

# Retiring?

**J**EFFREY Gray retires soon — he would be interesting to interview!’ said our Editor. So off I went to the Institute of Psychiatry at Denmark Hill, London, and found I had been slightly misled. Interesting — yes indeed. Retiring — not really.

‘My first day of not being Head of Department is 1st October,’ Professor Gray told me. I enquired as to his plans thereafter. ‘Basically there’ll be three components, I hope,’ he replied. ‘The research we’ve done on neuro-transplantation [moving nerve tissue from one animal to another] has led to a spin-off company which aims to take our particular methods to the clinic. That’s based here at the moment, though in the fullness of time it will have to go elsewhere. So I’ll probably spend about a day a week here on that.

‘The meeting I’ve just come from is concerned with a computerised version of delivering cognitive behaviour therapy. That’s reached the point at which we hope to roll it out to use in the NHS, in GP surgeries in particular. I’ll probably be playing a continuing role in that, maybe for a couple of days a week. That’s partly based here, but more with our software collaborators over in Smithfield.

‘I’ll carry on doing some academic research, mainly using functional magnetic resonance. That’s based here on the

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Institute scanner. I’ve got several research grants which continue, so I’m hoping to have a base here, though that’s not yet fully sorted out — the Dean is very chary about giving space to retiring professors.’ Is this what is meant by ‘retiring’?

‘Sixty-five is the age here, and I’ve had my birthday so that’s it. It seems absurd — I don’t feel any need to retire in the sense

JOHN SHEPPARD interviewed Jeffrey Gray of the Institute of Psychiatry just before his retirement’.

that I’m slowing down or that my thinking is losing its edge. I don’t intend to retire in the sense of cultivating my garden, or not if I can help it,’ he admitted. ‘I’m hoping I’ll have a desk and my main office here and carry on much as at present.’

Here is a man who is clearly wedded to his active role in psychology. It was not always so. ‘I certainly did not start out planning to do psychology,’ he laughs. He gave up science at age 14 in favour of history, Latin and Greek and was accepted at Oxford to read law. National service intervened. Here he learned Russian, and decided to read French and Spanish at Oxford. He got his first and was offered a junior fellowship.

‘Modern languages was great fun but I realised that academically it was going to get me nowhere. I finished modern languages and was really completely lost, but at the end of that summer I decided I wanted to do psychology. My college were kind enough to take me back.

‘I had no idea what I was letting myself in for. I’d read some Freud and thought it would be kind of fun and amusing. Subsequently, as a tutor, I frequently heard such reasons from eager young things — I immediately excluded them from consideration for admission!’

Vague ideas of medicine and physiology had to be deferred because of his lack of a science background. But having gained his degree in psychology and philosophy, he moved to the Institute of Psychiatry to take the one-year diploma in abnormal psychology.

‘That was a very great disappointment, because it was in those days largely assessment — test-bashing. We learned about every test under the sun and how to administer it. The only exciting bit was that behaviour therapy was just getting off the ground and this was a very exciting department that way.’

Clearly not inspired by the test-bashing,

and feeling that behaviour therapy at that time was just not rigorous enough for him, he wondered what to do next. He thought he might go for a PhD.

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His proposal for a PhD was to look at the approach-avoidance gradient in human beings, using hypnosis to set up real conflicts. He now sees this as having been quite impractical, ‘little short of mad’, and admires the polite way in which Hans Eysenck handled their two-hour interview.

In the end, what actually happened was that he was offered a place in the animal lab attached to Bethlem Hospital. ‘In the first few weeks, I used to carry a handkerchief soaked in eau de cologne in order to hide the smell of the rats.

‘Six weeks in, I suddenly realised that this was for me. Work with rats was challenging, rigorous, hard. By trial and error I had found what I enjoyed doing. Since then, with very rare moments of wondering why am I doing this, I have just loved it.

‘While I was a clinical student, Hans Eysenck came in one day and thrust a couple of Russian books at me. “I hear you can read Russian — can you tell me what these are all about?” Tjeplov had been following up Pavlovian ideas on personality theory. I found the books extremely interesting.

‘I wrote a synopsis for Hans who put me in touch with Robert Maxwell at Pergamon, who asked to see me at his flat in Bloomsbury. “Hans Eysenck tells me you can write a book — fine.” Out of that came my first book and I bound it into my PhD thesis, a study of the way in which the

intensity of a conditioned stimulus affects behaviour.'

The PhD was completed in 1964. There followed a hiatus of some months as he accompanied his Persian wife to her homeland, but found no work. While there, he was advised that there would be a post lecturing in Oxford. They returned, and he remained at Oxford for 19 years.

'Was the lecturing to be in your field of animal behaviour?' I asked, naively. 'Oxford didn't have you in a field, they just took you in because you were a good chap and whatever you did you would do it well. Brilliant — that's the way universities should run themselves. Nobody asked what would I lecture in.

'I had to do 36 hours a year of teaching, and it was up to me what I taught. Psychology was then very much within the arts tradition. The tutorial was the real meat and lectures an optional extra. So I lectured on the material from my book. There were about 10 students at my first lecture and, as I recall, one at the eighth. But that was all right, no one cared.'

