Abstract
This article explores the four 'Inventions for Radio', first broadcast on the BBC's Third Programme across 1964 and 1965, created by the dramatist Barry Bermange in collaboration with the composer and sound designer Delia Derbyshire. The 'Inventions' combined a collage of interviews, on subjects such as the existence of God, the process of ageing and the dream condition, with electronic music and soundscapes by Derbyshire. The 'Inventions' have been described as pioneering a 'poetic realism' and established a distinctive form of radio feature. Yet, existing scholarship on the radio feature has made little if any reference to the 'Inventions' and their authorship has been contested with Derbyshire's role often uncredited and their development unclear. The article addresses how the 'Inventions' came into being and their immediate reception and influence. In doing so, the article argues that the 'Inventions' were important not just for their formal achievement but for their socio-political significance as well, integrating the thoughts and experiences of people from different socio-economic backgrounds and providing an atypical outlet for working class voices in particular, on subjects they would not normally be heard discussing on British radio and television at that time.

Main Introduction
Based at the BBC Radiophonic Workshop from 1962 until 1973 as well as freelancing in film, theatre and other live events, the standard approach in media accounts of the composer and sound designer Delia Derbyshire (1937-2001) is to introduce her as the person who realised the original version of Ron Grainer's theme music for Doctor Who, first broadcast in 1963. Yet, although the
Doctor Who theme is deservedly celebrated, several of those who knew or worked with Derbyshire closely have identified another project as being an equal if not greater achievement: the four 'Inventions for Radio' on which Derbyshire collaborated with the dramatist Barry Bermange, first broadcast on the BBC Third Programme across 1964 and 1965.1 Each 'Invention' – The Dreams (first broadcast 5 January 1964), Amor Dei (16 November 1964), The After-Life (1 April 1965) and The Evenings of Certain Lives (9 September 1965) – was a long-form narrator-less piece, running variously between 40 and 47 minutes, combining music and soundscapes by Derbyshire with a poetic collage of interviews with members of the public, recorded by Bermange, primarily at Hornsey Old People's Welfare Council. The result was a distinctive form of radio feature. The acclaimed feature-maker Piers Plowright has described the 'Inventions' as pioneering a form of 'poetic realism'.2 Plowright has not been alone in that assessment of the 'Inventions' ushering in a new approach to radio. When the first three 'Inventions' were repeated on Radio 4 in 1977, Radio Times referred to them as 'classics of radio technique' that 'introduced a fresh genre to the medium'.3

The 'Inventions' were remarkable not only for their technical achievement but also the fact that they privileged the voices and thoughts of everyday people, from a variety of socio-economic backgrounds, on weighty philosophical subjects – the dream condition, the existence and nature of God, the possibility of life after death and the experience of ageing – at a time when the portrayal of British working class communities and individuals in particular was still limited and often clichéd, despite the emergence of working class screen 'heroes' in the late 1950s and early 1960s such as Albert Finney, Tom Courtenay and the residents of Coronation Street (1960-present). The BBC received complaints about the 'harsh' or 'uneducated' accents of some of the speakers and there was frustration that these 'inane… nonentities' were allowed to express their thoughts about such profound subjects on national radio, as if people from working class backgrounds were not entitled to discuss these concepts.4 For Brian Hodgson, Derbyshire's close friend and Radiophonic Workshop colleague, the 'Inventions' showed Derbyshire 'at her elegant best'.5 Adopting a culinary
analogy, Dick Mills, another of Derbyshire's Radiophonic Workshop colleagues, noted that if the *Doctor Who* theme was 'the House Speciality' then the 'Inventions for Radio' were her 'Main Courses'.6 According to Clive Blackburn, Derbyshire's long-term partner from 1980 until her death in 2001, Derbyshire spoke with more pride and affection about the 'Inventions for Radio' than her work for *Doctor Who*.7

The question of authorship, however, and Derbyshire's contribution to the 'Inventions' has been unclear. BBC policy at the time meant that Radiophonic Workshop personnel did not receive individual credits for their work. On first broadcast, *The Dreams* was described in *Radio Times* as 'an invention for radio by Barry Bermange in conjunction with the BBC Radiophonic Workshop' and *Amor Dei* as being 'by Barry Bermange in collaboration with the Radiophonic Workshop' with voices 'recorded from life and arranged by the author in a setting of radiophonic sound'.8 Bermange clearly admired Derbyshire's contribution. Interviewed by H.A.L Craig for the 30 December 1964 edition of the BBC's *New Comment*, Bermange spoke warmly about how his request for the 'water section' of *The Dreams* to feature 'something that sounded like an underwater church, bells ringing under the water' was produced 'in quite an exquisite way beyond my greatest expectation. It was a marvellous moment to hear this underwater church'. Yet, despite this audible admiration, Bermange never acknowledges Derbyshire by name in the interview and the listener is given the impression that his musical requests are being delivered to order by an anonymous factory system.

Derbyshire's absence from discussions of the 'Inventions' would continue into the 1970s and 1980s. John Elsom's essay for *Contemporary Dramatists* is fulsome in its praise of Bermange: 'No other writer can rival him for controlled daring and insight into the potentialities of [British] experimental drama' with Elsom identifying the 'Inventions' as:

Bermange's most extraordinary achievement [...] totally original music-drama works. In
these inventions, Bermange's remarkable gifts for ordering sound effectively – both ordinary speech patterns and electronic effects – were allied to themes which could scarcely have been expressed effectively any other way. He invented a new form of radio and theatrical experience: and the only possible contemporary parallel would be with Berio's music-drama for Italian radio.⁹

There is no mention, again, of Derbyshire and the impression that Bermange had considerable control over the music's form and content continues. In the H.A.L Craig interview he states this position of control directly, noting how 'all my plays are conceived musically':

I'm at the controls of the music: I can control the volume of the music, I can bring in the sounds that I want to bring in [...] I don't actually manufacture the basic music [...] I ask for certain basic sounds to be produced for me and from these, as with the voices, I make a selection of the kind of sounds that I think would suit the particular movement that I'm engaged on.

