

Portland Place

If a sceptical visitor to these isles asks whether there are any public institutions about which their natives still feel proud, most Britons would include two specific things in their answer: the NHS and the BBC. At times, the NHS may be in the list more for its principles than for the actual experience of a casualty department on a Saturday night, but the BBC usually delivers on its promise, and nowhere more so than on BBC Radio 3, Radio 4 and The World Service. Yes, the BBC runs some television channels too I have always felt television to be a rather immature, gaudy, attention-seeking medium compared to its thoughtful older sibling. A large fraction of the very little I know about the world, I have learned from the voices that emanate softly from the walnut cabinet of the 1942 RCA wireless set in my living room, or from a car radio turned up loud to compete with the rattles of a forty year-old Land Rover. Some of these voices have become a familiar backdrop to much of daily life: the robust style of John Humphrys grilling a politician for breakfast, the lucid clarity of Bridget Kendall summarizing tangled diplomatic tensions; the mordant wit of Sandi Toksvig, the patient explanatory of style of Donald Macleod explaining the genius of a composer, the ‘calm down in that traffic jam’ balm of Petroc Trelawny, and the gentle academic analysis of Laurie Taylor all help set the listeners’ mood . Fellow addicts, please feel free to insert a Charlotte Green joke at this point.

Except for the occasional short interview about the lab’s science in morning news programmes, my experience of broadcast radio has been the conventional one of being the listener not the speaker. Recently, though, I was invited by the producer of one of my favourite programmes, *The Forum*, to be a guest on the show. Daunting though the prospect was, I typed ‘yes’ and hit ‘send’ on the e-mail before I had time to chicken out.

The Forum consists of stand-alone episodes, each of which explores a particular topic through a guided panel discussion between invited guests. Most episodes are chaired by Bridget Kendall, currently the BBC’s Diplomatic Correspondent and famous for an amazing early career as the corporation’s Moscow-watcher. The episode to which I was invited to contribute was on the topic of self-assembly, and the other participants were to be Sharon Glotzer, a chemist working at the nano-scale, and Roderich Gross, a roboticist working with swarm robots. The idea was that



Broadcasting House
(Wikimedia Commons)

Sharon would describe self-organization of molecules and complexes, I could describe it at the level of cells, adding in the feedback systems that take cells from mere self-assembly to adaptive self-organization, and Roderich would describe how he has constructed simple robots that can cooperate automatically in tasks such as finding and moving an unconscious casualty, or crossing a chasm larger than themselves.

Making the broadcast involved travelling to Broadcasting House in Portland Place, London, where I was to speak in the studio, with Sharon and Roderich in two different studios in the USA, linked to London by an ocean cable (which avoids the delays inherent in satellite communication). George Val Myer's magnificent art deco building is unmistakable, and no visitor could walk through its entrance without gaining a strong sense of the BBC's history and place in the nation. This is both scary and reassuring: there is something matertertine about the place and, indeed, many Brits refer to the Corporation as 'Aunty Beeb' or just 'Aunty'.

A helpful commissioner showed me to the studio, a dark room lined with sound-absorbing tiles and with an octagonal table, each thickly-upholstered chair facing a microphone. The producer greeted me, made sure I was comfortable, and retreated to his triple-glazed production box directly behind the seat he had given me (I suspect so that I would not be distracted by whatever he was doing). A few busy looking people came and went without paying any attention to me, and then came a woman who smiled at me at once. As I was rising to stand on her entrance to the room, she spoke with a voice that was unmistakably that of Bridget Kendall. Trying not to be too star-struck, I chatted with her in what was a moment well-crafted by her to put me at my ease and, in a very short time, the programme began. Being in the studio with Bridget (as she asked us to call her), rather than on a remote link, was really helpful because she was sitting directly opposite me, allowing me to read her body language and understand when the conversation was about to be directed to me, when she wanted more detail or wanted me to wrap up and hand it back: it must have been much more difficult for Sharon and Roderich and I was really impressed by how seamlessly they

managed to make things work. Being in the same room also allowed a tiny bit of wordless communication off the topic. This began when I was using an analogy to describe the differences between how biological systems build themselves and how we build things: when mentioning a construction manager I said ‘she’. There is nothing unusual in that – I make a point of alternating ‘he’ and ‘she’ characters when I am teaching, setting exam questions etc.– but Bridget reacted with a strong smile and positive body language from across the table, and that small thing made the whole artificial situation of the studio feel much more like normal communication and, for me, it became easier to forget the microphone and adopt a less ‘lecturing’, more ‘normal conversation’ tone.

The programme time seemed to fly by, and I really enjoyed hearing about Sharon’s and Roderich’s fascinating research. I have not yet met either of them but I hope to soon, at some conference somewhere. With the event over, Bridget thanked us all, and I left for the London that was outside the studio, so invisible and inaudible that after an hour in the dim light it seemed almost an act of faith to believe the city was really there at all.



The broadcast itself caused some e-mail traffic to all of us, mostly very interesting and much that I received was very helpful to a plan that a few of us have to begin a Masters level course in Biological Architecture. There were also several mails from teachers asking for further information: this is yet another illustration of how valuable the BBC is to stimulating conversations in British educational and cultural life.

I got one more, personal and silly thing from the broadcast. I am a radio amateur (‘radio ham’): one of those odd people who, despite the convenience of Skype etc., still like to have conversations across the globe by transmitting voice or morse code from home-built radio stations, bouncing signals off the ionosphere, and by listening for faint replies over the static and the ‘crash, crash’ of distant tropical lightning storms. The UK legal power limit for an amateur radio transmitter is 400 Watts but I tend to use much less, and am teased regularly about this deliberate frugality by friends

in the local radio club who run big amplifiers up to the legal limit. When this edition of *The Forum* was broadcast on radio 4, my voice was being transmitted at 500,000 Watts by (the still valve-driven) Droitwich long-wave Transmitter, plus the 100,000 Watts of the Scottish long-wave transmitters, and the 20,000 or so Watts of the FM network. So next time my friends try to cajole me into at least trying high-power transmission, I can truthfully say that I have.

Jamie Davies,
Edinburgh,
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Links:

The broadcast: <http://www.bbc.co.uk/programmes/p027gcpk>