Dr Fox

By Michael Leapman



Item 8

The most gratifying academic research is that which helps to confirm something we already suspected to be true. That is why Dr Scott Armstrong, Associate Professor of Management at the Wharton School of the University of Pennsylvania, has enjoyed so pleasing a response to his latest paper, at least from laymen.

He was testing something called the Dr Fox Phenomenon. Dr Fox was an actor who, for the purposes of some research done in California in the early 1970s delivered, on three occasions, a talk which

made no sense.

It was convincingly called 'Mathematical game theory as applied to physician education' and the audience were social workers, psychologists, psychiatrists, teachers and administrators. Questioned afterwards, they all said it was a comprehensible and stimulating lecture. Nobody realized it was a trick.

This, coupled with his own observation of how academics react, encouraged Dr Armstrong to formulate and test his own hypothesis: that work which is unintelligible will not necessarily be recognized as such by scholars, and that in some cases the less intelligible a piece of prose the greater the respect it will earn from its readers or victims.

'If the Dr Fox hypothesis is valid', he wrote, 'researchers who want to impress their colleagues should write less intelligible papers. Journals seeking respectability should publish less intelligible papers. Academic meetings should feature speakers who make little sense.

This strategy would be beneficial for advancement by an individual researcher or by a journal. Its major drawback is that it does not promote the advancement of

knowledge'.

Dr Armstrong's method of testing was to choose 10 journals in his field of expertise, which is management. He asked 20 academics to rate them in terms of prestige. Then he applied to them the Flesch reading ease test, which measures the comprehensibility of a piece of prose by the length of its sentences and the number of syllables for every 100 words.

He found, as he had expected, that the higher a journal's prestige, the less easy it was to understand. Thus the *Administrative Science Quarterly*, which was rated highest in prestige, had a reading ease score of only 20·2. Yet *Supervisory Management*, the least regarded journal, had a reading ease score of 54.3 – more than twice as easy to understand.

Next he had to find a way of answering

the argument that, since the higher prestige journals presumably discuss more complex issues than the low prestige ones, it is inevitable that their language should be more convoluted.

He took four passages from academic journals and rewrote them in two ways – one more long-winded than the original and one in simpler English. He asked academics to rate the competence of the research described.

Bear in mind that the meaning of the three passages – the original, the simpler and the more difficult – was identical. Yet in each case the readers rated the original passage as more competent than the one written in simpler English.

One of the passages, for instance, began: 'This paper concludes that to increase the probability of keeping a customer in a queue, the server should attempt to influence the customer's initial subjective estimate of the mean service time to give him the impression that it is small'.

In the simpler version, this read: 'You are more likely to ensure that a customer waits in a queue if you can get the person to think that he will not have long to wait'. Faculty members gave the tougher passage a competency rating of 4.6 the easier one only 2.9.

Why, then, this premium on obfuscatory English? 'The academic reward system is against clear writing', said Dr Armstrong, when I went to see him in Philadelphia. 'You find this pressure to publish things, to get it out fast. It took me 10 years to write a book. I'd keep rewriting things. I went through five versions. But people said: "That isn't very smart. The thing is to get it out". And I'd show people the fourth and fifth version after I'd rewritten it to make it clearer, and they'd say: "Gee, the first version was more impressive".'

Dr Armstrong's book was about longrange forecasting. He was rewarded for his careful honing of the text by some firstrate reviews, and the book is into its sixth printing, but he is still a bit disappointed by its sales.

'It soon becomes obvious that the purpose of writing papers is not to communicate but to impress. The ability to write in an incomprehensible way is useful for people who have nothing to say. And in the time you spend making it easier to read, you could be writing another incomprehensible paper.'

Predictably, his work is less popular with others in his field – some of whom are doubtless guilty of the very sins of obfuscation of which he writes. 'People told me, for my career, that this wasn't a

very smart article to write', he said. 'It was likely to offend people.'

Not that he is unused to that, for he had earlier been engaged in another controversy inspired by his healthily sceptical attitude towards academia.

Last year he wrote a paper attacking the conventional 'advocacy' method of scientific research. This is the practice whereby a scientist formulates a theory and devotes his subsequent research to substantiating that theory and to attacking rival theories.

Dr Armstrong believes that this method, like ill-written papers, actually hinders objective research. He thinks scientists should keep open minds and test numerous alternative hypotheses as the best way of arriving ultimately at the truth.

To support his point, he used the advocacy method satirically to prove that one of its chief proponents, Dr Ian Mitroff, did not exist. 'Little evidence on his existence is available. The evidence that does purport to demonstrate his existence is hopelessly flawed by a lack of suitable controls.

Reported sightings have been made by biased observers who failed to provide full disclosure of their methods and of the conditions under which their observations were made. These findings were not replicated by others in any systematic way.'

This kind of thing is wonderfully familiar to students of scientific controversy and provides splendid ammunition for established cynics, like myself, who have for years cherished every scrap of evidence to support our hypothesis that many of the most vaunted scientific theories are bunk.

On the other hand, from Dr Armstrong's point of view, it may be that his friends were right in warning him that he is not smart to express anti-Establishment views with such fervour. Though he, an amiable man, would be the last to complain, it could explain why, after 12 years at the Wharton School, he still has to put the word 'associate' before the word 'professor'.

To succeed in winning friends and influence, he will have to learn a thing or two. He must write less clearly and more often. He must formulate a fixed opinion and stick to it, come what may. He must keep his eyes, his ears and his mind firmly closed.

This article is reprinted with permission, from *The Times* of Monday, 9 June 1980.

© Times Newspapers Ltd.