There is a somewhat dismissive tone in Bermange's reference to the 'basic music' that is at odds with his enthusiasm for the 'exquisite' sounds but the absence of Derbyshire's name and Bermange's apparent downplaying of her role is curious. Interviewed years later, Bermange claimed the 'Inventions' came about due to him not being allowed to direct for radio as he was not 'a bona fide BBC director', prompting him to collect 'my own raw material [the interviewees' responses] and did something with it, modifying it and presenting it in a new form. Now they're set up as classics, four monoliths set up as something extraordinary' but, once again, Derbyshire is not mentioned.¹⁰

Over time, that absence would rankle Derbyshire. According to Brian Hodgson, Derbyshire was deeply upset in later life that she had no copyright on the 'Inventions' and believed Bermange had
taken her copyright away.\textsuperscript{11} Her archive contains a telling note from Desmond Briscoe, co-founder of the Radiophonic Workshop and Senior Manager during Derbyshire's time there, within an off-air cassette recording of *Third Words*, a 1996 Radio 3 programme presented by Piers Plowright, on significant features broadcast on the Third Programme. Towards the end of the programme, Plowright celebrates the 'Inventions' with *The Evenings of Certain Lives* as his case study. The 'Inventions' are described as a collaboration between Bermange and Derbyshire and, in his note accompanying the cassette, Briscoe mentions that 'I've spoken to Piers, who was very pleased to know that he had “put the record straight”!!'.\textsuperscript{12}

Given the testimonies and additional evidence contained within the Delia Derbyshire Archive at the University of Manchester, one of the consequences, of the extremely welcome scholarship on Derbyshire to emerge in the last ten years, is that Bermange's role has become somewhat sidelined, especially with the musical content of the 'Inventions' being emphasised. A thorough assessment of the 'Inventions' is complicated further by the difficulty in accessing the full set of works. At the time of writing, the four 'Inventions' are still to receive an official release on any music platform.

The Delia Derbyshire Archive, which can be accessed by members of the public in person, contains off-air recordings, notes, isolated music cues and make-up material for *The Dreams* and *Amor Dei* but little on *The After-Life* beyond a few isolated cues and even less on *The Evenings of Certain Lives*. The British Library hold recordings of the first two 'Inventions' and off-air recordings of *The Dreams* and *Amor Dei* have been circulating on websites like YouTube for several years but *The After-Life* has only recently been uploaded in 2018 (despite appearing in private online circles for some time) with *The Evenings of Certain Lives* proving the most difficult to access. The master tapes of all four 'Inventions' are held in the Radiophonic Workshop Archive, stored in the BBC Archive Centre at Perivale but these tapes are not accessible to researchers.

Consequently, the 'Inventions' have often been absent from scholarly accounts of important works
in British radio and discussions of significant examples of the radio feature in particular. There is no mention of Barry Bermange or the 'Inventions for Radio' in Kate Whitehead's account of the history of the Third Programme or Seán Street's *Historical Dictionary of British Radio*, which provides entries for other 'groundbreaking' programmes and the radio feature as a whole. The Radio Ballads, for example, created by Ewan MacColl, Charles Parker and Peggy Seeger, are referred to as 'a ground-breaking concept of feature making' that 'not only developed a new narratorless technique of documentary storytelling, utilizing new mobile recording technology but gave a direct voice to working-class communities, elevating their stories to a kind of radio “art”'. The 'Inventions', however, allowed working class voices to be heard alongside other demographics, speaking about subjects that were not restricted to their own immediate community but impacted on human cultures and experience more widely. Street does provide an entry for the Radiophonic Workshop and Derbyshire also receives an entry as a ‘gifted and innovative composer’ with *Doctor Who* ‘her best known work’ but, although noting she ‘created many other themes and sounds for BBC media’, there is no mention of the 'Inventions for Radio'.

Perhaps more surprising is the absence of the 'Inventions' from Street's excellent study of 'a poetic form of making in radio'. The Radio Ballads receive deserved coverage again in Street's celebration of radio in which 'the imagination of the listener, working in partnership with the maker of the sounds, creates something which is more akin to a poetry than journalism, closer to film than television, nearer to music than factual speech; something which can be at times abstract, ambiguous, shadowy and, yes, mysterious'. Street's evocative overview of his chosen forms of radio corresponds perfectly with the 'Inventions' and their poetic collage of everyday speech, music and transformations of sound into new forms whose original source can no longer be recognised. This is not a criticism of Street's work, which is full of expert insight and rewarding discussion, but underlines the difficulty in providing accounts of the history of British radio and critical assessments of key works when many of those works are lost or difficult if not impossible to access.
This article makes use of a wide range of archive material and interviews to provide a detailed
discussion of the origins of the 'Inventions for Radio' as well as their immediate reception and later
influence. The article does not focus on the musical content as that has been covered impressively
in depth, particularly in relation to *The Dreams* and *Amor Dei*, by Louis Niebur, James Percival and
Teresa Winter.\(^{18}\) Instead, I concentrate on how these distinctive works came into being in order to
provide a more complete understanding of Barry Bermange's role in their creation as well as a more
thorough account of the impact of these 'pioneering', 'extraordinary' and 'classic' examples of 'poetic
realism'. In doing so, the article argues for the additional significance of the 'Inventions' in terms of
the representation of working class voices, moving beyond the Radio Ballads, as part of the wider
'decline of deference' in British culture of the 1960s as well as their influence and anticipation of
later works by artists as diverse as Pink Floyd, Jonathan Harvey and Steve Reich.

**Origins and Rejections**

A study of the files kept on Barry Bermange at the BBC Written Archives Centre reveals that the
development of the 'Inventions' was the result of multiple factors that impacted on Bermange's
repeated attempts to get his work accepted and broadcast by the BBC. That process can be traced
back to 14 August 1956 when Bermange submitted his synopsis for *Waiter's Dance*. *Waiter's Dance*
demonstrated Bermange's commitment to experimenting with form and his interest in the
possibilities of sound. The proposal was rejected. The official report on the synopsis, by Mollie
Greenhalgh, dismissed 'this complicated and fantastic idea' as lacking 'any radio possibilities', citing
the total absence of any dialogue and Bermange's lack of experience in dealing 'with a fantasy of
this kind'.\(^{19}\) Undeterred, Bermange submitted *Cartoon War*. *Cartoon War* was a result of Bermange
'experimenting' to create, as he put it, an 'adventure in Broadcasting'.\(^{20}\) Once again, he came up
against an unimpressed Greenhalgh: 'Fantasy about the sabotaging of a village fete by a couple of
tramps. Incidental characters are two fishes, a crab and some statues. I am afraid I found this quite incomprehensible, and neither clever nor funny. The author obviously thinks he knows how to use radio, but equally obviously does not understand the first thing about its mechanics'.

Despite Greenhalgh's critique, Bermange's work intrigued others at the BBC. George MacBeth felt that Bermange's writing was 'too whimsical for a Third Programme audience' but admired some of his descriptive phrases, encouraging Bermange to write poetry instead. Robin Midgley advised that 'beneath the pretentiousness and the over-obvious attempt at “adventure in broadcasting”, there is much that might be of use'. Bermange's greatest advocate, however, was David Thomson at the BBC's Features department. Thomson had read *Cartoon War* and, although unable to use it, wrote to Bermange to inform him that 'I am interested in the way you attack your 'adventure in broadcasting' and would be glad of an opportunity of meeting you and talking things over'. There would be multiple setbacks along the way as well as the occasional success but, in Thomson, Bermange now had the backing of a sympathetic producer and Thomson would produce the first three 'Inventions for Radio'.

