

Interview: Brian Hodgson



Brian Hodgson with John Lewis in the Electophon Studio, Broadwick Street, about 1977



Brian Hodgson today (Richard Ponting)
(Photos courtesy Brian Hodgson)

Brian Hodgson joined the BBC Radiophonic Workshop in 1962 and worked alongside Delia Derbyshire, John Baker and Dick Mills on hundreds of BBC assignments including Doctor Who, for which

Hodgson created the Tardis sounds. In 1972 he left the BBC to set up Electrophon Studios with John Lewis.

He returned to the Radiophonic Workshop in 1977 as the studio's organiser and was its Director from 1983 until his resignation in 1995.

Brian Hodgson interviewed by James Gardner, 19 April 2010.
Updated and edited by Brian Hodgson and James Gardner in February and March 2012.

James Gardner: How did you get interested in electronic music in the first place?

Brian Hodgson: Well, I was interested in radio as a kid, because radio was very much part of our lives in the wartime years. Don't forget I'm now 74, so I'm going back ages. Life revolved around the radio, especially the news during the war, and then all the famous radio shows, *It's That Man Again*, *Merry-Go-Round*, all of those things. Lots of *Children's Hour*. I was a child actor as well, doing some radio. And I went into the Air Force to do my National Service and got dumped in an Air Radio Servicing Flight, so I started to learn a bit about technical stuff. When I came out, I went back to the theatre and then decided I'd like to try and get into radio. I heard the BBC were looking for studio managers, applied, got a job and ended up as a studio manager in their Drama Department. And that was key, really, because Drama Department were the people who really got the Radiophonic Workshop off the ground.

I was in Drama Department for a couple of years working as a studio manager on lots of different productions including several Radiophonic productions. *Living Time* by Arthur Adomov was one of them with electronic music by Maddalena Fagandini, who also did the music for a production of Cocteau's *Orphée* produced by Michael Bakewell. This whetted my appetite and I went on a special training course that the BBC used to do after you'd had two years experience to give you a wider engineering perspective.

When I came back I was invited to go for a short attachment to the Radiophonic Workshop. I knew about the Radiophonic Workshop; I'd heard its early productions in 1958 when I was in the Air Force and I'd also got myself fascinated by the whole business of tape recording and the manipulation of tape.

So you were more interested in the dramatic possibilities of tape for radio drama rather than *musique concrète* or electronic music *per se*.

Sure. My first exposure to *musique concrète* had been when I was in the theatre. We were doing some sort of modern play and somebody brought in *A Panorama of Musique Concrète* [1], which I think was the first LP of that sort of thing. And I was utterly fascinated by that, and kept playing it and playing it and playing it. But very much the stimulus came from the theatre. And that's really the way the BBC did it because the demand and the support for the Workshop came from Drama Department; people like Donald McWhinnie, Michael Bakewell. They had been listening to stuff done in France, and *musique concrète* and wanted to do modern drama but using music that didn't have a traditional sort of base. So they were interested in that side.

Music Division—much to Daphne Oram's disgust—didn't really want to know. They sent her a memo saying “we have orchestras, which we pay to provide all the music we require. We don't need studio managers playing around to do it for us.”

She was after something more like the electronic music studios at radio stations in Europe.

Absolutely. That's what she wanted to do. And she got very upset, really, when Drama took over. And went off to do her own thing. She composed and taught, founded Oramics in an Oast House in Kent and began work on a music-making machine that was years ahead of anything else until the late seventies.

How aware were you and your colleagues at the Radiophonic Workshop about ‘serious’ electronic music and *musique concrète*?

Oh, we were pretty much aware of what was going on in France and Germany. Delia [Derbyshire] knew Berio quite well. There were people in England like Roberto Gerhard, Humphrey Searle, Tristram Cary, of course—who were all experimenting and working. Roberto and Humphrey used to come to the studio occasionally. That was actually a bit before my time. So we were basically aware, but we were doing a different job. We were set up in a completely different way from anybody else. We were not part of the music division of a broadcasting authority, as some of the other studios were. And we were not part of the academic scene.

