# Chapter 13 Roberto Gerhard's BBC Sound Compositions

Gregorio García Karman

This chapter examines the use of manipulated tape in Roberto Gerhard's sound compositions for the BBC, with a particular focus on the circumstances surrounding the production of those works and the development of the composer's craft. This is achieved through an investigation of the pertinent primary sources, which include official records, correspondence, production materials and sound recordings – including notably the BBC Radiophonic Workshop files and the Gerhard Tape Collection. Pivotal works such as *A Leak in the Universe*, *Asylum Diary*, *Lament for the Death of a Bullfighter* and Symphony No. 3 'Collages' are discussed with specific reference to Gerhard's concept of 'sound composition' and the most prominent features of the composer's technique in the medium of magnetic tape.

# Genesis of a radiophonic composer

Soon after his arrival in Cambridge, Gerhard was employed by the BBC as a writer of musical features on Spanish themes for the Latin American Service. At that time, radio was essentially a live medium, and scores were in short supply during the Second World War, so Gerhard arranged numerous items, including vocal numbers from Zarzuela, songs and his own ballet music Allegrias (1942) to illustrate his talks. Gerhard was commissioned to compose original music for a number of Latin American features including Cristóbal Colón (1941) and El día de la raza (1942), and two literary features by Salvador de Madariaga, broadcast in commemoration of the discovery of America. Gerhard's most significant BBC score during the war was that for Eric Linklater's seven-episode series Adventures of Don Quixote, which was broadcast by the home service in 1944. Gerhard was pleased with Linklater's work and the positive reaction the series received. However, his correspondence with the Deputy Director of Music of the BBC, Kenneth Wright, reveals that he was also feeling straitjacketed by such commissions for incidental music:

As an artist I do feel indeed like a camel who, having drunk his fill, can now set forth for a very long journey. That's what I intend to do, before long I hope, and

• I trust the moisture will keep me going for a while with the more sober kind of work I'm looking forward to. 1

When one year later the Latin American Service sounded Gerhard out about a commission for a considerable amount of original music for new features, Gerhard contentiously refused to negotiate the fees in advance. The composer longed for 'exercise out-of-doors, so to speak, where no choreographer or producer is pulling at your sleeves and asking you to go that way in particular and for so and so long'. Adventures of Don Quixote would be Gerhard's last radio feature for the next eight years.

#### The twelve-note stigma

During the Second World War Gerhard had great difficulty having work accepted by the BBC, unless it fitted the stereotype of Spanish nationalism. The Music Department's reading panel considered Gerhard's Schoenbergian Wind Quintet (1928) 'advanced ... extremely difficult and ... ugly'; two years later, the Symphony 'Homenaje a Pedrell' (1941) was discreetly turned down, and only towards the end of the war the Violin Concerto (1942–5), regarded as too advanced for the Promenade Concerts, was recognized as being 'interesting for broadcasting'. The difficulties in finding acceptance as contemporary composer by the BBC and the 'strongly conservative taste's of programmers were somewhat relieved by the launch of the BBC Third Programme in September 1946, which offered a new outlet for serious music, drama and in-depth discussion. In 1947 the Third Programme broadcast Gerhard's Wind Quintet together with *Dances from Don Quixote* and Gerhard received a commission for the opera *The Duenna*, achieved with the support of Stanford Robinson and George Barnes (Controller of the Third Programme 1946–8).

According to the account by Humphrey Carpenter,<sup>6</sup> the Third Programme was afflicted by a lack of direction during its first few years. There were opportunities for the younger generation, like John Lowe's 1947 series *Contemporary British* 

Composers, featuring composers such as Lennox Berkeley, Antony Hopkins, Edmund Rubbra and Humphrey Searle. On the other hand, those considered to be followers of Schoenberg were often turned down. Under the influence of Steuart Wilson (Head of Music, 1948–50) and the musically conservative Harmann Grisewood (Controller of the Third Programme, 1948–52) *The Duenna* was almost cancelled. It was only through the advocacy of Gerhard's close friend Stanford Robinson, then Head of Opera, that the work was retained. Maurice Johnstone (Head of Music Programmes, 1953–60) can also, in part, be held responsible for the narrow horizons of the Third Programme. Though Johnstone had enthusiastically supported the *Cancionero de Pedrell* in 1945, as a conservative who dismissed the work of the Second Viennese School<sup>8</sup> he turned down Gerhard's request for a public performance of both the Violin Concerto and Symphony No. 1.9