Clear themes and approaches emerged in Bermange's BBC work – in particular, a fascination with plays addressing old people and death, which would anticipate the subject matter of the four 'Inventions', as well as an openness to experimentation, the role of sound and absurdism. Two changes needed to take place, however, before the 'Inventions' could come into being. The first was the tone of Bermange's work on old people and the support services available to them and the second was Bermange's incorporation of actuality recordings of everyday speech rather than the voices of professional actors. The pivotal year for Bermange was 1961. The tonal shift in Bermange's writing about the experience of old age seems to have been instigated following a sequence of rejection letters and feedback from various figures at the BBC advising Bermange that his work risked alienating the very demographic that he was so focused on writing about.
On 8 February 1961, Robin Midgley wrote to Bermange about his proposed play *The New Boy*, set in an old people's home where the inmates have become like children, obeying a set of rules and doing nothing by their own initiative. Midgley informed Bermange that although the play 'could be very effective' it 'would be important to be as fair as possible to the old people's home, by showing [...] the amenities that do exist and the well-meaningness of the rules and regulations'.25 Similarly, the producer Michael Bakewell rejected Bermange's *Life Worth Living* because of its apparent attitude towards old people and their available support: 'The trouble is that a vast proportion of our audience is presumably composed of old-age pensioners, and I fear they would simply hate it. Although I don't think it is your intention, they and the people responsible for their welfare would feel very much that they were being got at'.26 The most substantial report on Bermange's approach came from Martin Esslin, then Assistant Head of Drama (Sound) and someone sympathetic to Bermange's affinity for absurdism given his own deep interest in that mode. Esslin questioned Bermange's knowledge of old people and the support available to them and advised that Bermange's research needed to be as rigorous as possible, pointing the way to a more sympathetic, nuanced and informed engagement with the experiences of old people, evident in the 'Inventions for Radio':

I don't know how much the author knows about old-age homes or the problem of dealing with old people: there certainly is a lot being done to enable old people to go on working. I simply don't believe that an old man would be penalized if he tried to do some work. One would have to know one's chapter and verse on this extremely well before one could launch into social criticism on these lines. There seems to be a great vogue for old-age home plays [...] I don't know whether in view of this we should encourage just another vague and not too well found social protest.27

Bermange's writing and his fascination with the experiences of old age seemed to be resulting in the
same response from the BBC. As Bakewell summarised, 'although the general attitude here towards your work is considerably more favourable than before, I have not yet succeeded in making a sale of any of the scripts we have. What I really need is a new idea to offer them. The more I consider the matter the more I am convinced that no good purpose is going to be served by trying to push you into being a matinée writer, so please, if you can, let me have a few new ideas'.

**Experiments in East London and New York**

In fact, Bermange had been developing some new ideas, which would take him more into the realm of the radio feature, paving the way for the 'Inventions for Radio'. On 10 January 1961, Bermange wrote to David Thomson proposing something other than a play or short story. Bermange was visiting New York in March and pitched a feature on 'a playwright's impressions of New York, that is to say, the impressions of someone who HEARS rather than sees a city'. Bermange envisaged a 'complete breakaway from conventional travel tales' by emphasising the location's 'sound assets':

Hearing New York [...] could be a tremendously interesting experience because, while most of us have shrewd inbred ideas of what it looks like there, what it sounds like is a mystery, and one that I would like to have a bash at solving over a 30 minute course of Home Service time. [...] If you could arrange this for me I would be grateful. Extremely.

Thomson agreed to support Bermange's venture, liaising with the BBC's New York Office without committing to any specific broadcasts of the results of Bermange's trip. Unbeknownst to Bermange, Thomson had confided that the proposed sound picture of New York should not be commissioned but 'perhaps it would be worth lending midget recording gear' as Bermange was a 'promising young writer' and artist. The gear in question was a Fi-Cord 'midget' recorder and Bermange was to be well instructed in its use. The Fi-Cord became available in 1959 and was remarkably compact, further enabling field recording, but had a reputation for being somewhat
difficult to use. By early February, Bermange had been trained to operate it: 'I think I will be able to handle it all right. What do I do now?' The answer was a test run, in London's East End.

Bermange sent Thomson a report on his trial recording, which although 'not a 100 p.c. [percent] success' meant 'at least I now know what I will be up against in New York, what I must do, and what I must not do' and had resulted in some lurid material courtesy of a group of meth drinkers:

I spent all day with them round their fire. It was a ghastly experience and cost me two quid plus cigarettes, and a lot of perspiration. Occasionally you will hear my voice croaking in the background but that, if necessary, can be wiped off. These fellows just passed the mike to one another, said a few words, or sang, or groaned, or babbled or cursed, then handed it back to me. They all had something wrong with their eyes. I think the songs sound very good indeed and typical of their condition. And the speech that begins 'This is England' is rather good too, considering the speaker spoke from a lying down position with his head in a pile of ashes and his belly shining in the sun. Perhaps you could include these items in your programme on Vagrancy. [...] If not, I would like to keep them for my own East End programme because these men seem to sum up the situation down there.

The East End test run was an important stepping stone towards the 'Inventions' and Bermange's growing interest in working with actuality recordings and everyday speech. That interest was furthered by his visit to New York. Although encountering problems with the Fi-Cord, he returned to London in late March with seven tapes of material for Thomson and a proposal:

Play the tapes in the indicated order and you will hear tell of rites involving the folding and arranging of fabrics and the application of crude pigment with a hypodermic syringe. The practitioners, all drug addicts, are known as Professional Friends. May I refer you to Aldous
Huxley's 'The Doors of Perception' and to R.C. Zzehner's 'Mysticism, Sacred and Profane.' I am formulating my own views on the recordings and would like to make a programme. I need thirty minutes, a splicing machine and radiophonic music. Can this be arranged?

The proposal is significant as it reveals Bermange's awareness of the Radiophonic Workshop and desire to incorporate its sonic possibilities in his planned radio projects. That awareness, however, would not include the work of Delia Derbyshire as she did not arrive at the Workshop until 1962.

The first half of 1961, then, was a crucial transitional phase for Bermange. The cumulative feedback from Bakewell, Esslin and Midgley, advising Bermange to conduct research into old people and their support services as well as a more sympathetic stance towards his subject matter, combined with Bakewell's plea for new ideas, the availability of the Fi-Cord, his test run in the East End and New York trip to record actuality sounds and voices, all fed into the 'Inventions for Radio'.