For the BBC, the Radiophonic Workshop was very much a service department, with the creative artists there credited as ‘assistants’, and the music as ‘special sounds’.

Yeah, the ‘special sounds’—that came a bit later. At first we weren’t credited at all! It just said ‘sound by the BBC Radiophonic Workshop’ and that was it. Credits didn’t come for at least another five or six years.

It was The Department, rather than individuals.

Did the legacy, the ethos, of Daphne Oram and Desmond Briscoe live on in the Radiophonic Workshop?

Yes, it did really—especially as Desmond was there until 1983, when I took over as head of the department. It was a little bit of an ivory tower, a sort of closed shop—he didn’t want other people coming in, and had no intention of allowing outside composers to come in and use the staff at the workshop as glorified engineers.

By the early ‘60s, the relationships that had started with Drama Department and other departments at the BBC, especially Education and Schools—were building quite nicely and people were becoming known for their talents, and would be very often asked for as individuals, rather than just the Workshop.

Did that change take place in the ‘60s?

Yes. The real breakthrough into public awareness, I think, had started with the *Quatermass* series, which Desmond had done and which was immensely popular. And so people had heard odd sounds. But strangely enough they didn’t quite make the impact that *Doctor Who* made in 1963.

The idea of a signature tune that was entirely electronic was virtually unheard of. There had been things that had been noticed, like interval signals made into gramophone records [2]. They’d sell the odd 2,000 and that would be it—they certainly didn’t make a major impact. But I think nobody was really quite prepared for what *Doctor Who* did.

That theme came about because [producer] Verity [Lambert] came in and she said “what I really want is a Ron Grainer theme tune played by the Lasry/Baschet [3] group”. And Desmond said “well, you do know that Ron actually wants to write something for us”—Ron had told Verity that he didn’t want to write any more television signature tunes because he was bored with it. So Desmond rang Ron who said “yeah I’d love to do something specially for you.” And that’s how it started. He arrived with a bit of manuscript paper ripped off the end of something else he was writing, and left it with Delia, and that was it.

And she went away and did the rest

She did the rest [4]. He wrote little things down like ‘cloud bubbles’ and ‘swoops’, but that was about it.

There was no brief apart from that?

Nobody really quite knew what he wanted. (laughs). And Delia interpreted it. When he said “Crikey, Delia—did I write that?” she said “well, most of it.” She wrote other sections of it, just to keep it all together.

Once that theme was done was there an attempt at the Workshop to produce something that was consistent with?

No—the thing was that there was no real artistic policy at all at the Workshop. And every time anyone tried to do one, it would last about as long as one production and that would be it. So it very much depended on the talent of individuals. Now at the time, I was there doing mainly ‘special sound’—I never considered what I did was music. I worked in what I called ‘The Theatre of Sound.’ Other people called some of the things I did ‘music’, but that was their choice.

These days what you were doing would be called sound design.

Sound design, yeah. The Tardis and things, that’s all registered as music. But that’s another story.

So I was there, Delia was there, with our own specific talents. She was working in more abstract forms. John Baker was there. Now, John was a jazz pianist, an absolutely brilliant jazz pianist. And he was fascinated by the whole cutting together of tape. He used to take a sound and create all sorts of wonderful little signature tunes. It was also the time of local radio starting [5], so all the stations all over the country would want local radio signature tunes. So John did loads and loads of those. So the whole thing of conventional music being played with odd sounds was getting into the airwaves, shall we say.

Also, our involvement with Education Department was thriving, things like *Music, Movement and Mime*, *Listen With Mother*. All of those things were using the Radiophonic Workshop because it was very convenient to be able to get special music written—it didn’t cost them anything—and the children started to get fascinated. So whole generations of children were growing up from three and four listening to these strange sounds.

