

Comment

BBC radio science: challenges and opportunities

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Historical background

The BBC Radio Science Unit has its roots in two radio networks, going back more than 40 years. In the late 1950s, BBC External Services (now World Service), appointed a science correspondent and began a weekly science magazine programme. Initially called ‘Science and Industry’, it changed its name in about 1964 to ‘Science in Action’. It is still running today, after more than 2000 editions, probably making it the longest running science show on radio.

The domestic Radio Science Unit began in the 1970s and over the following twenty five years produced weekly magazine programmes, conversations, phone ins and documentaries on science, technology and medicine for all the main networks. At first the two units and the two networks they worked for were rather different. Half of the work of the World Service unit was for news and for translation into the other languages broadcast. The rest was almost entirely made up of topical magazine programmes in English – on science, basic research, medicine, technology and even tropical agriculture. The domestic radio unit did not contribute to news: domestic news has its own team of science correspondents. It has always had topical magazine programmes and features.

In 1998 it was decided that the two science units should merge, based at the World Service site in Bush House in London. The result must be the biggest radio science unit in the world, with over 30 staff and an annual budget in excess of £2 million. The unit makes about 260 hours of programmes a year, divided roughly equally between the two networks.

In my view, the last few years have seen a polarisation in what we do away from semi-topical magazine programmes and towards, on one hand very topical science news and on the other, feature series that are often proposed in some detail over a year before broadcast. Two journalists in the unit work exclusively on stories for World Service News. It’s encouraging to see science taken seriously by news editors and included in the headlines. But of course it has to compete with politics and other news areas, so only the biggest stories get on, and often they get scant airtime.

Other broadcasters sometimes look with jealousy at our feature output: whole series of programmes of up to 30 minutes each, carefully crafted and narrated, with the top contributors and with producers able to spend one or even two weeks per programme. It’s certainly a privilege to be able to make them, but it’s not the luxury it sounds! Commissioners (and who can blame them) want big ideas, novelty, landmark series. So hopeful producers offer epics on, say, cancer or cosmology. The trouble is, while we might envisage these as 12-part series, the commission comes back asking for just two or three 25-minute programmes. So economies of scale in research, time and travel disappear and if you were to interview all the experts you’d hoped to, it would take the whole series just to list their names and affiliations! So part of the craft of good feature-making is finding the right focus to appeal to both commissioner and listener, without the programme degenerating from epic to shopping list.

The broadcasting environment

Radio is a very competitive business. With many parts of the world enjoying access to a dozen or more terrestrial channels in FM quality, maybe a hundred more by satellite and probably thousands through the internet, you need a distinctive voice to be heard above the Babel. Of course the letters ‘BBC’ help,

but we'd soon lose listeners if we just relied on our reputation. We need to know who's listening and respond to their needs.

The archetypal Radio 4 listener is conservative. The average listener is 53, female and lives in the South East of England. Move an old favourite even slightly in the schedules and howls of protest arrive, by e-mail, phone, fax and letter. But keep things the same and your audience will slowly grow old and die! So there must be surprises. As a Radio 4 listener myself, the surprises are the best bits – a human story, a skilful new use of sound, a daring comedy show or simply something I never knew before. But the schedulers need to know when to surprise and when to deliver the expected news, weather or soap.

Follow a good speech station – and their audience numbers - through the day, and I suspect many will follow the same line. The breakfast audience is big but brief. In the 15 or 20 minutes someone is listening, they want an update on the news and issues of the day, plus perhaps briefing on the weather, sport and travel. After 9AM the numbers fall, peaking again at lunchtime and then again in the early evening 'drivetime'. In all those peaks, the numbers may be high, but the attention span is short and news is what's wanted. In the dips in between, there's still a substantial audience however, and their more prepared to listen attentively to what you have to say. It is in those slots – mid morning, mid afternoon and the later evening – that most of our science features are to be found. It may not be peak listening, but about a million people listen to our 9PM weekday slot, and more than 2.5 million hear at least one science programme a week on 4.

