

# Time Lords

By **Anwen Crawford**

## **The Radiophonic Workshop, creator of those ‘Doctor Who’ sound effects, is back**

For 40 years, inside a building on a modest side street in Maida Vale, west London, on the site of a former rollerskating rink, there existed a doorway to another world.

Had you opened this door, you would have found yourself inside a low-ceilinged room, amid a welter of reel-to-reel tape machines, oscillators, and heavy cabinets marked with inscrutable dials. Some of the equipment was ex- military, or salvaged from junk shops and markets on the Portobello Road, then modified on site.

Composers – their employer preferred the term “assistants” – moved among these machines, adjusting a dial here, splicing a length of tape over there, carefully, precisely, like alchemists refining their metals. From their experiments arose bizarre and beautiful noises, of Martians, the Milky Way, blue veils and golden sands. “Wee have Harmonies which you have not, of Quarter-Sounds and lesser Slides of Sounds,” read a passage pinned to the door. It was taken from Francis Bacon’s unfinished utopian novel *New Atlantis*, first published in 1624. “Wee have also meanes to convey Sounds in Trunks and Pipes, in strange Lines, and Distances.”

Here in Room 13, as it was known, time was handled like a material: the composers, with their tape machines, could speed it up or slow it down, reverse it, cut it into pieces, splice the pieces back together. Past and present were looped until who knew where you were headed. What’s that you hear now? It’s a warped and screeching sound, an aeon bending out of shape, and then you see it, a blue police box, hurtling through space ...

You may have never heard of the BBC Radiophonic Workshop, but you have almost certainly heard it. Between 1958 and 1998, the Workshop was the in-house sound effects and music production unit for BBC radio and television. Founded by Daphne Oram and Desmond Briscoe, the Workshop employed 17 composers in all during the course of its existence, until the BBC disbanded it in the interests of cost efficiency. Some were at the Workshop for only a few months, while others stayed for decades, scoring quiz shows, science documentaries and children's dramas, crafting theme tunes and jingles. Several of the BBC's best-loved programs have borne the stamp of the Workshop, including Spike Milligan's radio comedy *The Goon Show* during the late 1950s, for which the Workshop provided sound effects, and David Attenborough's 1984 television series *The Living Planet*, with a soundtrack by Workshop member Elizabeth Parker.

As for *Doctor Who*, it could hardly have existed without the Workshop's efforts. The sounds of ray guns, space bombs, time tunnels, airlocks, ghosts, Daleks, the sonic screwdriver: all were made at the Workshop. Member Brian Hodgson conjured the sound of the TARDIS in motion by scraping a house key over piano strings, recording that noise onto tape, then reversing the tape. "I wanted a sound that seemed to be travelling in two directions at once," he commented, many years after the fact, "coming and going at the same time."

For a long time it was BBC policy to withhold the names of individual Workshop employees from program credits, which meant that members were rarely afforded the recognition, or the money, that they deserved. The original theme tune for *Doctor Who* was realised in the Workshop by Delia Derbyshire, from a one-page score by Australian-born composer Ron Grainer. As Hodgson recalled, Grainer's score "was a scribble"; it was Derbyshire who arranged it, using oscillators, a wire string, and a sine wave-generating device known in the Workshop as a "wobulator". Each note was recorded, cut, and spliced by hand onto quarter-inch tape. In 1963 there was no multi-track tape recorder at the Workshop, so in order to create a master copy of the arrangement the three tape reels – string bassline, oscillator melody and embellishments – had to be played back simultaneously on separate machines, in the hope that they would synchronise. When Grainer heard the results he

insisted that Derbyshire be credited and paid half the royalties; the BBC refused.

Sound design has always been a part of radio and television production. What distinguished the Workshop – especially in comparison with the light orchestral music that had previously been common in broadcast scoring – was its commitment to experimental and electronic methods. During the Workshop’s first decade this meant laborious, and often ingenious, tape manipulations. Analogue synthesisers began arriving in the late 1960s, followed by digital synthesisers and samplers during the 1980s.

It was Daphne Oram who made the passage from Bacon’s *New Atlantis* into the Workshop’s statement of purpose, and her interests were the Workshop’s in a nutshell. She saw a future where, as she wrote in her 1972 treatise *An Individual Note*, “computers will be controlling crotchets”. But she also looked back to a long history of utopian thinking and its relationship to sound. The ability of Workshop members to pluck music from machinery, or from objects – Delia Derbyshire favoured a “tatty green BBC lampshade”, which she played like a bell – was futuristic, and it was occult, like an ancient knowledge vibrating with latent power. It was, recalled member Dick Mills in a 2014 documentary, *Pioneers of Sound*, “a very alien art form”.