Was your work on *Doctor Who* just another job or did you set out to make it special?

Everything we did was special! I mean you had no sense it would be a success—I just reckoned it would probably run for about 13 weeks. In the back of my head I thought “no way they going to be able to keep this up”. But it had to be right. Everything we did just had to be right and had to satisfy us personally, so in a way we were bringing as much effort to something if it was for *Music, Movement and Mime* as if it were for *Horizon* or *Doctor Who*. They all got the same level of attention.

On *Doctor Who* there were some very interesting graphics that Bernard Lodge had done using video feedback, so we had that to work with. It was all very vague. And for the Tardis sound we wanted to get away from—or I wanted to get away from—a conventional spaceship. I didn't want it to go ‘bang, woosh’. And we'd been talking about things like ‘the rending of the fabric of time and space’.

Was that part of the brief or just something you came up with yourself?

Well, Verity, Waris Hussein [6] and I were talking about it but there was no specific thing—it had to fit the graphics. At that time it was proposed to run the graphics each time it took off. “It's got to go somewhere; it's taking off, it's going into time and space”. And that was more or less my brief. It took quite a long time before I started work on it—about a couple of weeks just thinking about it.

You didn't have a ‘time-and-space-rending’ sound library back then, so how did you put that sound together? What was available?

Basically, I had the piano frame—it was an old Sunday school piano whose frame had been taken out of the case—a key, a microphone, a white noise generator, a few test oscillators, a sweep oscillator that allowed us to do that rising note all the way through. Tape recorders of decidedly antique appearance, even for the time, because basically the Workshop had been started with all the old equipment

that had been put into redundant plant and our engineer had managed to get working. So the two main tape recorders...one was a Motosacoche, which was built by a Swiss motorbike manufacturer during the war. That one had a great talent: to service it you had to open the back and get inside it, but so you didn't have to crouch down, the whole deck rose majestically on four stilts. And it would actually work while it was going up and down. So if you really wanted to frighten a producer, you stood with your back to the machine, pressed the button and the whole thing would rise into the air with his precious music on the top of it! It was all quite safe. They took about 15 seconds to get up to speed but once they were in speed they would run exactly at 15ips in sync for virtually a whole day. Which is a lot more than a lot of tape recorders ever did. We had an EMI BTR/2, which was the BBC's standard machine at that time. And loads of Ferrographs...anything we could actually get working.

And loads and loads of recording tape, of course. And razor blades.

Once you'd got all your material in place—and very often you'd throw a load of stuff away anyway—it was just a question of working away at it using all the standard techniques of *musique concrète*.

For the Dalek voices was the ring modulator already there or was that something you'd had in mind...?

The ring modulator was there but nobody apart from me had ever used it on speech before. I originally used it on speech for a radio play called *Sword from the Stars*. And they had a polite robot, who was like a butler and I used it on that, with my voice and the ring modulator. Intelligibility was quite a problem, so when we did it we worked very much with Peter Hawkins, the actor, to get the right delivery—elongating the vowels so that the modulator had something to bite into.

It was a Post Office ring modulator, which had a quite peculiar frequency response—all mid-frequency. Which unfortunately television managed to lose about 18 months into the series

So the original one's gone.

Oh, the original one went ages ago! They lost it. But just about then we started to use a voltage-controlled ring modulator and that did the job.

It sounds like there was no such thing as a typical day at the Workshop, but if there had been, what would it have been like?

Well you've really just answered that—there wasn't a typical day at the Radiophonic Workshop! Except there would be a load of people looking worried...

Because you had a looming deadline?

Yeah, or looking wonderfully triumphant because you'd just had a breakthrough. Delia and I used to say there are 'arbits' and 'omens', and that's how we'd work. The 'arbit' was an arbitrary length of tape that you inserted into something that suddenly made it all work. And you never knew quite what it was going to be. It was utterly arbitrary, depending on how the gods and the muses felt that day.