Enter Hornsey Old People's Welfare Council

Bermange was moving to a blend of his existing creative instinct towards the absurd and experimental with interview material. Barely two weeks after Bakewell's request for 'new ideas' and just over a month after his New York trip, Bermange pitched a project more in line with the approach taken by the 'Inventions for Radio' over two years later:

An awful lot of nonsense is talked about the problem of leisure time. The beauty of leisure is its freedom – the filling of time with what one chooses to do, if anything. This is not to deny that many people find difficulty in adjusting themselves to having an unprecedented amount of spare time, particularly elderly people who have reached retiring age. I enclose a short story for voices which deals very roughly with this difficulty. I would like to go into the subject more closely, using a combination of locality recordings, music and poetic
narrative. The piece would last 30 minutes.\textsuperscript{35}

The project went into production and, by 17 August 1961, Bermange had delivered two tapes of material. At this stage, Bermange was still not clear what to do with the recordings, suggesting they 'will be of little use in themselves' beyond notes that could be made and that he was moving towards the use of a professional actor, 'like Hugh Burden', to provide a spoken narrative: 'a sober voice cropping up now and again to put forward a fact, a figure of what you will'.\textsuperscript{36} The spoken narrative would not feature in the 'Inventions' but of direct relevance to their eventual content was the source of Bermange's material for this earlier production: Hornsey Old People's Welfare Council. Bermange requested 'some kind of payment, however small' be sent to the Welfare Council and noted that he would be using the Fi-Cord to record interviews with eight people the following Wednesday afternoon at the Welfare Council offices, 'singly, and not at once'.\textsuperscript{37} This initial collaboration with Hornsey Old People's Welfare Council resulted in \textit{Freedom Hours}, listed as a 'programme of recordings in which old people talk about the way they spend their time' and broadcast on the Home Service on 20 July 1962 with the credit 'arranged by Barry Bermange' and produced by David Thomson.\textsuperscript{38}

By conducting interviews at Hornsey Old People's Welfare Council, Bermange had clearly taken on board the advice from Bakewell, Esslin and Midgley about the need to deepen his knowledge and understanding of the actual experiences of old people and their available support. The choice of the Welfare Council at Hornsey also provided Bermange with an organisation that had acquired a positive reputation for its services for senior citizens. The 1962 report by the Medical Officer of Health for the Borough of Hornsey, noted that the work of the Old People's Welfare Council was well known as an example of good practice. That practice included 8000 home visits a year, 3000-4000 interviews at the Council's office, organising holidays and sea-side day trips, Christmas parcels, arrangements to find jobs for retired people and a meals centre at the Haringey Boys' Club.
where cooked meals were provided three times a week.\textsuperscript{39}

The experience of working on \textit{Freedom Hours} with Bermange had clearly been a rewarding one for David Thomson and, over a month before \textit{Freedom Hours} was broadcast, he was already proposing another collaboration with Bermange for the Home Service, this time on the subject of street entertainers, broadcast that December as \textit{Living on a Rainbow}:

By means of actuality recordings we would get them to describe their lives and personal problems, relationships with police and the public, also their personal family backgrounds etc., and their opinions. Recordings of their acts would be included.\textsuperscript{40}

The anonymous handwritten comments on Thomson's proposal were concise but enthusiastic and indicate that Bermange and Thomson were establishing a recognised collaborative partnership as producer and artist: 'I recommend this. Thomson & Bermange would give it a distinctive quality'.\textsuperscript{41}

By now, Bermange's stock had risen considerably at the BBC and his reputation beyond was burgeoning. His dramatic writing for the BBC was finding more success, in particular \textit{Nathan and Tabileth} (1962), yet another play about old age but one which, as Robin Midgley described, was 'very well observed and for once, not over stylized […] I think this really could be quite splendid stuff and Barry certainly deserves to have something done on the Third, and at last I think he has written one that does really deserve it.'\textsuperscript{42}

With the broadcast of \textit{Living on a Rainbow}, Bermange had accumulated considerable experience in conducting interviews and the core elements of the 'Inventions for Radio' were nearly all in place: Bermange's long-standing thematic concern with the experience of old age, the blend of Bermange's affinity for the poetic, absurd and experimental with more informed research and the
use of interviews emphasising everyday speech, a fruitful partnership with David Thomson and relationship of trust with Hornsey Old People's Welfare Council as well as an interest in incorporating music from the BBC Radiophonic Workshop. The vital element still to be confirmed was the identity of the Radiophonic Workshop staff member but by late summer 1963 that was resolved: Delia Derbyshire was attached to a project titled provisionally 'Mid-Century Attitudes: Dreaming', envisaged as 'a programme of actuality speech and electronic sound'. The project was described as being 'formally organized in a musical sense', drawing on notes from 2 March 1963, with a proposed structure that was 'to get more fragmented and contrapuntal towards the climax' and feature a careful relationship between key phrases in the script and musical phrases of the same pitch and rhythm as well as the use of silence 'to frame a particularly meaningful phrase or statement' and the 'deliberate placing of exquisitely formed sounds'. The first 'Invention for Radio' was officially underway.

**Editing, Scoring, Mixing and Authoring the 'Inventions'**

As mentioned at the outset of this article, the 'Inventions' have traditionally been attributed to Barry Bermange as the sole author. The Delia Derbyshire Archive at the University of Manchester has enabled, however, a more complex picture of the 'Inventions' authorship to emerge. The archive contains substantial material on the first two 'Inventions', *The Dreams* and *Amor Dei*, with extensive handwritten notes by Derbyshire on the development of the former in particular and reels of make-up elements and work-in-progress cues of the music for the latter. Drawing on this material, Louis Niebur and Teresa Winter have contested persuasively the notion of Bermange being the sole 'author' of the 'Inventions'. In an extended analysis of *Amor Dei*, Niebur demonstrates how Derbyshire's notes 'in which she has indicated fairly precise musical timing' contradict Bermange's claims that 'I'm at the controls of the music'. Similarly, Winter, in her close analysis of *The Dreams*, complicates the repeated statement that the voices from the interview recordings were edited solely by Bermange:
Notes from Derbyshire's archive suggest that [Bermange] did not work alone on this part of the process either […] The final result […] was organized […] into the most common themes that repeatedly appeared in conversation [being chased, falling, being under water etc] Using these scripts, the two of them listened back to the recordings, splicing and organizing the tapes into […] five taxonomies on 19 August. One typed document suggests that the next day they listened to the categories to 'plan, shape, order' and roughly edit, before fine editing at the end of the month. There are also notes in her handwriting regarding the detailed editing of the voices.46

The available evidence certainly points to Derbyshire having a more considerable role in the 'Inventions' than the creation of the music alone. Her handwritten notes from 22 July 1963, before the editing sessions began in August, contain observations on the importance of the interviewees' words underlined by the placing and shaping of phrases and use of music and silence:

slow moving, fading to fast cutting – use of repetition – same thing said again with more feeling – same thing repeated – louder, cut faster? Same idea said by different person […] contrast between ordinary everyday narrative […] without rhythm, shapelessly, and strange, obsessive, dreamlike speech […] into rhythm.47

In the same document, Derbyshire writes how the music needs 'to provide coloured breathing silences for listener to reflect in, for speaker to apparently think in, for speaker to disappear into' alongside notes about using modulated sine tones and white noise, 'intensity changes in heart beat rhythm' and frequency changes in 'breathing rhythm'.48 Whether these notes are Derbyshire's own thoughts, transcriptions of Bermange's ideas or a combination of the two, the document is compelling evidence of Derbyshire being involved closely in discussions about the arrangement and
editing of the voices alongside the music. That notion is reinforced by an undated note from Desmond Briscoe in which he states that he would like to discuss 'Delia's contribution to [The Dreams], apart from the obvious electronic track'. It is perhaps due to Derbyshire's increased role that Radio Times described the 'Inventions' as being by Barry Bermange 'arranged in conjunction' and 'collaboration' with the BBC Radiophonic Workshop: an indication, as far as was possible within BBC policy at the time, that this was a creative partnership rather than a more typical instance of a near finished programme being handed over for the addition of music and sound.