The adverse situation of those years — marked by strong national and anti-German sentiments that underpinned the principles of post-war music broadcasting — led Gerhard to consider emigrating to the USA. Nonetheless, between 1946 and 1954 the BBC transmitted a number of noteworthy studio performances of his work. Besides the premiere of *The Duenna* in 1949 and first broadcast performances of the *Capriccio*, the Violin Concerto, the Concerto for Piano and String Orchestra and *Pedrelliana*, the Third Programme also transmitted the *Cancionero de Pedrell*, the suite from *Pandora*, *La fulla i el núvol* and *Ventall*, and a revised version of *The Duenna*, which was revived in 1951. The following year Gerhard was invited to give a speech on 'Schoenberg and Berlin' in commemoration of his teacher's death.<sup>10</sup>

In the early 1950s a number of composers, including Gerhard, began to be more vocal about the policy direction of the Music Department's panel system. Richard Howgill (Controller of Music, 1952–8) decided that the Music Department should be able to schedule performances without reference to the panel, whose members had already started to question whether or not Gerhard – by now, a reputed professional composer – should bypass the reading panel. In 1954, *The Heritage of Spain*, a survey of Spanish music for the Third Programme, edited and presented by Gerhard, would mark a turning point in the number of collaborations between the composer and the BBC. That year the Third Programme also broadcast *Celestina* 

Roberto Gerhard, letter to Kenneth Wright, 6 July 1944, WAC, Roberto Gerhard, File I 1941–9.

Roberto Gerhard, letter to Kenneth Wright, 18 July 1944, WAC, Roberto Gerhard, File I 1941–9.

<sup>&</sup>lt;sup>3</sup> Herbert Murrill, 2 September 1941, WAC, extract from R27/576 Music Reports Ga-Ge: Roberto Gerhard.

<sup>&</sup>lt;sup>4</sup> Report signed by Mosco Carner, Herbert Howells and Gordon Jacob, 29 March 1945, WAC, extract from R27/576 Music Reports Ga–Ge: Roberto Gerhard. The Violin Concerto had to wait until 1950 to receive its first performance.

<sup>&</sup>lt;sup>5</sup> Roberto Gerhard, 'English Musical Life – A Symposium', *Tempo*, 11 (June 1945), pp. 2–6.

<sup>&</sup>lt;sup>6</sup> Humphrey Carpenter, The Envy of the World (London, 1996), pp. 88–9.

<sup>&</sup>lt;sup>7</sup> See Harmann Grisewood, letter to John Lowe, 4 March 1948, and subsequent correspondence, WAC, Roberto Gerhard, File I 1941–9.

<sup>&</sup>lt;sup>8</sup> According to William Glock, quoted in Carpenter, The Envy of the World, p. 195.

<sup>&</sup>lt;sup>9</sup> Johnstone argued that the seasons at the BBC had to accommodate the claims of many distinguished living composers 'and in respect of some of them, we can but hope that they are satisfied with studio performances'; Maurice Johnstone, letter to Roberto Gerhard, 19 May 1954, WAC, Roberto Gerhard, File II 1950–62.

<sup>&</sup>lt;sup>10</sup> Third Programme, 19 February 1952, WAC, Radio Speech Index.

A series of 22 programmes covering the first three months of 1954, which was combined with theatre broadcasts of Spanish classics staged by the Drama Department.

• I trust the moisture will keep me going for a while with the more sober kind of work I'm looking forward to. 1

When one year later the Latin American Service sounded Gerhard out about a commission for a considerable amount of original music for new features, Gerhard contentiously refused to negotiate the fees in advance. The composer longed for 'exercise out-of-doors, so to speak, where no choreographer or producer is pulling at your sleeves and asking you to go that way in particular and for so and so long'. Adventures of Don Quixote would be Gerhard's last radio feature for the next eight years.

#### The twelve-note stigma

During the Second World War Gerhard had great difficulty having work accepted by the BBC, unless it fitted the stereotype of Spanish nationalism. The Music Department's reading panel considered Gerhard's Schoenbergian Wind Quintet (1928) 'advanced ... extremely difficult and ... ugly'; two years later, the Symphony 'Homenaje a Pedrell' (1941) was discreetly turned down, and only towards the end of the war the Violin Concerto (1942–5), regarded as too advanced for the Promenade Concerts, was recognized as being 'interesting for broadcasting'. The difficulties in finding acceptance as contemporary composer by the BBC and the 'strongly conservative taste's of programmers were somewhat relieved by the launch of the BBC Third Programme in September 1946, which offered a new outlet for serious music, drama and in-depth discussion. In 1947 the Third Programme broadcast Gerhard's Wind Quintet together with *Dances from Don Quixote* and Gerhard received a commission for the opera *The Duenna*, achieved with the support of Stanford Robinson and George Barnes (Controller of the Third Programme 1946–8).