And an 'omen' was something that just happened quite by accident, where you'd drop a piece of equipment and it made a magic sound, or you'd fall over something, or somebody would spill something on something, or a joint would suddenly break in a piece of tape. And something magic would happen. And they were the 'omens'. And we relied quite heavily on 'arbits' and 'omens' as much as the work you were putting into it. It would either create a new sound, or it would point you in a direction that you suddenly thought was promising.

And at the Workshop you were always working to very tight deadlines

Indeed. Remember, of course, that in those days things took much, much longer to do because basically you were starting with nothing. And one of the problems was you'd start on a project and it would seem to be going quite well and you'd work for three or four weeks on it, and you'd suddenly think "this is not really exactly what I'd intended to do when I started". But by then you were so close to the

deadline you really had to cobble it into some sort of shape. Because you couldn't miss the deadline.

Whereas later on, after we were properly equipped, people were able to try something out probably in a morning, say "that's a lousy idea" and sling it.

From a technical point of view do you think there was anything that the Workshop pioneered? Most of the techniques that you used were, as you've said, fairly standard *musique concrète* techniques, with the possible difference that you were always working to a deadline...

We were working to a deadline and if we found that a piece of equipment would do something, we would start using that piece of equipment. We found a thing called a P.A. stabiliser which was invented to stop howl-round on a P.A. But if you used that and fed it back into itself it would produce rising or falling feedback. That was a sort of breakthrough.

It was a frequency shifter?

It was a frequency shifter. Basically it was a modulator which took the output of a P.A., fed it to the loudspeakers so you could actually have more gain on your P.A. without it going into howl-round. But you used that if you wanted feedback that rose in pitch or fell in pitch, or if you just wanted phasing. People were doing what they called 'flanging' with tape recorders. Well, we could do it electronically with the P.A. stabiliser, just using a very small shift, so you could get a really slow phasing...like on the Cybermen. *Cyber Invasion* is really just white noise with this incredibly slow shift on it.

After an initial pioneering period using 'classical' tape studio techniques, the Radiophonic Workshop started using voltage-controlled synthesisers in the 1970s. How do you view that era now?

Voltage-controlled synthesis, looking back on it...I used to call the 'buzz and fart' era, because everything came out sounding like

buzzes and farts. It was an important thing that had to be done, but it was like a back alley we went up into. And it became more and more limiting. One of the other problems was that people stopped making sounds. At the Workshop, we carried on making sounds—in fact people like Elizabeth Parker, Peter Howell and Malcolm Clarke were still making their own sounds right up to the point the workshop closed. All these people at the Workshop still carried on making sounds. Synthesiser manufacturers would say “every time we get anything back from you it’s all completely different. If we get a synthesiser back from a pop group it’s just got the presets on it and that’s it. Nobody’s ever changed anything”.

I mean the early synthesisers, the VCS3 and things like that, you could actually create sounds on them, and we did. But once the manufacturers reckoned they could do presets, everybody just used the presets. It wasn't really until frequency modulation synthesis came along that we were able to start creating sounds again. But there again, they all came with loads and loads of presets. And most people—except at the Workshop—just used presets.

Was this one of the reasons you left the workshop?

No, that was separate. Basically, I’d reached my mid-30s; I thought “if I’m not careful I’m going to turn into one of these balding BBC engineers who goes round as miserable as sin and wishing he’d got out when he was young enough”. I also thought “if I hang around here much longer I’m going to turn into an alcoholic”.

As many did.

As many did. It was too easy to get into the habit of the odd glass of wine, because you were working immensely long hours. I mean we’d work through the night, things like that. We didn’t get overtime—that’s just what you did, simply to get the job done.

And I had the chance to get out, and I took my pension and I got out. Delia was supposed to come with me but she never really did because she had become disenchanted with everything by that time and was off on to her own sort of trajectory.

You and she worked on side projects—moonlighting from the BBC —didn't you?