Brian Hodgson, who worked alongside Derbyshire in the Workshop, has stated unambiguously that Derbyshire contributed more to the 'Inventions', including the cutting and process of pairing phrases from the interviewees' responses. Similarly, Dick Mills, interviewed for the 2010 Radio 4 documentary Sculptress of Sound, claims:

Barry Bermange would never have said 'let's repeat certain phrases here and there', Delia picked up on each of those characters' own rhythms and, you know, juxtaposed them to give her the argument.

Mills' comments do need to be qualified. As we have seen, Bermange had already acquired considerable experience in working on radio features based around edited arrangements of interview material, prior to his collaborations with Derbyshire. As well as Freedom Hours and Living on a Rainbow, Bermange had also overseen Times Remembered, broadcast by the Home Service on 26 August 1963 as The Dreams was being edited. Times Remembered was described in Radio Times as 'a programme of recordings in which old people remember the holidays of their childhood and compare them with those of today' with the recordings listed as being arranged by Bermange and music by the Radiophonic Workshop. Bermange's existing experience then and his sensibility as a dramatist was such that it would not have been unlikely for him to make suggestions about repetitions of phrases but, nonetheless, there is clear evidence of Derbyshire having a greater
role in the creation of the 'Inventions' than has often been officially and publicly acknowledged.

**Reception – High Praise and Hostile Critique**

*The Dreams* was broadcast on Sunday 5 January 1964 at 7.15pm on the Third Programme and repeated on 15 January at 8.00pm. The internal response was very positive and Derbyshire received a memo from the BBC's Head of Features, Laurence Gilliam, praising her contribution:

> I would like to express my admiration and thanks for the excellent radiophonic soundtrack you provided for this programme. The whole effect was extremely fresh and evocative, making a first-class and original piece of radio. You will be glad to hear that Third Programme were extremely appreciative of this pilot programme, and have, as a result, commissioned three further 'inventions' by Barry Bermange.  

Critical reviews of *The Dreams* tended to be more measured. *The Guardian* noted, without mentioning Derbyshire directly, that:

> The tapes were blended with admirable softness and skill, so that the bemused, repetitive, floating phrases did now and then achieve the numbness of a dream; and the Radiophonic Workshop put in only the discreetest accompaniment. It was ingenious, rather than inspired; but it did arrest the ear, and force recognition at a far more intimate level that radio usually disturbs.

The reference to the Radiophonic Workshop providing 'only the discreetest accompaniment' is indicative of many critical responses to the early years of the Radiophonic Workshop which expressed dissatisfaction with a perceived tendency towards obtrusive noise and 'horrible emanations'. The sense that Derbyshire's work for *The Dreams* was a welcome change in
direction from the Radiophonic Workshop was furthered by the *Northern Echo*:

The Dreams was an interesting piece of pure radio. The voices of people recounting their dreams were edited with a rhythm that was evocative of the dream state and approached poetry. The Radiophonic Workshop's contribution was just right – the monster is being tamed.\(^{55}\)

The BBC's Audience Research Report for *The Dreams* revealed much more mixed responses, with around half of the 151 questionnaires providing 'singularly unenthusiastic' feedback.\(^{56}\) Negative reactions dismissed *The Dreams* as a 'pretentious mess' with the interwoven voices described as 'unpleasant and totally ineffectual' and expressed frustration with the repetition of particular vocal phrases and the 'whines and whistles' of the music being reminiscent of science fiction films, all combining in an 'unrealistic, wholly futile, almost inane exercise'.\(^{57}\) The report acknowledged that 'there were others, and in fairly large numbers' who had felt that, although *The Dreams* had been a failed experiment, it was a 'brave try' at an 'exciting idea' which was 'full of potential' with the use of repetition in the speech being 'compelling and intriguing to begin with'.\(^{58}\)

The overall appreciation index for *The Dreams* was 39: significantly below the average of 65 for Third Programme features at that time. That figure was also much lower than earlier comparable pieces such as the 66 scored by the 1955 'radiophonic poem' *Night Moves* with music by Humphrey Searle or the 56 for 1957's *Private Dreams and Public Nightmares*. Similarly, the Radio Ballads, which were also narrator-less combinations of music and everyday speech but far less abstract and experimental in their form, scored, as a whole, much higher: the first six Radio Ballads, broadcast across 1958-1963, scoring 61, 67, 69, 65, 50 and 60. The subsequent 'Inventions' received higher audience reaction index figures than *The Dreams* – 49 (*Amor Dei*), 43 (*The After-Life*) and 51 (*The Evenings of Certain Lives*). Although *Amor Dei* still received substantial criticism from many
respondents to the BBC questionnaire, there was also fulsome praise, not least for Derbyshire's contribution: 'Brilliant technique in tape editing and use of that “aery” electronic music'; 'The final music was beautiful – superbly done and with an appropriate timelessness'.

A recurring complaint across the BBC audience reports on the 'Inventions' was the perceived poor quality of the interviewees' voices and the content of their responses. That negativity is perhaps not so surprising given the narrow sample range and privileged nature of many Third Programme listeners. The 1964 edition of the BBC Handbook referred to the Third Programme as being 'intended for the significant minority whose tastes, education, and mental habits enable them to take pleasure in close and responsive listening to broadcasts of artistic and intellectual distinction' and that inevitably resulted in a notable proportion of listeners with elitist attitudes toward class and culture. The most hostile and dismissive comments were received for Amor Dei and The After-Life with the repeated view that some of these voices were inadequate and inappropriate for discussions of such profound topics as the existence of God and the possibility of life after death. It is telling that the report on The Evenings of Certain Lives, in which senior citizens discuss their experience of getting older, makes no reference to the accents and dialects of the interviewees being problematic, perhaps because the interviewees were not felt to be discussing matters outside of their experience, education and comprehension. The voices in Amor Dei were variously dismissed as 'moronic mumblings' and 'a lot of senile, inarticulate old women' (the interviewees are, in fact, more diverse) with 'a string of cliches spoken by people who cannot put their feelings into words' resulting in 'a foreground patchwork of inane contributions from a group of self-opinionated nonentities'. The negative reactions to The After-Life made the factor of social class and regional or non-received pronunciation accents more explicit:

The voices were unattractively flat and monotonous and the effects wearisome [...] The speakers in some cases sounded almost uneducated and their 'harsh' voices, it was claimed,
ruined 'what little effect' their ideas might otherwise have had: in the words of a Clerk 'the accents, the phraseology, the stumblings, the dropped “g” and the disjointed replies were most displeasing'. These factors, combined with the 'weird' electronic effects ('like somebody moaning into a watering-can') made most distasteful listening, according to a large number who failed to see any meaning behind this 'ghastly noise'.