According to the account by Humphrey Carpenter,<sup>6</sup> the Third Programme was afflicted by a lack of direction during its first few years. There were opportunities for the younger generation, like John Lowe's 1947 series *Contemporary British* 

Composers, featuring composers such as Lennox Berkeley, Antony Hopkins, Edmund Rubbra and Humphrey Searle. On the other hand, those considered to be followers of Schoenberg were often turned down. Under the influence of Steuart Wilson (Head of Music, 1948–50) and the musically conservative Harmann Grisewood (Controller of the Third Programme, 1948–52) *The Duenna* was almost cancelled. It was only through the advocacy of Gerhard's close friend Stanford Robinson, then Head of Opera, that the work was retained. Maurice Johnstone (Head of Music Programmes, 1953–60) can also, in part, be held responsible for the narrow horizons of the Third Programme. Though Johnstone had enthusiastically supported the *Cancionero de Pedrell* in 1945, as a conservative who dismissed the work of the Second Viennese School<sup>8</sup> he turned down Gerhard's request for a public performance of both the Violin Concerto and Symphony No. 1.9

The adverse situation of those years — marked by strong national and anti-German sentiments that underpinned the principles of post-war music broadcasting — led Gerhard to consider emigrating to the USA. Nonetheless, between 1946 and 1954 the BBC transmitted a number of noteworthy studio performances of his work. Besides the premiere of *The Duenna* in 1949 and first broadcast performances of the *Capriccio*, the Violin Concerto, the Concerto for Piano and String Orchestra and *Pedrelliana*, the Third Programme also transmitted the *Cancionero de Pedrell*, the suite from *Pandora*, *La fulla i el núvol* and *Ventall*, and a revised version of *The Duenna*, which was revived in 1951. The following year Gerhard was invited to give a speech on 'Schoenberg and Berlin' in commemoration of his teacher's death.<sup>10</sup>

In the early 1950s a number of composers, including Gerhard, began to be more vocal about the policy direction of the Music Department's panel system. Richard Howgill (Controller of Music, 1952–8) decided that the Music Department should be able to schedule performances without reference to the panel, whose members had already started to question whether or not Gerhard – by now, a reputed professional composer – should bypass the reading panel. In 1954, *The Heritage of Spain*, a survey of Spanish music for the Third Programme, edited and presented by Gerhard, would mark a turning point in the number of collaborations between the composer and the BBC. That year the Third Programme also broadcast *Celestina* 

Roberto Gerhard, letter to Kenneth Wright, 6 July 1944, WAC, Roberto Gerhard, File I 1941–9.

Roberto Gerhard, letter to Kenneth Wright, 18 July 1944, WAC, Roberto Gerhard, File I 1941–9.

<sup>&</sup>lt;sup>3</sup> Herbert Murrill, 2 September 1941, WAC, extract from R27/576 Music Reports Ga-Ge: Roberto Gerhard.

<sup>&</sup>lt;sup>4</sup> Report signed by Mosco Carner, Herbert Howells and Gordon Jacob, 29 March 1945, WAC, extract from R27/576 Music Reports Ga–Ge: Roberto Gerhard. The Violin Concerto had to wait until 1950 to receive its first performance.

<sup>&</sup>lt;sup>5</sup> Roberto Gerhard, 'English Musical Life – A Symposium', *Tempo*, 11 (June 1945), pp. 2–6.

<sup>&</sup>lt;sup>6</sup> Humphrey Carpenter, The Envy of the World (London, 1996), pp. 88–9.

<sup>&</sup>lt;sup>7</sup> See Harmann Grisewood, letter to John Lowe, 4 March 1948, and subsequent correspondence, WAC, Roberto Gerhard, File I 1941–9.

<sup>&</sup>lt;sup>8</sup> According to William Glock, quoted in Carpenter, The Envy of the World, p. 195.

<sup>&</sup>lt;sup>9</sup> Johnstone argued that the seasons at the BBC had to accommodate the claims of many distinguished living composers 'and in respect of some of them, we can but hope that they are satisfied with studio performances'; Maurice Johnstone, letter to Roberto Gerhard, 19 May 1954, WAC, Roberto Gerhard, File II 1950–62.