Yeah, we did. Desmond was quite good about that—he encouraged us to do it. If we had our own equipment we could go off, and he reckoned it was a good stimulus so we didn't get too bored with the idea we were just doing radio and television all the time. He did it with a nod and a wink, and he was really quite spiritually generous. And it kept you sane, sometimes.

The first of those was Unit Delta Plus, wasn't it?

Yes, with Peter Zinovieff. We did things like Paul Scofield's *Macbeth* at Stratford and the film *Work is a Four-Letter Word*, and worked at Peter's studio in Putney rather than at the BBC. We also gave one of the first electronic music concerts at the Watermill Theatre near Newbury [7] incorporating kinetic sculptures by Paul Takis and light projections by a pioneering unit at Hornsey College of Art.

What was it like working in Unit Delta Plus and what was the division of labour?

Basically, Delia and I did all the commercial stuff and Peter was more interested in research. He had the first privately-owned computer, and things like that. And he was working very much on the creation of sound. He was really behind the first British synthesiser, the VCS3 and the Portabella [8] and eventually the Delaware [9]. Whereas the Moog stuff was conventional analogue electronics, Peter was very much into digital synthesis. Things like his sequencer, his first sequencer, was eight times bigger than the Moog one and was entirely digital.

And then there was a bust-up and we decided that he was going in one direction and we were going in another direction. And then Peter got heavily into the synthesiser manufacturing bit and created EMS.

The original idea for Unit Delta Plus was to create logos and signatures, wasn't it?

Yeah, things like that. And the odd commercial.

Have any of those survived?

I really don't know. (laughs) It's all so long ago.

Do you have any recollections of those days?

Well, we had Paul McCartney there once, briefly.

At one of your concerts?

No, no—he just came down to the studio to have a look around.

What did he make of it?

Well, he was interviewed some time later and he was a bit fazed by Peter's insistence on probability. Peter was very into probability and random things. And I don't think Paul quite understood where that was going. I don't think any of us knew exactly where that was going to go.

What else? We did theatre stuff, we did *Medea* and *Macbeth* at the Greenwich Theatre, and I did *Brief Lives* at Hammersmith Theatre Club and of course lots of Mechanical Ballets with the kinetic sculptor and artist Peter Logan.

So you and Delia split off and a bit later ended up in a group called White Noise with David Vorhaus.

Well, Kaleidophon was the company. Vorhaus had met Delia at a lecture that we'd done at Goldsmith's College with Peter Zinovieff. And they had become smitten, shall we say. So we set up with David, which was a fun, mad sort of...David still is—at his ripe old age—a complete hippy, sort of into everything. His speciality at college had been electron spin resonance and then he ended up doing electronic music, and he's still doing all the same things he was doing in the '60s, even now.

So that worked for a bit. Delia and I were still at the BBC, and it was then that I decided I wanted out of the BBC.

How did that that first White Noise album come about?

Electric Storm? Well it was pretty much David and Delia. My contribution to it was minimal. I did the motorcycle sequence at the beginning of the dead biker bit on the track *The Visitation* and I did the voiceover for the dead biker. And I helped find the guy who wrote some of the lyrics, John Renn-McDonald. I did little bits and pieces but basically it was Delia and David.

And then you left to do Electrophon and Wavemaker

I then went to do the Electrophon studio with Delia but she didn't come with me, as she was supposed to, except for working on the soundtrack for *The Legend of Hell House*, but then she basically faded away. I was doing commercials, ballets for Christopher Bruce for Ballet Rambert other ballets for Robert Cohan at London Contemporary Dance Theatre.

At the Rambert I met Burt Alcantara who had composed *Tutti Frutti* for Louis Falco and we turned it into a pop album called *Zygoat*. Then John Lewis, a Canadian composer who was also working for Ballet Rambert came to me and said he wanted to buy a synthesiser, and we went off to buy a synthesiser for him, And nobody in the synthesiser shops knew anything about them. They just sold these boxes and said "they're wonderful, that'll be £3000". So I said why don't you put the money into Electrophon and we'll change it and create Wavemaker, and we started doing the first Wavemaker album, *Where are We, Captain?* which was followed by *New Atlantis*.

