MICHAEL FRAYN

The novelist and playwright on making fiction of science.

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There is a celebrated scene from *Oklahoma!* in which the mutually antagonistic farmers and cowboys set aside their differences and come together for a hoe-down. Something of the same spirit will be found in London this week when the bookmen of the Royal Society of Literature and the scientists of the Royal Society gather for the first of a new programme of joint meetings. The occasion is symptomatic of the recent *rapprochement* between the two disciplines – though whether, like Rodgers & Hammerstein's characters, the participants end up breaking chairs over each other's heads, remains to be seen.

The subject for debate, appropriately, is science and literature. On stage, Simon Singh, author of the highly successful *Fermat's Last Theorem*, will be interviewing Michael Frayn, whose play about the race for the atomic bomb, *Copenhagen*, has just completed a three-year run in London. Frayn is useful spokesman for the literati, not only because he has managed to turn the baffling subject of nuclear fission into compelling drama, but also because as a philosophy graduate he is able to meet theoretical scientists on common ground.

'I can't see why more writers aren't interested in science,' he says, 'because it's such a suggestive area. But it's true that it has become extremely specialised, and it's hard for anyone who hasn't devoted a lifetime to the study of one particular science to know very much about it.'

Primo Levi – a chemist as well as a writer – lamented what he called 'an unnatural schism, unnecessary, harmful' between literature and

science. Frayn believes that the late nineteenth century, when a strong command of mathematics became essential to understanding scientific advances, was the point at which the boffins began to show the rest of us a clean pair of heels.

'An intelligent layman could follow Newtonian physics reasonably clearly, and you could certainly follow classical astronomy and cosmology. But by the time you get to quantum theory, I think we were losing it. Quantum mechanics is just out of everyone's depth – even scientists'. I think Richard Feynman, who was *the* most dazzling physicist, said that anyone who thinks he understands quantum mechanics, doesn't understand quantum mechanics.'

A cosmologist seeking a model for an orderly universe could do worse than study Frayn's immaculate office close to Regent's Park. In the hallway is a perfectly aligned collage of posters for his plays – most conspicuously *Noises Off* (which has just returned to the West End) and *Wild Honey*; at one end of the main room, statuettes for the many awards he has won are marshalled in petrified rows, like a Pompeiian audience forever awaiting the next gag; among the bookshelves, the *Encyclopaedia Britannica* seems to smirk in the knowledge that it could not have found a snugger home. Frayn's desk commands a picture window with a pastoral view of rambling back gardens; a copy of *Science and the Swastika* lies close at hand, and a Russian typescript sits on the table where he methodically pours the Platonic ideal of a cup of tea.

Talking on the telephone, his highly efficient manner is rather intimidating, but in person he is charming and quietly spoken. A lanky figure in a grey sweater and green corduroys, he settles into a black leather armchair, and spreads his mesmersingly long and pale fingers. At 67, his face is cross-hatched with wrinkles, and wispy white hair drifts back from his domed forehead. One can imagine him as an old-fashioned

headmaster, striding the school corridors with his gown a-billow, and occasionally rapping his desk with the board-rubber to bring his pupils to attention, before resuming his benign tutelage.

Frayn believes that one reason for scientists disappearing off our radar is that – with a few notable exceptions, such as Richard Dawkins – they fail to communicate the full excitement of what they are doing ('I think that it has become fashionable to write up your results in as dull a way as possible'). Fortunately a number of talented journalists have recently emerged, such as Simon Singh and Dava Sobel, who are able to capture that excitement and explain it in an accessible way – something which Stephen Hawking's *A Brief History of Time*, for all its phenomenal sales, failed to do. 'It is the most remarkable book,' says Frayn, 'with a very good strategy. It starts off very easy and you think, "I can't think why anyone's had problems with this;" but as you get into the later stages, you realise it's extremely difficult to follow – and, I suspect, unfollowable.'

He was, he says, stunned by the public's enthusiasm for his own *Copenhagen*: 'When I wrote it, I didn't expect anyone would perform it, let alone come and see it.' He adds, however, that theatre has one great advantage: 'The audience can be involved in a way that's not possible in cinema and television – and I think sometimes they do like to be asked to think very hard about what's happening on stage.'

Frayn had an unexpected change to gauge the scientific community's reaction when the National Theatre took the play to Oxford. 'It turned out that there was an international conference in particle physics going on there, and they took a block booking, and I had to agree to go and meet them afterwards. I've never been so frightened in my life. But in fact they were very generous about it. I think people are often so pleased to see their little world presented for the public at large that they're remarkably forgiving.'

The closest link between writers and scientists, Frayn argues, is that they are both in their different ways attempting to describe the world. (He points to Oliver Sachs's fascinating accounts of his patients in *Awakenings* as a prime example.) And although scientists are generally associated with bare facts, he is increasingly struck by the degree of imagination that they bring to their work: 'They are absolutely marinated in the phenomena they've observed, and out of that comes some huge leap – they suddenly see a completely new framework which explains everything.'

Although Frayn started out as a journalist, research is not something he himself enjoys – in contrast to his wife, the biographer Claire Tomalin, 'who loves the research and hates the writing. I feel terribly guilty that I'm *not* writing.' This proved something of a hindrance when he started writing a column for the *Guardian* in the late Fifties. 'It was supposed to be a reported column, but it was three times a week, and I couldn't get round to interviewing enough people and finding out about enough things; so I began to make bits up and have fictitious characters come in – and gradually the fictitious characters took over.'

What does he think of science fiction? Not much, when it is of the little green men variety; but he considers *Brave New World* to be 'very brilliant', and has himself written a futuristic novel, *A Very Private Life*. Both these, he insists, have validity because they offer a critique of existing society, rather than being simply 'romances set in space'.

From Mary Shelley's *Frankenstein* onwards, scientists have tended to fare badly in novels: they are more likely to be found unleashing forces beyond their control than saving humanity. But experience shows that we are right to be suspicious – as Frayn says, 'It's always difficult, with any new system, new thought, new theory to know what the consequences are going to be. It's one of the great ironies of nuclear physics that when it

began, it was a subject like theology or Egyptology, with no practical application. It's almost impossible to imagine your way back to that world: it's like the parable of the Garden of Eden.'

He is tired of being asked whether he is going to write another play like *Copenhagen*. ('It's not like that. Ideas come, and you think you can see how to make them work, and you pursue them, and they may turn out to be scientific or not.') He has just completed another novel – the successor to his best-selling *Headlong* – which he expects to be published next spring, but he refuses to divulge the subject matter: 'Sooner or later I'm going to have to start writing the jacket copy and I'll have to decide what it's about; but it's not about physics or the history of art – it's a very simple story.'

This must have been a relief, for he admits that there were moments during the writing of *Copenhagen* when he felt he had bitten off more than he could chew. 'Many, many times I sat in total despair trying to think how on earth to get this mass of material into workable shape. I also fell into despair with *Noises Off* – I couldn't see how I was ever going to make that work. I'm always trying to find an easier way of making a living: as soon as I've found it, I shall transfer to it.'