so candidly and effectively to the problem of pseudoscience, and in Britain even more so. True, the situation is not as bad here as it is in the US — we do not yet have Biblical myths taught in schools as "creation science", nor our Prime Minister consulting astrologers to plan her diary — but both countries can sustain newspapers largely devoted to peddling nonsense.

Mosley's approach is the essence of science. He simply asks people to think for themselves, to question, and above all to demand evidence.

"Evidence is one of the most important tools we have in deciding what to believe — not just the quantity of evidence, but the quality. If we checked out these stories we'd find a severe lack of good evidence. I'd be interested, for example, in seeing the proof that there is a second world war bomber on the moon."

"When you buy a used car you don't accept everything the salesman tells you. You evaluate it and try to decide if it makes sense. So you check the doors, you kick the tyres. Isn't it foolish to buy a belief without checking it out too?"



Heavens above: You don't have to be mad to believe in astrology