There is a striking contrast with the audience reports for the Radio Ballads and *Songs of the Durham Miners* (1964), the latter broadcast on the Third Programme just three weeks after *The Dreams*. *Songs of the Durham Miners* received an appreciation index of 71, above the Third Programme average of 65 and far above the 39 for *The Dreams*. The audience reports in these cases tended to provide more sympathetic reactions to the regional accents and working class voices as they were considered authentic and within their expected context, unlike the voices in the 'Inventions': 'the real thing' 'deriving directly from the experiences and living conditions of the people' with a 'definite North of England flavour' and a welcome opportunity 'to have authentic local voices for a change'. It seemed that for many of these respondents, regional and 'uneducated' voices were acceptable when they were contained within their milieu even though, in the case of *Songs of the Durham Miners*, one sixth of the sample audience found the dialect of the songs 'completely baffling' but not so much to register a negative rating. The motorway workmen featured in *Song of a Road* (1959), the second Radio Ballad, were generally praised for their authentic speech and variety of accents. Similarly, the award-winning third Radio Ballad, *Singing the Fishing* (1960), was praised for its 'genuine' insight into the lives of herring fishermen with the majority of respondents approving of 'the pungent, earthy, uninhibited contributions of the actuality speakers' and 'their rich dialects (though the accents evidently defeated a small number)'. By comparison, there was little praise for the 'authentic' and 'local' accents audible in the 'Inventions', particularly the first three. One exception was a response to *Amor Dei* which recognised it as being 'not a symposium of views on God […] but a study in human voices and the language of ordinary
people' with praise from other respondents for the feature's 'collection of sincere and often moving statements of simple belief'.

Working class voices and regional accents had been featured sympathetically on BBC radio long before the 'Inventions' and Radio Ballads, especially in the radical work of Olive Shapley for the BBC North Region in the late 1930s with features like *Miners' Wives* (1939) and *The Classic Soil* (1939), but these tended to be infrequent instances and, again, emphasised the views of working class people on their immediate socio-economic situation. One of the quietly subversive qualities of the 'Inventions for Radio', however, is the fact that they integrate the voices, thoughts and experiences of people from a mixture of socio-economic and educational backgrounds on philosophical concepts that run across boundaries of class. This quality is most evident in the first two 'Inventions' and perhaps at its most subversive in *The Dreams* where the accounts of the interviewees are edited together in such a way that the feature creates the impression that these people are participating in a shared collective dream. Bermange requested that the interviewees relate the memories of their dreams in the first person as if they were providing a running commentary on the dream. Edited together and grouped around five movements of core dream categories (running away, falling, landscape, underwater and colour), *The Dreams* suggests that, irrespective of age, gender and socio-economic background, this cross-section of British people share similar fears, fascinations and desires or, in the case of *Amor Dei* and *The After-Life*, beliefs (and non-beliefs). There is a sense of social mobility – or a dissolution of social boundaries – that corresponds with the decline of deference that became increasingly evident in British society and culture during the 1960s. The 'Inventions' can thus be seen as feeding into what John Kirk refers to as 'the developing myth of classlessness' and the notion of the 'affluent society' which 'had become hegemonic, accepted by many on both Left and Right' by the late 1950s. *The Dreams* was broadcast in early 1964 as campaigning for the next General Election gathered momentum and the 'Inventions for Radio' anticipated the incoming Harold Wilson government. As Selina Todd notes,
Labour and Wilson downplayed his career as an Oxford scholar and instead made much of his background as 'a northern grammar school boy in close touch with the needs of his [working class] constituents' unlike the aristocratic Conservative leader, Alec Douglas-Home. In this respect, as well as the 'Inventions' poetic collage that brings together and moves back and forth between voices from different socio-economic backgrounds woven into the same audible expressions, Wilson and the new Labour government also paralleled the social mobility that had enabled Delia Derbyshire to move from a working class background in Coventry, via a scholarship to study at Cambridge, to a career at the BBC Radiophonic Workshop. Wilson's affirmation of a 'meritocracy based on planning and science' and the 'white heat of technology' was echoed in the white noise, oscillators and tape manipulation of Derbyshire's sonic practice.

The final 'Invention', The Evenings of Certain Lives, was broadcast in September 1965 to enthusiastic reviews. The Sunday Telegraph celebrated the 'enormously moving and effective' blend of 'timing, sounds, and the juxtaposition of voices fading and flowing, in talk that is neither fantasy nor sentimental fiction, but rooted in reality'. The Listener was similarly effusive, describing the 'unforgettable' repetitions of words and electronic heartbeats in a programme which 'essayed small tragedy with the force of poetry or drama and I shall listen to its repeat'. Those repeats took place shortly after each 'Invention's initial broadcast, then again in 1966 followed by the first three being repeated on BBC Radio 4 in 1977 with The Dreams repeated on BBC Radio 3 in 1993. Even before the broadcast of the second 'Invention', there was a sense that the work was a 'prestige' example of the Radiophonic Workshop's capabilities. Derbyshire represented the Radiophonic Workshop at the 1964 Congress for Experimental Music in Berlin with an eight minute extract from The Dreams and several other Derbyshire works (including Doctor Who) forming part of the presentation that, as Teresa Winter surmises, showcased 'exceptional examples of their most experimental work […] and the best that they could produce'. That sense of the significance of the 'Inventions' was further evident when Derbyshire and Brian Hodgson organised
an event on 25 March 1965 titled 'Serious Publicity for the BBC Radiophonic Workshop', which sought to counter the more 'gimmicky' publicity generated by the coverage of Doctor Who. 'Selected members of the responsible press' were invited to attend the Workshop when work was in progress on The After-Life with both The Dreams and Amor Dei included in a short list of the Radiophonic Workshop's significant achievements. Desmond Briscoe would include The Dreams (along with the Doctor Who theme and Brian Hodgson's Dalek voice treatments) in a 1966 demonstration tape for visitors to the Radiophonic Workshop and listed each 'Invention' in an international audit, compiled by Hugh Davies in 1966, of all works for magnetic tape ever composed, for the Parisian Group de Recherches Musicales.

