

Broadcasting brain stories

Peter Dillon-Hooper (Manager of the Society's History of Psychology Centre) talks to **Geoff Bunn** about writing and presenting a history of the brain on Radio 4

This month BBC Radio 4 is broadcasting a 10-part series entitled *A History of the Brain*, written and presented by Dr Geoff Bunn (Manchester Metropolitan University). Geoff chairs the BPS History and Philosophy of Psychology Section and was the BPS Centenary Fellow at the Science Museum from 1999 to 2001.

Where did the idea for the series come from?

There had been a proposal from Marya Burgess, the producer of *Mind Changers*, to fill the regular narrative histories slot on Radio 4 with a series on the history of the mind. Although the original proposal was not commissioned as it stood, it eventually morphed into a history of the brain.

And how did you get involved?

Marya contacted me early last year to help with the original history of the mind proposal, which I did. I had been writing a master's level course called 'Conceptual and Historical Issues in Neuropsychology' so I was able to jot down a few ideas when the *History of the Brain* idea came up. We took the result to Radio 4's commissioning editors and after I had taken a voice test in the studio, I got started on the writing.

What sort of audience are you, and

Radio 4, hoping to reach? Is it aimed at the kinds of listeners who became captivated by the *History of the World in 100 Objects* series?

Yes, that great series was an inspiration to us. In our case we had only a single object to examine, but it's an incredible one, of course. The nature and functions of the brain has fascinated people across the



Geoff Bunn (Manchester Metropolitan University) presents a Radio 4 history of the brain in November

world since prehistoric times. It's a very rich history that many people will find intriguing, not just those interested in science and medicine.

How much freedom did you have to write the series? Was the content entirely up to you or was it constrained by production guidelines?

I was given pretty much complete freedom to plan and write the series, which was wonderful. The challenge was that there are just so many ways to cut the

brain up, so to speak. The constant oscillation between the localisation of function in different brain regions versus anti-localisation could have been one way of doing it. Telling the story of how different structures or diseases were identified could have been another. Recounting tales about extraordinary patients would have been interesting too – although Oliver Sacks is an extremely difficult act to follow. In the end a chronological account allowed us to touch on all these features whilst maintaining a robust narrative across the series. The original plan was to record some interviews on location. But as the writing progressed we found that the stories were so compelling that we didn't need them.

Was it difficult to decide what to include and what to leave out?

I was lucky to have had the assistance of two graduate students, Holly Taberner and Gail Davidge, who provided excellent help with the basic research. They regularly sent me amazing material, such as 'A seventeenth-century case of synaesthesia' or news items such as 'Renaissance artists concealed pictures of the brain in their paintings'. The brain has been many different things to many different people, so it wasn't difficult to select some of the best stories from its 5000-year history. Neurology is such a fascinating subject for historians of the human sciences, full of intriguing personalities and controversies. The down side was that we had to leave out a few important figures such

as Ferrier, Charcot and Sperry. Other key personalities such as John Hughlings Jackson and C.S. Sherrington regrettably only received little more than a mention. On the other hand we rescued a few names from obscurity. John Walsh for example put the final nail in the coffin of the 'animal spirit' theory of nerve transmission when he coaxed a spark out of an electric eel in 1776.

What help and guidance did the BBC give you?

Danziger, K. (1997). *Naming the mind: How psychology found its language*. London: Sage.
Randall, W.L. (2007). From computer to compost: Rethinking our metaphors for memory. *Theory & Psychology*, 17(5), 611–633.

Marya, my producer, was extremely patient. She knew exactly when I needed a nudge and when to encourage me to explore a potentially obscure digression. The way she made me think about the spoken word in musical terms, in terms of pitch, rhythm and expression, was quite a revelation.

Can you tell us about making the recordings?

We recorded them in a three-day marathon at Broadcasting House. The first few episodes each took a couple of hours to complete. Getting the appropriate pace and the right vocal inflection was tricky.

But Marya was a great tutor. It felt a bit like acting. In the absence of an interlocutor, one's normal way of speaking comes across as a little flat when

recorded, whereas what might sound a little 'over the top' evidently sounds quite natural to the audience. It's the same kind of odd discrepancy you get between giving a lecture and listening to one.

How did you find writing to length for a 15-minute slot?