<sup>&</sup>lt;sup>10</sup> Third Programme, 19 February 1952, WAC, Radio Speech Index.

A series of 22 programmes covering the first three months of 1954, which was combined with theatre broadcasts of Spanish classics staged by the Drama Department.

and L'étranger, two adaptations for the radio that, following Conquistador, also signalled Gerhard's return to composing music for radio drama.

#### Features and drama at the BBC

The involvement with the BBC offered Gerhard an insider's perspective during a period of profound change in radio production methods. In the 1930s a complex drama production with a large cast would involve the simultaneous use of several studios, with each component located in its own space, linked via loudspeakers in each studio. Even during the war, the recording and archiving of programmes was very rare. Overseas Service programmes - as in the case of Gerhard's Latin American features - were one of the earliest contexts in which recording was allowed, in view of the difference in time zones. Recordings in the 1940s - strictly regulated by agreements with the Musicians' Union12 - were still made on 78-rpm discs, each capable of holding three to five minutes per side. Backgrounds for radio drama were built up by layering sounds, and eventually up to eight turntables could be used simultaneously in a recording session. In the 1950s magnetic tape simplified these operations, but the BBC initially resisted change and used the tape recorder only as a rehearsal tool - a means for the cast to listen to their performance prior to live broadcasting. By the mid-1950s however, the advantages of magnetic tape were recognized. The increased portability, extended duration and simplicity of editing offered by magnetic tape enabled a new approach to composing features, opening up the possibility of using sound from outside the studio, removing the need for live orchestras, and giving producers a greater editorial control.13

Towards the end of the Second World War, Features and Drama – until then part of the same departmental structure – were given independent status, although the area of activity of each department remained controversial throughout the 1950s. Val Gielgud retained the position of Head of Drama and Laurence Gilliam was promoted to Head of Features. Gilliam's department gained a reputation with writers and producers such as D.G. Bridson, Douglas Cleverdon, Louis MacNeice and Dylan Thomas, and its output is generally associated with a more popular and fresher character, without the aspirations and concerns of Drama.<sup>14</sup>

Producers were in charge of proposing ideas for new productions. They would usually discuss the script with the composer, passing on their plan for the music, and – once the score was finished – they would assist in engaging the necessary

musicians and booking the technical facilities for the recordings. As a rule, when Gerhard was engaged as a composer, he also supervised the orchestra and conducted the recording sessions at Maida Vale. Sometimes he also participated in the read-through of the programme as well as in the final recording session, in which the actors and the edited recordings were mixed together. Writing music for radio drama and features gave Gerhard the opportunity to listen to his works shortly after composing them, and to experiment with different instrumental groupings and sonorities. These productions became Gerhard's playground for trying out new instrumental techniques and to investigate the musical potential of recording technology. Even if the quality of his scores was variable, it would be a mistake to underestimate Gerhard's music for this form of radio and the creative benefit that it had on his works for the concert hall. While a certain ambivalence characterized the composer's attitude to this work, which he saw as a sideline to his main artistic commitment, he eventually came to think that the dichotomy between incidental and autonomous music was a short-sighted way of looking at things. 'In 50 years' time people will see what they have in common rather than what distinguishes them now', he argued.15

Geoffrey Bridson would become one of Gerhard's most important allies in the BBC during the 1950s and early 1960s. Bridson had started as a features programme assistant in the mid-1930s and came to prominence after the Second World War as an international reporter specializing in large-scale feature programmes and political documentaries for the Home Service. Bridson was a self-taught writer, and the Third Programme gradually gave him liberty to develop more creative work, writing and producing poetry and narrative verse for literary and cultural programmes. In 1950 he was appointed Assistant Head of Features, becoming one of the BBC's most influential spokespeople, responsible for more than 800 documentaries and cultural programmes during his career. His left-wing standpoint and the influence exerted on him by Gilliam's vision – reminiscent of Bertolt Brecht's radio theories – of the non-indoctrinating, social contribution of broadcasting, that believed in a radio available to the man in the street 'to express his own opinions in his own unvarnished words', <sup>16</sup> were representative of a new spirit of post-war radio.

Seeking 'the creative exploration of a revolution in form',<sup>17</sup> radio had made room for new dramatic forms that combined performance with storytelling and poetry. Visionary producers like Cleverdon and McWhinnie, and plays that crossed the boundaries of convention like Dylan Thomas's *Under Milk Wood* (1954) or Samuel Beckett's *All That Fall* (1957), characterized this new way of thinking. Cutting-edge radio coexisted alongside more traditional fantasy plays, poetry and serious radio drama, all of which sought to exploit new technical advances and

In 1946 the Musicians' Union would not allow the Third Programme to broadcast more than three hours per week of music from gramophone records; Carpenter, *The Envy of the World*, p. 18.