Legacy, Influence and Kindred Spirits

Derbyshire was clearly proud of the 'Inventions' and re-purposed material from them in both her BBC and freelance work. The 'underwater' movement from The Dreams provided the basis for one of Derbyshire's most famous pieces, 'The Delian Mode', first released on the 1968 album BBC Radiophonic Music, and also surfaced in her music for an installation on the West Pier at the first edition of the Brighton Festival in 1967. A fifteen minute extract from Amor Dei was accompanied by visual projections from Hornsey College's Light/Sound Workshop at a 1966 concert of electronic music and visual art, held at the Watermill Theatre, organised by Derbyshire. Re-purposed elements of Amor Dei would appear in both the third and fourth 'Inventions for Radio' as well as Derbyshire's music for Peter Hall's 1967 Royal Shakespeare Company production of Macbeth, the 'Poets in Prison' event at the 1970 Festival of the City of London, John Berger's Ways of Seeing (1972) and the 1972 factual series Tutankhamun's Egypt, one of her final assignments at the BBC. These repeat broadcasts, playbacks at live events and reconfigurations in new productions, helped ensure that the 'Inventions' and Derbyshire's music for them reached a far wider audience than the typical radio feature of that time, especially those on the more exclusive Third Programme.
Barry Bermange also revisited the 'Inventions'. In March 1966, he wrote to Briscoe asking about the possibility of the 'Inventions' being released commercially. Briscoe confirmed that the 'Inventions' continued to generate comment and interest and that he would raise the possibility with the BBC's fledgling Radio Enterprises at the first opportunity but nothing came of the suggestion. Bermange had other plans for the 'Inventions' despite the fact that, as he put it, 'they were locked away in the archives and vaults – a massive radio sub-culture, never to be heard of'.

Bermange acknowledged that, although the 'Inventions' were 'designed for pure sound, the inner ear,' the next stage in their evolution was theatre and a group listening, presented at the ICA and Planetarium in 1969 as his 'Darkness Theatre'.

*The Times* review reflected that the Planetarium performances were 'an unusual experience' and that 'the direct transfer of broadcast work into an auditorium must be almost unheard of', although Derbyshire had presented extracts from the 'Inventions' in concert halls and theatre spaces as discussed earlier. Acknowledging that the original radio broadcasts were 'some of the most remarkable and imaginative productions to be heard in years,' *The Times* gave a mixed review of the live event but noted the impact of the Planetarium '[switiching] on the heavens' and the cosmos rising and wheeling above the audience for the playback of *Amor Dei* and *The After-Life*.

For Bermange, 'Darkness Theatre' was 'a step towards a physical realization' that might include groups of actors and dancers.

At the same time, Bermange continued to present the 'Inventions' in fresh contexts on radio with German and Slovenian versions of *The Dreams* (without Derbyshire's music), broadcast in 1969 and 1976 respectively, and a complete set of all four 'Inventions' recreated for Dutch radio in 1983. The Dutch 'Inventions' featured the voices of Dutch actors performing translated transcriptions of the original interviewees' responses set to augmented versions of Derbyshire's cues in a stereo field, with Derbyshire once more uncredited (the lack of credit for Derbyshire in the 1983 Dutch editions, overseen by Bermange, is surprising and does not reflect well on Bermange given that Derbyshire's role was acknowledged on air in the 1977 BBC repeats and the BBC policy during the 1960s which
required individual Radiophonic Workshop personnel to be uncredited no longer applied). The Dutch versions are fascinating – the use of transcriptions of the original interviewees' responses in effect resulting in a form of verbatim radio – but the decision to employ professional actors to perform the transcribed text, instead of recording new interviews on the same themes with members of the public in Holland, dilutes the socio-political potency of the concept audible in the BBC editions with their blend of accents, dialects and speech patterns from everyday people. In this respect, both Derbyshire and Bermange were open to re-inventing the 'Inventions' and brought them to new platforms and audience experiences beyond the radio in Britain.

The influence of the 'Inventions for Radio' is not just detectable then in later instances of the radio feature, such as Bermange's own S.O.S broadcast in 1978. There are echoes of the 'Inventions' and their blend of electronic music with everyday voices reflecting on weighty themes and philosophical subjects in Pink Floyd's The Dark Side of the Moon (1973). Pink Floyd were familiar with the Radiophonic Workshop and Delia Derbyshire in particular, having been involved with the same environment on the West Pier at the 1967 Brighton Festival, making use of similar early synthesisers such as Peter Zinovieff's VCS3, referencing the Doctor Who theme on tracks like 'Sheep' from Animals (1977) and even performing it openly in their live shows. On The Dark Side of the Moon, the segue from 'Money' into 'Us and Them' as well as that track's latter half make particularly memorable use of fragments of interviews with a mixture of crewmembers, engineers, musicians and the doorman at Abbey Road studios, Gerry O'Driscoll, whose interview provided the band with the album's title. There is no explicit evidence of the conscious influence of the 'Inventions' on Roger Waters' decision to incorporate interview material of everyday speech 'about human experience', but the substantial shared affinities between Derbyshire and Pink Floyd make the 'Inventions for Radio' and The Dark Side of the Moon kindred spirits at the very least. 79

The 'Inventions' anticipate the integration of extracts of interviews with everyday people, looped
and arranged into rhythmic patterns as part of a music composition in works like Steve Reich's *Different Trains* (1988) but there is a definite and direct influence in the music of the late English composer, Jonathan Harvey (1939-2012). Harvey knew Derbyshire very well during their time at Cambridge. The two played cello and piano together often, including publicly, and travelled to Paris and Brussels where they experienced Le Corbusier's Pavilion at the 1958 World Fair and heard Edgard Varêse's *Poème Électronique*, a pivotal moment in their understanding of electronic music. Harvey would go on to become a major composer and, for Julian Anderson, the equal of Karlheinz Stockhausen 'as a pioneer in the genre of electro-acoustic composition, in which he worked more consistently than any other concert composer in Britain'.

A period of time at IRCAM in Paris, one of the leading research facilities for electronic and electro-acoustic music, resulted in *Mortuos Plango, Vivos Voco* (1980), which contrasts manipulations of the sound of the tenor bell at Winchester Cathedral and the voice of a chorister (Harvey's son, Dominic). The resynthesised sound of the tenor bell is evocative of the bell-like quality and subsequent transformation of the resonances generated by the sound of a metal lampshade being struck, one of Derbyshire's favourite sound sources and a prominent element in her music for *The Dreams*. More similar, however, is the manipulation of the recording of a boy chorister, which parallels Derbyshire's manipulation of the recording of the chorister John Elwes, singing the advent antiphon *Rorate Coeli*, that provides the basis for the entire score of *Amor Dei*. The sonic parallels between the work of Derbyshire and Harvey are not so fanciful. In 2008, I was contacted by Harvey, enquiring if the Delia Derbyshire Archive contained a recording of a piece by Derbyshire which had haunted him since he had first heard it in the 1960s – that piece was *Amor Dei*. It is not so surprising to discover that *Amor Dei* would have such an impact on Harvey given his deep interest in mysticism, spirituality and long history of composing forms of sacred music, including numerous works for cathedral choirs and pieces inspired by Buddhist thought. Harvey acknowledged that this 'wonderful piece' and Derbyshire's 'extraordinary' music for it 'had an influence on my own music'.