Now the Workshop is back, after a fashion. Late last month a handful of surviving members released the first official Workshop recording since 1985. The album is called *Burials in Several Earths*, a title likewise taken from Francis Bacon. The music is improvised, mostly on synthesisers, and the mood is otherworldly, as one might expect, though there are hints of the pastoral, even the elegiac.

The opening title track starts modestly, with synthesiser notes so precisely shaped that you can almost see their waveforms in the air. There is a touch of piano, played in the bass octaves, but it’s the arrival of some seriously heavy low-end frequencies that commands attention. ‘Things Buried in Water’ begins with reflective, almost wistful piano chords, before morphing into a soundscape of white noise (helicopters come to mind, and laser beams), then ticking, over the course of several minutes, to a close.

Freed from their background role, the Workshop members have chosen to play loud, and play long. This is music designed to be heard on its own, unattached to any television or radio program. There are several instances of electric guitar, bringing tracks like 'The Stranger's House' in closer proximity to psychedelic rock than the Workshop has previously ventured. It's interesting to hear the musicians stretch out, but these new freedoms also risk diluting the Workshop's charm, not to mention its considerable mystique.

The Workshop, after all, was a stealthy avant-garde, smuggling its weird and wonderful electronics into living rooms under cover of news broadcasts and family entertainment. Other mid-20<sup>th</sup>-century musicians and composers experimented with electronics, including Pierre Boulez, Karlheinz Stockhausen and Pierre Schaeffer. The latter coined the term *musique concrète* in 1948, and his philosophy and methods, based on the manipulation of found sounds and non-traditional instruments through the use of magnetic tape, were comparable to the Workshop's.

While the members of the Workshop were aware of these discoveries, they charted a parallel course: composing to order, and for a mass audience. This gives its archival recordings – particularly those made during the 1960s, many of which have been anthologised – a unique purpose and spirit. To lavish so much time and skill on tiny snippets of sound was generous; it demonstrated to an audience that some person, or persons, cared about the smallest details. The artistic challenge that the Workshop posed to an audience was also generous, as it suggested that ordinary people, too, might be interested in stranger things. For those who chose to step through the Workshop's portal, new universes of sound and music awaited.

Its legacy has been profound, particularly in Britain, where several generations of budding musicians were exposed to the Workshop's efforts throughout their childhoods. *Burials in Several Earths* features production work by Martyn Ware, a founding member of The Human League – one of several British groups to make synthesisers a key part of their sound in the late '70s and early '80s. During the '90s and into the 2000s, electronic producers such as Aphex Twin, and groups such as Portishead, Radiohead and Broadcast carried on the Workshop's spirit, using the studio as a

compositional tool, and blurring the lines between musical instruments, electronics and found sound.

But the Workshop was never itself a *band*, which makes its reconfiguration now as one – there are live performances scheduled – a little odd. On the one hand it's nice to see the members step out of the shadows, but the shadows are, in their own way, useful. *Burials in Several Earths* works best when approached as sound that gradually darkens the atmosphere. Listen with one eye elsewhere, perhaps on the television.

The vast contemporary appetite for cultural remnants of the past has been to the Workshop's favour. Ancient episodes of *Doctor Who* float around on YouTube, while the personal recorded archives of individual Workshop composers such as Delia Derbyshire and her '60s colleague John Baker are gradually being issued, or reissued. It's never been easier to investigate the Workshop's back catalogue, and bits of it keep turning up, sometimes in unexpected contexts. Last year, for instance, Detroit rapper Danny Brown used a Delia Derbyshire composition called 'Pot au Feu' as the backing track for his own song 'When It Rain'. You'd hardly guess that Derbyshire's arrangement, with its harsh, staccato melody and skittering percussive effects, was made in 1968. It still sounds like the music of tomorrow. But that was, and is, the beauty of the Workshop: its members conceived of no technical or temporal boundaries. They were technicians, musicians, composers, visionaries. They were also, in the best British sense, tinkerers. Dick Mills recalls a favourite saying of founding member Desmond Briscoe: "Because we weren't experts, we didn't know what we shouldn't be capable of doing."

## **ANWEN CRAWFORD**

Anwen Crawford is the *Monthly's* music critic and the author of *Live Through This*.