<sup>&</sup>lt;sup>13</sup> Ian Rodger, Radio Drama (London, 1982), pp. 92–3.

See Richard Hollingum, *Between Two Worlds – Experimentalism in Radio Drama* (2010), http://northampton.academia.edu/RichardHollingum/Papers/520164/Between\_Two\_Worlds\_Val\_Gielgud\_BBC\_Drama\_Sound\_and\_Experimentalism (accessed 21 September 2012).

This was Gerhard's answer in 1967 to counter the charge of being a chameleonic composer; interview with John Amis, RGTC, CUL\_OR01\_Gerhard\_020801.

<sup>16</sup> Bridson, Prospero, pp. 51-3.

<sup>&</sup>lt;sup>17</sup> Hollingum, Between Two Worlds, p. 2.

Gerhard's BBC radio drama and features productions, 1952-66 Table 13.1

	20,000					
Title	Year	fear First broadcast	Department	Producer	Author of script	Instruments
Conquistador	1952	04.08.1952 (TP)	Features	D.G. Bridson	Archibald MacLeish	fl, cl, hn, tpt, perc, vn, vc, pf
Celestina	1954	18.03.1954 (TP)	Features	Peter Duval Smith	Fernando de Rojas	ff, 2 ob, eng hn, heckelphone, S, T, gui, hn, bn, timp, perc
L'étranger	1954	954 18.07.1954 (TP)	Features	D.G. Bridson	Albert Camus	fl (pic), ob, eng lm, cl, tpt, trbn, accdn, bn, perc
Don Carlos	1955	18.07.1955 (HS)	Drama	H.B. Fortuin	Friedrich Schiller	hpd, org
A Leak in the Universe †	1955		Features	D.G. Bridson	Ivor Armstrong Richards	accdn, va, perc, pf, tape
Maria Stuart	1956	16.09.1956 (TP)	Drama	Julius Gellner	Friedrich Schiller	3 hn, 3 tpt, 2 trbn, b trbn, perc
Good Morning Midnight	1956	956 10.05.1957 (TP)	Features	Sasha Moorsom Jean Rhys	Jean Rhys	voice, accdn
The Unexpected Country † 1957 07.06.1957 (HS)	1957	07.06.1957 (HS)	Features	Sasha Moorsom Olwen Wymark		tape
The Revenge for Love	1957		Features	D.G. Bridson	Wyndham Lewis	3 vn, va, vc, cb, perc, gui, hp
Asylum Diary 🕆	1959	10.11.1959 (TP)	Features	Michael Bakewell	Christine Lavant	tape
Lament for the Death of a Bullfighter †	1959	22.05.1960 (TP)	Features / Music	D.G. Bridson	Federico García Lorca	spk, tape
The Overcoat †	1961	961 07.04.1961 (TP)	Drama	Charles Lefeaux	Nicolai Gogol	Bar, chorus of actors, vn, gui, accdn, tape

Woyzeck	1961 21.04.1961 (TP)	Drama	H.B. Fortuin	Georg Büchner	fl (pic), ob, cl, bn, S, Bar, chorus, accdn, hn, tpt, trbn, tuba, perc
Caligula	1961 30.06.1961 (TP)	Features	Michael Bakewell	Albert Camus	3 ff (3 pic), 3 tpt, 2 trbn, b trbn, mand, timp, perc
The Tower	1962 14.02.1962 (TP)	Drama	W.A. Glen- Doepel	Hugo von Hofmannsthal	pic, tpt, tuba, timp, perc, org, 2 boy S, gui
The World's Great Stage	1962 17.12.1962 (HS)	Drama	Charles Lefeaux	Calderón de la Barca	ob, eng hn (ob), tpt, trbn, S, A, T, hp, pf (cel), accdn, perc
The Philosopher's Den	1962 20.04.1963 (TP)	Features	Rayner Heppenstall	Zbigniew Herbert	2 fl, 2 hn, 2 bn, mand, gui, perc, accdn
The Anger of Achilles† (serial, 3 programmes)	1964 17.05.1964 (HS)*	Drama	Raymond Raikes Homer / Robert Graves	Homer / Robert Graves	2 fl (pic), 2 ob (eng hn), 2 cl, 2 bn, 4 hn, 2 tpt, 3 trbn, perc, timp, S, Bar, chorus, gui, accdn, hp, vn I, vn II, va, vc, cb, tape
Funnyhouse of a Negro	1964 10.12.1964 (TP)	Features	D.G. Bridson	Adrienne Kennedy	Adrienne Kennedy cl (b cl), tpt, perc, org
Pericles **	1965 26.11.1965 (TP)	Drama	Raymond Raikes William Shakesp	William Shakespeare	2 fl (pic), ob, eng hn, 2 cl, 2 bn, 4 hn, 2 tpt, 2 trbn, b trbn, tuba, timp, perc, Mez, T, 2 Bar, chorus, hp, vn I, vn II, va, vc, cb
The Man Born to be King (serial, 12 programmes)	1966 19.01.1975 (R4)*	Drama	Raymond Raikes	Raymond Raikes Dorothy L. Sayers	2 fl (pic), 2 ob (eng lm), 2 cl, 2 bn, 4 hn, 2 tr, trbn, b trbn, timp, perc, gui, hp, pf, vn I, vn II,