Having been reacquainted with the piece, Harvey reaffirmed his admiration for its music: 'Delia
captured a very poetic and intimate feeling with these sounds. I think they are quite capable of
haunting one, as they did me, for many, many years, such is their psychic 'truth'… The
biographical essay for Jonathan Harvey on the IRCAM website identifies key influences on his
music and compositional practice – Benjamin Britten, Arnold Schoenberg, Milton Babbitt and
Karlheinz Stockhausen – but it might not be over-stretching the case to suggest that, given her
presence in Harvey's fledgling years as a composer and musician as well as her enduring presence
in his musical imagination via Amor Dei, Delia Derbyshire could be added to that group as well.

Conclusion

The absence of Delia Derbyshire and the 'Inventions for Radio' from accounts of institutions, genres
and individuals, is in part a symptom of the wider issues around the access to archive radio. The
inaccessibility or unavailability of substantial amounts of pre-digital broadcasting is one of the
major problems facing accounts of the history of British radio. Writing in 2010, Simon Rooks, the
current Head of Music, Image and Document Collections at BBC Archives, has discussed how
today's access to BBC audio archive material 'is steadily becoming more of an online experience
than a visit to a monolithic building [...] and the mission to make as much of the BBC Archive as
available as possible has never been articulated more clearly or more strongly'. That mission,
however, cannot provide access to material that no longer exists. Prior to the late 1980s, broadcast
programmes were frequently disposed and selectors employed to identify key works or extracts
deemed worthy of preservation within what was once referred to as the BBC Sound Archive. Even
then, access to historical material that has been preserved is often limited. In December 2011,
delegates from the BBC (including Rooks), the British Library and Ofcom formed an advisory
committee to address this issue following a summit meeting organised by Bournemouth University
on UK Radio Archives. The summit acknowledged the challenges facing researchers, including the
'brick wall of non-access' and the 'lack of awareness among researchers about what material is
available and where'. Those issues have begun to be addressed with the British Library's Save Our
Sounds and Unlocking Our Sound Heritage programme, launched in 2017, a major initiative in that respect but problems of access and awareness remain.

Where the 'Inventions' are concerned, those problems are not just about the debatable matter of canon formation. The influence of the 'Inventions' has reached beyond the radio feature or indeed the medium of radio. The 'Inventions' foreground and document the thoughts and experiences of people from demographics typically excluded from official histories and the discourse on subjects such as the existence of God and the dream condition. That exclusion of working class voices and experiences is also extended to the historical tendency to marginalise and neglect the work of Delia Derbyshire, a female practitioner from a working class background, active in forms of composition (television and radio theme tunes) often perceived as being less worthy of serious attention.

Reflecting on the portrayal of the working class prior to the late 1950s, the producer Tony Garnett, a frequent collaborator with Ken Loach on works such as *Cathy Come Home* (1966) and *Kes* (1969), has observed that:

> The representation of the working class was from the outside; created by people from educated middle class, London and Home Counties biased and mainly based on second-hand stereotypes rather than on first-hand observation […] The working class were patronised as criminals and comic relief.\(^{85}\)

Although, as Sheila Rowbotham and Huw Beynon note, films, plays, radio and television programmes of the late 1950s and early 1960s […] appeared to mark a decisive break in the representation of class [pulsating] with anger and a sense that change for the better was in the offing, the actual voices of working class people were still heard in such a way that what they were allowed to discuss on national radio and television was often limited.\(^{86}\) John Kirk, drawing on the comments of James Kelman that the working class in English literature… were confined to the
margins, kept in their place… You only ever saw them or heard them. You never got into their mind,’ suggests that although ‘working-class figures emerge’ in the English canon, they do so through ‘a range of strategies which deny their full humanity’. It is that absence or marginalisation of the stories of working class people from official and broadcast accounts and histories of life in Britain that Selina Todd has sought to overturn in her 2014 study of the experiences of British working class people across the twentieth century. By placing the thoughts of working class people in a shared soundscape with the thoughts of people from other socio-economic backgrounds, on subjects addressing what are often our most intimate beliefs, fears and desires, the work of Bermange and Derbyshire on the 'Inventions for Radio' brings those thoughts out of the margins and provides a compelling insight into the minds of British people in the mid-twentieth century.

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1 Throughout the article I have formatted the title of individual 'Inventions' in italics e.g. *The Dreams* and referred to the overall set as 'Inventions for Radio' or 'Inventions' using inverted commas. The term 'Invention for Radio' was printed initially in *Radio Times* programme listings without the use of inverted commas. At first, the phrase seems to have been used as an unofficial description applied to the individual programmes but, over time, it became accepted and used as the collective name for the overall strand or set of works.


7 Clive Blackburn, interview by David Butler, March 15, 2018.

8 Programme listing for *The Dreams, Radio Times*, January 2, 1964, 19; programme listing for *Amor Dei, Radio Times*, November 12, 1964, 37.


11 Brian Hodgson, interview by David Butler, August 12, 2015.

12 Desmond Briscoe to Delia Derbyshire, note, 19 October 1996, Delia Derbyshire Archive, University of Manchester Library.


15 Street, *British Radio*, 95.


17 Street, *The Poetry of Radio*, xii.


19 Mollie Greenhalgh to Assistant Script Editor, Drama (Sound), memo, 24 August 1956, Scriptwriter/Bermange, Barry/File 1a/1956-1959, BBC Written Archives Centre.

20 Barry Bermange to Eric Ewens, letter, December 1956, Scriptwriter/Bermange, Barry/File 1a/1956-1959, BBC Written Archives Centre.

21 Mollie Greenhalgh to Assistant Script Editor, Drama (Sound), memo, 3 January 1957, Scriptwriter/Bermange, Barry/File 1a/1956-1959, BBC Written Archives Centre.

22 George MacBeth to Barry Bermange, letter, 12 February 1957, Scriptwriter/Bermange, Barry/File 1a/1956-1959, BBC Written Archives Centre.

23 Robin Midgley to Assistant Script Editor, Drama (Sound), memo, 10 January 1957, Scriptwriter/Bermange, Barry/File 1a/1956-1959, BBC Written Archives Centre.


27 Martin Esslin to Script Editor, Drama (Sound), memo, 6 March 1961, Scriptwriter/Bermange, Barry/File 1b/1960-1962, BBC Written Archives Centre.


29 Barry Bermange to David Thomson, letter, 10 January 1961, Artist/File 1/Bermange, Barry/1960-1962, BBC Written Archives Centre.

30 Bermange to Thomson, 10 January 1961.


33 Barry Bermange to David Thomson, letter, 28 February 1961, Artist/File 1/Bermange, Barry/1960-1962, BBC Written Archives Centre.

34 Barry Bermange to David Thomson, letter, 13 April 1961, Artist/File 1/Bermange, Barry/1960-1962, BBC Written...
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