Was that continuing a line of musical enquiry begun earlier or was there a more commercial imperative behind it?

No, it was basically doing things we wanted to do. I don't think we were actually that much into pop music. We just liked other people's pop music but weren't particularly interested in making it ourselves.

We were just sort of looking at various different means of expression. Building a studio we were trying to create something. With Electrophon, we were basically trying to get the equipment to respond to what we wanted it to do rather than doing what it wanted to do, or what the engineer who designed it wanted it to do.

So it was an attempt to get a wider range of expression out of what were really rather limited instruments.

Indeed. Absolutely. Until I went back to the BBC—FM synthesis hadn't started at that point—we were still wallowing around in the whole voltage-controlled bit.

When you did go back to the Radiophonic Workshop presumably things there had changed a lot.

Unfortunately things had not changed a lot! The Radiophonic Workshop was equipped in exactly the same way it had been when I'd left it five years earlier. They had the Delaware which I was responsible for getting just before I left...

Was that via Zinovieff?

That was via Zinovieff, yeah. But basically it hadn't been changed at all. They had a vocoder, which they bought from Zinovieff for £15,000 [10]. Considering they didn't have a budget, it was a complete waste of money. And it was quite limited. It was used, I think, really successfully about five times in its entire life.

Including Peter Howell's music for *The Body In Question*.

The Body In Question—it was always brilliant on that. *A Case For Ancient Astronauts* as well was terrific and Malcolm Clarke's *There Will Come Soft Rains*, the Ray Bradbury story. And that was about the limit of its decent use.

When I came back, my brief was to look at the place and try and bring it up to date. And my term coincided with a renewed interest from television management in what was going on at Broadcasting House. They'd put a television producer, Aubrey Singer, in as Managing Director, Radio. He brought people over from television

including one guy called John Dutot in charge of resources. Because to get anything done and to get a budget or anything like that was almost impossible, and it wasn't until John Dutot came over...he came to the Workshop and was quite fascinated by what we were doing. And I was moaning that we virtually had no money—we had no budget for equipment.

We lived on—another of my phrases—‘fag ends and lollipops’. A ‘fag end’ was the leftover from other people’s schemes. If they had a couple of thousand pounds left over they gave it to the Workshop. And ‘lollipops’ were...if Desmond whinged loudly enough, every couple of years they’d give him something to shut him up. So the ‘lollipops’ tended to be rather big things like mixing desks, which were always far too big and not really suitable for what we wanted, and far too expensive. And I wanted to start buying modern equipment that was cheap, didn’t last for 35 years before you had to throw it out. Engineering were very anti- that.

But suddenly this whole revolution in the management of Radio happened: the engineers came in from television, administrators came in from television, accountants came in from television. And John Dutot said “If I bring over Director of Resources, Television, do you think you could persuade him to give you some money?” And I said “I think so!” So he came over and he too was fascinated by the place. He was Michael Checkland, who later became Director-General. And he said “do me a paper on what you want to do with the Workshop”.

My brief had been basically to try and get it up-to-date somehow. So I set out a sort of plan to rebuild all of the equipment, doing one studio at a time, to end up with a studio for each composer—because people were working for five hours in the morning and somebody else would come until or after midnight. The whole thing was quite unsatisfactory. You couldn’t really service deadlines properly, especially the amount of work we were doing by then. He gave me a budget of, I think, £100,000 a year and we set about rebuilding the workshop. And that’s when...I was whizzing about all over the place looking at FM synthesis, looking at different things. We looked at the fag end of voltage control and decided it wasn’t