He wanted to stay in learning theory, and had become interested in genetics and emotionality. Research into the partial reinforcement extinction effect led to his looking into anti-anxiety drugs and hormones. In 1968, he took a year's travelling fellowship at Rockefeller, New York — 'for a retreat' — learning how to do research on the brain. For the remaining 15 years at Oxford his focus was on the hippocampal system. He had become a physiological psychologist.

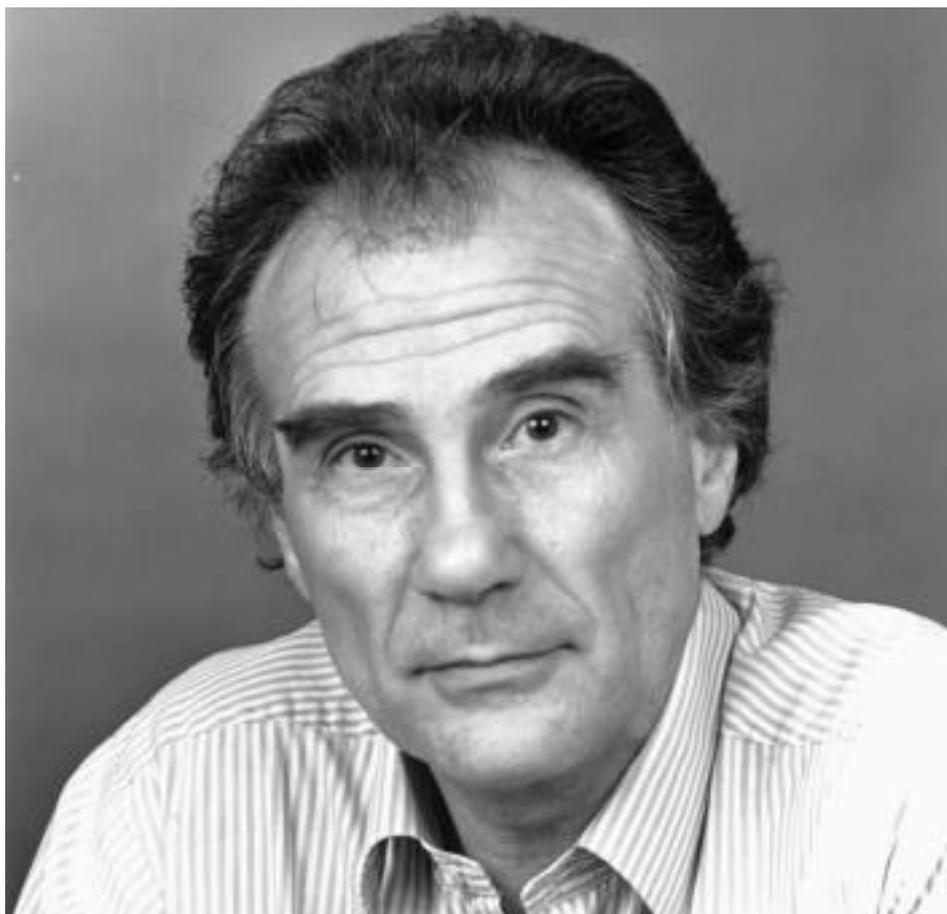
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In 1983, Jeffrey Gray succeeded Hans Eysenck as Head of Department at the Institute of Psychiatry. 'It was something I'd always wanted to do. I'd always been interested in psychiatry. I did feel frustrated during my years at Oxford that we had no real contact with psychopathology. I wanted to get to work on clinical populations, though it turned out that the neuroscience developments I was able to make here, the scope for multidisciplinary collaboration, were the more important.

'There were no teaching duties whatsoever here. It's entirely a graduate



student department, so the admin load is very low. There's a massive clinical service which runs itself. This job is beautiful: you make it up as you go along.

'I made it a condition on coming here that they gave me an animal lab. I spent a year taking stock and made contacts. I had written quite a big book on the neuropsychology of anxiety. I decided that what I really wanted to do now was to go into neurotransplantation.

'The main target up to then had been models of Parkinson's disease. We moved from motor function into cognitive function. That line of research, the most important thing I've done (together with Institute colleagues John Sinden and Helen Hodges and a very big research team), has ended up with our ability, in animals so far, to do the following.

'We develop lines of as yet undifferentiated cells taken initially from a foetal brain. We can expand them as much as we like, we can freeze and keep them, we can thaw them, and we can put them into a damaged adult brain.

'They migrate selectively to a region which is damaged. They differentiate into all the cell types that the brain has, and at the site of damage they reconstitute

at the right position, in the right shape. They restore cognitive function to normal levels.

'We've now done that, putting cells derived from mouse brains into rat and marmoset brains. We've done it in a range of models of human diseases — dementia, hippocampal damage, demyelination diseases. We managed to bring in five million pounds worth of venture capital funding and our company on the sixth floor employs about 20 people.

'So far, we have used cells derived from mouse brains. We are now deriving lines, on the same principle, using cells taken from human foetal tissues. We anticipate that we will only need about a dozen cell lines which can then be maintained indefinitely.

'We hope to go to clinical trials in 2001. So this is the thing that I have done in my life that I can look back on and say we did something which in the end was able to help people.'

My summary of our conversation is inevitably brief and partial. The interview was, for me, exciting but it had to stop when the man from the BBC had already been waiting outside for half an hour. Happy 'retirement', Professor Gray!