manipulated tape / sound composition / radiophonic sound TP: Third Programme date of broadcast of first programme in the series HS: Home Service partially based on Gerhard's score for the 1958 theatre play R4: Radio 4 of the same title

challenge the imagination of the listener. Bridson would later refer to this period as 'the great age of the creative feature in radio'. 18

Up until the late mid-1960s Gerhard produced over 20 applied compositions for the radio, 10 theatre pieces, and a similar number of soundtracks for film and television. His compositions for BBC radio (Table 13.1)<sup>19</sup> include scores for adaptations of some of the most important poetic, literary and dramatic works by writers such as Büchner, Calderón de la Barca, Camus, García Lorca, Gogol, Graves, Hofmannsthal and Schiller. Predominantly aimed at the intellectual audiences of the Third Programme, those works were representative of the kind of human and vital literature that was the flagship of the Third Programme's literary output.

Productions of the classics (The Anger of Achilles, 20 Maria Stuart, Don Carlos, The World's Great Stage, Woyzeck, The Tower) were mainly the responsibility of Val Gielgud's Drama Department. Meanwhile, Features favoured the more risky and explorative productions written mainly by living authors that contributed speculative fantasies and experiments in narrative design (A Leak in the Universe, The Unexpected Country, Good Morning Midnight), texts that revolved around the deconstruction of moral principles (The Revenge for Love, Caligula, The Philosopher's Den) or joined the debate on topical human rights issues (Asylum Diary, Funnyhouse of a Negro), and even those that seemed to be chosen with Gerhard as composer in mind (L'étranger, Lament for the Death of a Bullfighter).

The small ad hoc ensembles and the experiments of the Features Department in the 1950s can be contrasted with the large-scale Drama productions in the 1960s. The Anger of Achilles, The Man Born to be King and Pericles were all big radio programmes with generous budgets, sizeable casts and substantial scores for large orchestral forces. Proportionately, dramas such as The Overcoat or The Anger of Achilles would lack the commitment with the electronic medium that features like Asylum Diary or Lament for the Death of a Bullfighter had. This was the result of a long series of cuts and restructurings initiated by the BBC in the late 1950s that Bridson called the 'fall of the radio', 21 which led to the closure of Gilliam's department. 22

## The road to experimentalism

Electronic music was a product of the technological age, and its development depended on the skills and ideas of many individuals in many countries.<sup>23</sup> In Europe, broadcasting stations – heralded by the Parisian *Club d'Essai* and the Studio fur Elektronische Musik of the NWDR in Cologne – played a leading role in the development of the new artistic medium. Sound production methods, which had their roots in the creation of sound effects for radio dramas<sup>24</sup> were widely extended. The difference was that the BBC advocated a different scheme that favoured applied composition at the expense of pure experimentation. The increasing use of sound effects in radio comedy and science-fiction series, the patronage of producers like Cleverdon and McWhinnie, the influence of *musique concrète* and the work of composers such as Gerhard, Tristram Cary or Humphrey Searle were some of the landmarks in the years before the creation of the Radiophonic Workshop.<sup>25</sup>

There is little evidence of the precise circumstances that led Gerhard towards experimenting with manipulated tape. His earliest works in the new medium, composed when he was approaching 60 years old, include Bridget Boland's *The Prisoner* (1954)<sup>26</sup> and Devine's production of *King Lear* (1955) for the Shakespeare Memorial Theatre. At this stage Gerhard owned a single Vortexion open-reel tape recorder capable of recording at 3.75 and 7.5 inches per second, which he admitted using only for playback.<sup>27</sup> Probably one of Gerhard's earliest revelations was his visit to Baden-Baden and Cologne, coinciding with the premiere of his Symphony No. 1 in 1955, where he had 'several interesting experiences ... with genuine, uncompromising *elektronische Musik*'.<sup>28</sup> In Baden-Baden the chief engineer of

<sup>&</sup>lt;sup>18</sup> Bridson, *Prospero*, p. 265.