Writing to a specified word length is a basic academic skill of course. And ruthless editing is valuable in many walks of life. Museum curating is excellent training for radio writing, I've discovered, because you have to write descriptive object labels using only 25 words. But in radio there's a tension between telling an intricate story on the one hand and sustaining the listener's interest on the other.

Did you think about it like a series of short lectures for your students, or did you use a completely different approach?

It was more like writing 10 essays in 10 weeks! I was surprised that what I thought looked good on the page sometimes didn't work so well when spoken out loud. I learned that writing for radio is great training for lecturers. The key thing in both cases is trying to evoke compelling images in your listeners' imaginations.

Can you give a taster of what's to come in the programmes?

The first programme covers the ancient Egyptians, who discarded the brain during mummification. Even though they had a rudimentary knowledge of brain function, they considered the heart the more important organ, vital to a person's

passage into the afterlife. Today we believe in the brain almost to the exclusion of anything else. As a counterpoint to the Egyptians, the final programme tells the revealing story of Einstein's brain, both before and since his death. It's an object that still has a powerfully mythical status. The story tells us a lot about how we conceptualise the relationships between the brain, the mind and the body today.

In Programme 7 we recount the story of the rivalry between Camillo Golgi and Santiago Ramon y Cajal, who shared the 1906 Nobel Prize for their contributions

to neurology. Golgi's work made Cajal's possible.

Both men made incredibly beautiful drawings of nerve cells under the microscope.

But they fundamentally disagreed on how neurons were connected to each other.

Golgi never accepted Cajal's theory of the synapse, the fundamental building block of the neurosciences.

Why would the series be of interest to psychologists?

It's fascinating the way the brain has always been conceptualised alongside speculations concerning the soul, the mind or the self. But whereas a knowledge of the brain always runs in parallel to the state of biological knowledge at any time, the mind can only ever be thought about in terms appropriate to that particular culture. The eighteenth century understood the brain in very egalitarian terms, but the nineteenth century read into it an opposition between the 'primitive' and the 'civilised'. Today, we consider the computer metaphor of the brain quite plausible because of the way computers have permeated our lives. But as the Canadian gerontologist William Randall argues, in some circumstances it might be more appropriate to view the brain as more like a compost heap than as an information processor.

Do you think psychologists pay enough attention to the history of the discipline?

Well we should, given that everything we study has been made possible by history! Our objects are much more historical and less stable than the kinds of things studied by the physical sciences. Even fundamental terms such as emotion, intelligence, personality and mind – and indeed psychology itself – have a history.

'How Psychology Found Its Language' – to use the subtitle of one of Kurt Danziger's books – would make a brilliant series. Danziger argues that psychological categories are not discoveries as such; they start out as ordinary language terms that only later acquire a psychological meaning. No one has ever discovered a new emotion, for example, although that's not to say that subjectivity isn't always changing.

Do you think there is scope for more psychology history on the radio?

Of course! Psychology is an extremely productive science with relevance to all areas of human endeavour. Psychology and its history have a secure presence on the radio, thanks to popular programmes like *Mind Changers* and *All in the Mind*. But there's plenty of scope for more. The history of psychology is full of charismatic scientists and their stories.

I gather you're also involved with another BBC project – 'The Science Explorer'. Can you tell me something about that?

This is an innovative website project that demonstrates not only the BBC's commitment to science, but also the way it constantly seeks new ways of making its archives available to its audience. It's exciting because it means I can provide a little more background to the listeners of *A History of the Brain*.

BBC Radio 4's 'Brain Season'

Dr Geoff Bunn's 10-part series *A History of the Brain* will be broadcast on weekdays at 1.45pm on BBC Radio 4 starting on Monday 7 November, with an omnibus edition on Fridays at 9pm.

The series is one of several programmes in Radio 4's 'Brain Season' this month. Look out for:

I *The Lobotomists* (Monday 7 November, 8pm). Hugh Levinson tells the story of the lobotomy craze in the 1940s and 50s.

I *Mind Myths* (Tuesday 8 November, 9pm). Claudia Hammond explodes common myths about the brain and its workings.

I *Neuroscience and Society* (Tuesdays, 15, 22, 29 November, 4pm). Matthew Taylor asks whether the remarkable findings of modern neuroscience might influence how we teach, punish and govern people.