worth pursuing, although we did have a project at one point for redoing the Delaware with digital versions of some voltage-controlled equipment. It was sort of like a hybrid thing, but it wasn't going anywhere. And suddenly MIDI came along, and FM synthesis, so we dumped that. And gradually we built it up. First of all the Fairlight, which we borrowed, for one production—I think it was *The Making of Mankind* [11] in 1980. Then we decided to buy it. And then there was the PPG Waveterm, which was another digital thing. That came from Germany and it was always a great problem. The only person who could control it was Liz Parker. How she did it, I don't know. She browbeat it, I think. It came, and she was about to start *The Living Planet*. And she sat down the guy and said “tell me how I do this, how I do this, how I do this, how I do that—and I don't want to know anything else”. And she got from it exactly what she wanted, and was the only person who could really operate it. Nobody else could operate it at all.

When the Fairlight arrived it enabled—in a way—the return of the kind of things that people like John Baker had been doing with his prodigious tape splicing 15-20 years earlier.

Yeah, that became wonderfully easy to do. You could actually throw something together in a morning instead of it taking three days. It also brought back the means of getting into sounds as well, bringing back the whole idea of concrete sources, and manipulating concrete sources. The Fairlight was the first of...I mean it was sampling, though it was only like one-and-a-half seconds or something. But that was magic! I mean let's face it, it was the leading edge of technology. But if you wanted to stay on the leading edge of technology you had to run very fast because suddenly the whole thing erupted.

What are your thoughts on the current fetish for old analogue synthesisers?

Some people collect old radio sets, you know. Some people collect vinyl. It's nostalgia for one's childhood. I'm personally more interested in what's going to happen rather than what has

happened. And I don't get it. I don't get my rocks off on all that silly old stuff. It's boys' toys.

It's fine—people get enormous pleasure out of it. I just don't see it going anywhere. Nobody seems to manipulate real sounds very much any more. I think that's more fascinating. If I felt I had enough time in my life to go backwards and relive part of my life—which I don't, because quite frankly there's still too many things I want to do anyway—I might get back into the whole thing using modern technology to try and do the things we were doing then. But really I've run out of oomph for that sort of thing. I'm more interested in my garden and my dogs, and waking up each morning to find out if I'm still alive!

Do you keep tabs on what's happening in electronic music these days?

Not much, no. I live in the wilds of Norfolk, miles away from concert halls and things like that—on the edge of the Norfolk Broads. I don't listen to much music at all—I seem to have a lot to do just living.

What are your thoughts on the ubiquity and so-called democratisation of electronic music?

Well I think the democratisation of electronic music has been wonderful, because before it was the private tramping ground of some very privileged, and often odd, individuals. And to have the technology available virtually in your lap is absolutely wonderful. And out of that will come some interesting and exciting things. Out of it will come an immense amount of crap as well. But if you look at the history of music, there has always been an immense amount of crap, and gradually, after the blessed filter of time, things emerge and stay, and they're the good things. The good stuff will survive and the crap will fall by the wayside.

There's now something of a cult around Delia Derbyshire —does it irk you that people like John Baker, David Cain and yourself are less valued?

It doesn't irk me that I'm less valued because I don't think I had even a tenth of the talent that Delia had. John Baker has his own following, and John was absolutely brilliant. David Cain...David was great at doing really spectacular things like *RUS* and everything, but I personally found most of his music somewhat mechanical. But that is a personal thing.

Do you think, then, that people are picking up on Delia Derbyshire's combination of technical chops and aesthetics?

Yeah, I mean there was an immense amount of wit in Delia's work that people pick up on quite unconsciously, I think. There was something so special about her. But there was also a complete sense of...other worldliness that sort of came out in the wit and things, and even a little thing like *Happy Birthday* or *Oranges and Lemons* played on the Greenwich pips. If you listen to it, the way she's constructed it—the whole thing is quite charming, and light and wonderful and airy. And that was very much part of her work. It was very light and wonderful and flowing. But she would start with amazing ideas, very complex things—she was very analytical. When she started the *Tutankhamun* series, she planned the whole thing immensely. It was going to be a sort of progression of music and sound. And then, of course, they decided that Episode One was going to become Episode Ten, Episode Ten was going to become Episode Two...the whole thing wound up. She lost interest. She became very unhappy, she couldn't get her head together. She was still sometimes creating stuff at the start of the dub in the afternoon. She was getting herself more and more into a state of being incredibly indecisive. She once said "I think I've got reverse adrenalin because the nearer the deadline comes the slower I'm getting". And she became quite pained by it all, which is why I think she withdrew from electronic music.