The actual year of composition sometimes diverges from existing catalogues, for example David Atherton, 'Gerhard: Catalogue of Works', in David Atherton (ed.), *Programme Book for the London Sinfonietta Schoenberg—Gerhard Series* (London, 1973) pp. 107–120, or Meirion Bowen, 'Appendix II: List of musical compositions by Gerhard and selected discography', in Meirion Bowen (ed.), *Gerhard on Music: Selected Writings* (Aldershot and Burlington VT, 2000), pp. 248–65.

Robert Graves's adaptation of Homer's Iliad.

<sup>&</sup>lt;sup>21</sup> Bridson, *Prospero*, pp. 13–14.

<sup>&</sup>lt;sup>22</sup> In 1964 Frank Gilliard (Director of Sound Broadcasting, 1963–70) abolished the Features Department; Bridson, *Prospero*, p. 315.

<sup>&</sup>lt;sup>23</sup> See Lowell Cross, 'Electronic Music, 1948–1953', *Perspectives of New Music*, 7/1 (1968), pp. 32–65.

Creating effects for radio drama was one of the founding principles of the electronic music studio of the Nordwestdeutsche Rundfunk (NWDR). See, 'Report on the decision to establish the studio for electronic music at the NWDR, Cologne,' 18 October 1951, quoted in Cross, 'Electronic Music', pp. 49–50.

<sup>&</sup>lt;sup>25</sup> See Hollingum, Between Two Worlds and Louis Niebur, Special Sound: The Creation and Legacy of the BBC Radiophonic Workshop (Oxford, 2010), pp. 6–14.

The story behind Bridget Boland's *The Prisoner*, considered by Hugh Davies to be Gerhard's first electronic work, is yet to be elucidated (Hugh Davies, 'The Electronic Music', *Tempo*, 139 (1981)). *The Prisoner* was presented at the Globe Theatre in London in April 1954 ('Plays Abroad,' *Variety*, 28 April 1954) and revived at Clare College hall, Cambridge, March 1957; CUL, Concert programme collection Roberto Gerhard.

Gerhard offered his tape recorder to a BBC correspondent who visited Cambridge with the intention of recording one of his talks: 'You will need to bring a microphone ... I don't record myself', he said; Roberto Gerhard, letter to Roger Fiske, 19 February 1955, WAC, Roberto Gerhard, File II 1953–62.

<sup>&</sup>lt;sup>28</sup> Roberto Gerhard, letter to Roger Fiske, 24 January 1956, WAC, Roberto Gerhard, BBC File II 1955–62.

the Südwestfunk, Dr Heck, presented Gerhard with some 'astounding effects obtained by distorting filters',<sup>29</sup> and in the Nordwestdeutsche Rundfunk (NWDR) the composer spent 'one morning listening to works by Stockhausen, Eimert and the rest'.<sup>30</sup> The influence of these visits can be clearly felt in the sound score for *King Lear*, one of the few written records of Gerhard's working methods.<sup>31</sup> In later productions he preferred to put into practice what David Drew refers to as 'Gerhard's empirical and always aurally determined researches into the uses of electronic tape'.<sup>32</sup>

At this time the BBC had also started taking interest in the field of electronic music. Two weeks before Gerhard's visit to Baden-Baden, Douglas Cleverdon promoted the broadcast of the radio play *Nadja Etoilée* on the Third Programme,<sup>33</sup> and on 5 October of that year Tristram Cary's *Japanese Fishermen* was transmitted. Cary's score, produced by the Features Department, is considered the first original electronic music composed for BBC radio.<sup>34</sup> It was followed by Cleverdon's first 'musique concrète project',<sup>35</sup> the 50-minute radio poem *Night Thoughts* by David Gascoyne, with music by Humphrey Searle.<sup>36</sup> Both Cary and Searle made their living writing incidental music for the BBC, and while Searle was unfamiliar with the techniques of musique concrète and learnt as he went, Cary had created the music on his own equipment.<sup>37</sup> Still, the reservations towards electronic music at the BBC were keenly demonstrated when Gerhard's proposal to present a talk with illustrations from the Paris, Cologne and Gravesano studios (after his visit to Baden-Baden and Cologne) was turned down.<sup>38</sup>

