



Communicating sciences

A history of science broadcasting by the BBC

Richard Holliman

Hi. I'm Richard Holliman, Course Team Chair of SH804. I'm here with Alan Jones who works as a Lecturer in the Faculty of Maths, Computing and Technology at the Open University.

When Alan isn't working for the Open University he's studying part-time for a PhD at University College London. The subject of his research is the history of science broadcasting with a particular focus on the emergence of the BBC as a public service broadcaster, which is why we've invited him here to be interviewed for the course.

Alan, I was wondering if you could tell us why you became interested in researching the history of science broadcasting?

Allan Jones

Yes, it was accidental really. I was, in the BBC's written archives centre on a completely unconnected project and stumbled across, well a couple of things that caught my attention. One was that, there had been some very early broadcasts about what we would call artificial intelligence in the early 1950s which seemed to me quite prescient, actually and then the other thing which I think is perhaps what you're interested in, is the rather uneasy relationship between the professional world of science, and the scientific organisations, and the BBC over the coverage of science basically.

Richard Holliman

So you had an existing interest in studying the history of science communication. Could you tell us something about what you've unearthed in your studies?

Allan Jones

Yes, well certainly the kinds of arguments that we're familiar with about the need for public understanding of science, there's nothing new about these. These go back to 20's, 30's, 40's, probably even before then, and they're all pretty much the same. What's interesting is how those people who are campaigning for those kinds of public understanding of science, impinged on the new emerging medium of broadcasting, and there was something quite distinctive about the new medium, namely it was a truly, a mass medium. It took off at quite an astonishing rate. To such an extent that within a few years of broadcasting starting its listenership was comfortably exceeding all the mass newspapers, periodicals and so on.

So it's not difficult to see why anybody interesting in promoting science or any other cause, actually, would be interested in taking advantage of this new medium. And the people who were interested in promoting public understanding of science back then had a certain view of the role of science in society, to do with the importance of science in the way society worked, in its commercial operation, economic operation, and also the importance of science as a way of thinking, as a corrective to superstition, horoscope, possibly even religion, and as a rational enterprise for people to engage in.

And I think that the scientists who were drawn towards broadcasting perhaps saw through the medium the possibility of creating a more rational society, a society that based its political and consumer decisions and all of the decisions on rational processes rather than prejudice, and I think this is a theme that runs through a lot of public understanding of science campaigns, this idea of trying to generate or, if you like, even engineer a particular kind of society.

Richard Holliman

Okay so do you think that public service broadcasting had some relevance in this context?

Allan Jones

Well to the scientists it clearly did. Public service broadcasting as it developed was very much the invention of, John Reith, the first Director General of the BBC and, although the concept of public service broadcasting hasn't really been defined properly, there is a sense of what it meant to Reith from various publications, and it was to do with, if you like, a basket of concepts.

One of them was independence, so independence from government, also independence from commercial interests, and also independence from vested interest groups who might want to appropriate the medium for their own interests.

There's also, and this perhaps is distinctive about Reith, like a strong concept of the best. So, through broadcasting the best of everything that had been thought, written, composed, was going to be brought to the masses through the new medium for social benefit.

And, if you kind of have that concept in mind and then think about scientists who would be perhaps inclined to think that the public understanding of science serves a social good then, somebody of that view might very well naturally look to a public service broadcast and say, 'Well look this is an activity you should be engaging in. You should be promoting science because it is a social good'.

And there, I think, lies a lot of the conflicts, you know, who is going to decide what is socially beneficial and who is going to regulate what happens on radio or the broadcasting mediums for that purpose.

Richard Holliman

So what you're saying to me, and I think it's come through very strongly from your arguments is that the emergence of public service broadcasting is very much integral to the emergence of the BBC.

Allan Jones

Yes, although actually the BBC began as a company. But a lot of what we think of as public service broadcasting started in the first 3 or 4 years when it was actually a private company, a consortium of radio manufacturers, that kind of laid down the principles of public service broadcasting, which then got carried forward when it became a corporation around 1927/28, around that kind of time.

The concept of public service broadcasting perhaps doesn't quite have any parallel in any other medium we are aware of because of something very strange about the way broadcasting happens. If you think of a radio dial, if you like, as a 12 inch ruler and the divisions on the ruler are your frequencies, then there's no limit to the number of frequencies just in a ruler, it just depends how closely you can inscribe the lines. But it's not quite like that with broadcasting.

When start to broadcast something, as soon as you are broadcasting anything other than science, the energy you are putting out gets smeared over a band of frequencies so you are not looking at a frequency, you are looking at a band centred on a particular frequency, and that severely cuts down the amount of scope you've got, and the number of stations you can have, particularly through international agreements, you've got to parcel these up through various countries, neighbouring countries and so on, and basically the UK ended up with about a dozen usable frequencies and it needed, the BBC needed all of those basically to cover the whole country.

So right from the start there was a strong sense that the broadcasting medium was a scarce resource. You couldn't just let anybody start up, unlike newspapers, books, where anybody with enough money could set up. Broadcasting's a scarce resource and this strong sense that it had to be used responsibly for the benefit of the whole country rather than interested

sections of the country, and that kind of very strong moralistic tone is really underlying the UK conception of public service broadcasting.