You don't think it was particularly to do with the introduction of the voltage-control era.

No...that's a complete red herring. Delia was, I think, becoming disillusioned. The technology was not capable of doing what she was conceiving. And certainly she thought we were wasting our time going up a voltage-controlled alley, and we were. But it had to be done—we had to find out.

I think some of her disillusionment comes through in the music, doesn't it?

Oh yeah, absolutely. She could be so wonderful and joyous and exuberant—or she could be completely depressed and uncommunicative.

We once went off on holiday together. We were supposed to be taking off at 11 in the morning and we didn't eventually take off until 10 at night, having gone to 3 different airports and being messed around rotten by British Airways. And she didn't actually speak to me from 11 in the morning until about 11 o'clock at night. And I thought "it's going to be a great holiday, this." (laughs) And when she actually spoke to me we were in the middle of a thunderstorm in Barcelona; water was pouring down the street, I was up to my knees carrying a suitcase across the water. We went into a bar, I ordered a large brandy and coffee for both of us and she turned to me and said "Isn't the sound of thunder wonderful?" That was the first thing she'd said to me for 12 hours!

What are your favourite Delia Derbyshire pieces?

Oh, there's so much of the stuff. She did wonderful, charming little things for...I think it was called *Mathematics Around You*. Really quirky stuff. I loved a lot of the drama stuff: *Dark Ages*, I love the Barry Bermange *Inventions for Radio*. I love *Blue Veils and Golden Sands*, the documentary she did about the Tuaregs—God, there were so many things.

What are you most proud of in your own work?

There were some strange little ballet pieces I did for Margaret Dale but I don't even think we kept copies. It's just sort of imaginative pieces. There was a series I did with Patrick Garland; *Brief Lives* with Roy Dotrice and I did a Beckett thing with Jackie McGowran—*Beginning To End*. There were little quirky things hidden away. Some stuff I did for Philip Saville: *The Machine Stops*, *The Rainbirds*, *Mark Two Wife*. *The Machine Stops* is around—there's a DVD of it or there's a recording of it still in the archives. *The Rainbirds* is still in the archives—somebody sent me a DVD of it. Louis Niebur used *The Machine Stops* as part of his composition course at UCLA. I don't know how much of the Patrick Garland stuff is still there But there were lots things like that.

I mean, at least 99.9% of my stuff was utter crap. But there was that odd little bit around. I don't think I even have copies of most of those things. We were just too busy doing things...we weren't creating a history and an archive—we were doing things.

[1] Released in 1956, this LP included work by Pierre Schaeffer, Pierre Henry and Philippe Arthuys.

[2] Maddalena Fagandini's 1961 television interval signal was reworked and released the following year as a Parlophone single called *Time Beat*, credited to 'Ray Cathode' and produced by George Martin.

[3] Les Structures Sonores.

[4] With the assistance of engineer Dick Mills.

[5] Beginning in November 1967 with Radio Leicester.

[6] The first *Doctor Who* director.

[7] 10 September 1966.

[8] The name given to the one-off prototype of the EMS Synthi A.

[9] The name given to the BBC's EMS Synthi 100.

[10] In his book on the Radiophonic Workshop, *Special Sounds*, Louis Niebur quotes a figure of £8,000.

[11] According to Peter Howell, the composer for *The Making of Mankind*, the first music done by the Workshop on the Fairlight was for the Lascaux caves sequence and recorded at the instrument's UK distributors, Syco.