In the past, such scheduling has been impossible for World Service. With 24 potential time zones, it is always breakfast time somewhere and an international broadcaster could never say good morning without it sounding silly to half the world. But technology is changing that. Underlying World Service today is a 24-hour a day live news stream supplemented by an automated playout system for pre-recorded programmes. Typically, five streams can run at once for different regions, so each can take live news for breakfast, lunch and supper, and the rich mix of programmes in-between. A listener can be in Nairobi one week and Singapore the next and still hear Science in Action at about the same local time of day.

A few decades ago, we didn't need to work so hard to get an audience. People living under regimes that regulated national media, as well as people desperate for an education, would huddle around a crackly short-wave set, hungry for all the news and science they could get. Today, most have plenty to choose from. But World Service still attracts a total daily audience of around 150 million. It's almost impossible to tell just how many listeners individual science programmes have.

Audience research studies have identified three main groups of World Service listener. There are still the 'information poor', hoping for a better education and unbiased news. But most of them today are not listening in English, though they do still represent a significant audience to some of our other language services. Then there are listeners referred to as 'aspirational'. They are keen to keep up with world events and like to be able to share what they've learnt with their friends. They like to be one step ahead with their knowledge about the environment or astronomy. But they are not loyal listeners. They prefer a pop music station if they can get one, and would desert radio for TV as soon as they could! The rise of satellite TV in India, for example, including BBC World TV has sent radio audiences plummeting. The third group is the most loyal. They are the opinion formers. Often well educated, city dwelling and with better incomes, they realise that radio can offer them something that TV often does not. They listen to radio for its cultural value as well as for news and entertainment.

The way in which people are listening is changing too. The days when millions listened on shortwave are on the way out. Now it's in their home or car on FM or digital from local transmitters or by satellite, or on the Internet. A few years ago, World Service ended shortwave transmissions to North America. Since then, our audience there has grown. Many are listening to local public radio stations that carry our programmes either in their own schedules or overnight. And many are listening on the Internet when it suits them. Just about all our programmes can be found in audio on demand, on the Internet. Some are replaced every week, others last in an indefinite archive. And people are listening. We get significant numbers of e-mails to our Radio 4 programmes from the USA, where they could only be heard online. The USA has now replaced India as the second biggest audience to World Service in English, after English-speaking West Africa.

My own interpretation of all this is that the radio audience is sophisticated, intelligent and interested. Whilst we should never over-estimate their prior knowledge, we should never underestimate their intelligence.

Note: *All views expressed in this article are those of the author and not necessarily of the BBC.*

Author

MARTIN REDFERN, while reading Geology at University College London, spent far more time than was healthy staging plays and operas at the student theatre. That left him well qualified to join the BBC as a Studio Manager, working on the full range of World Service programmes in many languages. That in turn taught him the techniques of radio broadcasting and gave him his first chances to produce his own programmes. He joined the World Service Science Unit as a writer in 1981 and, apart from a stint in television science, has been there ever since, variously called producer, senior producer, deputy editor, executive producer and chief producer. The BBC Radio Science Unit now makes most of the science programmes for World Service and Radio 4, together with science news for World Service. Life in the Unit is never dull. Over 25 years he has probably produced or presented over 500 hours of science programmes, ranging from topical magazine formats to landmark feature series and award-winning science-based dramas. Outside the BBC he has written extensively for newspapers and popular magazines and has contributed to many reference books. He is sole author of: *Journey To the Centre of the Earth*; *The New Geology* (Broadside Books 1991), *The Kingfisher Book of Space* (Kingfisher 1998), *The Kingfisher Book of the Earth* (Kingfisher 1999) - Short listed for the Aventis Science Book Prize (Junior) (2000) and *The Earth: A Very Short Introduction*. (Oxford University Press, 2003). martin.redfern@bbc.co.uk