Richard Holliman

Okay. I mean, that, that's very interesting. So could you say a little bit more about what public service broadcasting means for science, in particular?

Allan Jones

It's hard to single out science because it was part of the mix right from the start. You had some big name scientists broadcasting in the early days, people like Oliver Lodge, William Bragg, Arthur Eddington. But that was part of Reith's general philosophy of getting the big names in any field.

The early 15 years or so of the BBC in this country had a very strong adult education slant, to an extent that we would find quite surprising these days. So at prime time early evening broadcast, you would have programmes which would definitely had a strong educational slant and their associated reading lists, discussion questions, supplementary print material. Actually this is the first time you get the phrase, "University of the Air" coined. So there was a strong educational slant in which science played its part, and we can get a flavour of how much there was from looking at prospectuses from back then. For instance, in the early '30s they ran a special season of broadcasts covering two of - what we would think of as education terms - autumn followed by spring. These were all under the general umbrella of "The Changing World". This was a period of economic crisis in Europe so there was sense that the world was going through some kind of upheaval and so you had thematic broadcasts related to this in the adult education sector.

And science occupied one sixth of all these broadcasts which is, I think, is a percentage or a fraction you wouldn't get nowadays. Although you would certainly have a higher absolute amount of science these days because we have more channels but you wouldn't get that high percentage. So science clearly had a respectable position alongside several other subjects in the BBC's output.

Richard Holliman

So do you think that public service broadcasting means the same thing today as it did in the early 1920s?

Allan Jones

No, the point about public service broadcasting back then was this incredibly strong paternalistic slant that it had through Reith and his colleagues and co-managers at the BBC. This concept of bringing the best to the public, giving them the best whether they wanted it or not, there's this much quoted phrase from Reith - I'm just paraphrasing it. He said his duty was to, to give the public what they needed not what they wanted, and this has come to characterise the Reithian view.

The more kind of sociological questions that we might ask now didn't seem to get asked then, things like, 'well what do we mean by the best?, who decides?, on what basis?, whose interests are these things serving?' I don't think those concepts arose then. There was a general understanding amongst middle class educated people that there was a hierarchy of cultural interests and it was the BBC's duty to lay these before the masses for their own benefit. It would be hard to take that kind of approach now.

But I think certain other things, perhaps do survive. Chief of these, of course, is this concept of independence, this idea of independence from vested interests and also independence from the market. Public service broadcasting is a type of broadcasting that is hard to sustain in a purely market driven sector. In fact it's hard to justify in a purely market driven sector. So nowadays I would say public service broadcasting, amongst other things, means a type of broadcasting that doesn't justify itself in market terms and, I think that's where we are going to have a very interesting future in the decades to come, to see what happens to that concept.

Richard Holliman

Indeed, yes. So could you say a little bit about how science, particularly through scientific institutions worked to influence the way science was portrayed by the BBC?

Allan Jones

Yes. This is, perhaps the central thing of what my research has come to. Through a period of several decades institutions like the Royal Society, the British Association and other bodies and individuals had a very consistent view of what the BBC ought to be doing and I can summarise it basically as 3 things.

They considered the BBC should bring all its science into one department, because the BBC didn't operate that way so you have departments more by style of presentation than subject. You have news, presentation, features, talks, and so on, and any of those might have done a science broadcast and it's still pretty much that way. The scientific bodies outside the BBC wanted all the science provision brought under one heading, one department, under the direction of a scientific manager and taking, and this is the third part, taking advice from a body of scientists, responsible scientists, outside the organisation who would give advice on programming style, that kind of thing.

Now if you try and unpack what that means to a body like the BBC, which has a very strong sense of its own concept of what they should be doing, it would certainly mean a good deal of what they regard their own function being taken over by scientific concerns outside the organisation and this, really this tension went on for decades and right through to the early 1960s when several bodies of scientists lobbied the Pilkington Committee, which is one of these review bodies that broadcasting is subjected to every 10 or 15 years in this country, lobbying the BBC, well lobbying the government actually to make the BBC do these three things. This three way package of measures which had been advocated for several decades and, well they didn't win basically. But that story is a story of antagonism between the BBC and science about how science broadcasting should be done.

Richard Holliman

Okay. So do you think that scientific institutions still manage to maintain any kind of influence in, in public service broadcasting, or within the BBC?

Allan Jones

Well, I've got to come clean here because my research doesn't really come up to date but, my feeling though, is that generally scientists think that the media should be doing more for science, that science is crucially important and the media should do the kinds of things that people 50 years ago were saying media should do more for science, and for the same reasons.

But I think generally people have a more sophisticated understanding of how you cannot be seen to be interfering with media because that, in a sense, undercuts your whole message. So I think scientists are perhaps a bit more sophisticated in their interaction with media and I don't think they would be as, as kind of blatant as they were in the past.

Richard Holliman

Alan. Thanks very much for agreeing to be interviewed.

Allan Jones

It's a pleasure. Thank you.