## Gerhard's BBC pre-Radiophonic Workshop productions

A Leak in the Universe

The first of Gerhard's BBC projects included in Hugh Davies's catalogue of 'electronic music'<sup>39</sup> was Geoffrey Bridson's production of I.A. Richards's *A Leak in the Universe*. Bridson's instructions were to write 10 minutes of 'purely incidental music' to be set in between the various scenes, with the exception of a whistle 'to run behind the recorded voices speaking through the medium in a trance, and a disappearing theme ... at the end'.<sup>40</sup> The programme – for which Gerhard received a composing fee of £40 – was to be broadcast on the Third Programme on 1 September 1955. The score was completed within a period of three weeks. Having recorded it, Gerhard booked an extra studio session at the BBC in order to manipulate the tape with the instrumental takes.

The ten-page manuscript score of this work, for viola, percussion, piano and accordion, <sup>41</sup> is of significant interest as it incorporates instructions for the subsequent manipulation of those takes. <sup>42</sup> Cue 3 comprises an eight-bar semiquaver phrase on the piano and viola (playing pizzicato), which ends with a two-bar crescendoing accordion chord and snare-drum roll. The indications on the score show that this cue was to be played back at double speed and spliced on to a second copy of the same section played backwards. <sup>43</sup> In the case of cue 7 (Figure 13.1), manipulation 'A' indicates that the first three bars were to be played back from a variable speed turntable at normal rate, and then gradually accelerated to produce an upwards glissando during the resonance of the last chord. The result of this operation was to be spliced together with manipulation 'B', which comprised the recording of an ancient cymbal played backwards. These operations already demonstrate some of the essential principles of tape and disk manipulation as well as a procedure that would later become characteristic of Gerhard's sound compositions, namely the manipulation and recycling of recordings of the composer's own instrumental works.

Following the broadcast, the audience research report stated that 'many people were impressed' although 'a substantial proportion felt ... disappointed' and complained about the 'pretentiousness' of the play.<sup>44</sup> Opinion was also divided

<sup>&</sup>lt;sup>29</sup> Ibid. Gerhard received a demonstration of the musical potential of ring modulation and frequency shifting, pioneering research that was being carried out by the German public broadcaster at that date. See L. Heck and F. Bürck, 'Klangumwandlungen durch Frequenzumsetzung', *Gravesaner Blätter*, 4 (1956), pp. 35–56.

Gerhard, letter to Fiske, 24 January 1956.

The sound score of *King Lear* details every step of the sound composition, neatly drafted on squared paper; CUL, Gerhard 7.102.

<sup>&</sup>lt;sup>32</sup> David Drew, 'Roberto Gerhard: A Chronology', in Atherton, *Programme Book for the London Sinfonietta*, p. 75.

<sup>&</sup>lt;sup>33</sup> 7 June 1955; Niebur, Special Sound, p. 16.

<sup>&</sup>lt;sup>34</sup> Ibid., p. 17.

<sup>&</sup>lt;sup>35</sup> Ibid., p. 18.

This play combined straight music with the episodic use of transposition in octaves, reverse playback, 'filtered speech', and 'music superimposed backwards and forward'; Logbook, p. 41, WAC, Radiophonic Workshop, R 97/23/1 Radiophonic Workshop logbooks.

<sup>&</sup>lt;sup>37</sup> Cary got his first tape recorder in 1952 and had started experimenting with electronic techniques as early as 1946; Niebur, *Special Sound*, p. 16.

Roger Fiske, letter to Roberto Gerhard, 26 January 1956, WAC, Roberto Gerhard, File II 1953–62.

<sup>&</sup>lt;sup>39</sup> Davies, 'The Electronic Music'.

<sup>&</sup>lt;sup>40</sup> Geoffrey Bridson, letter to Roberto Gerhard, 3 August 1955, WAC, Roberto Gerhard, File II 1950–62.

<sup>41</sup> CUL, Gerhard 3.35.

<sup>&</sup>lt;sup>42</sup> A partial recording of the broadcast of *A Leak in the Universe* has been identified in the Gerhard Tape Collection (RGTC, CUL\_OR01\_Gerhard\_047501).

<sup>&</sup>lt;sup>43</sup> In practice, a recording of this cue reveals that only the first three bars were played backwards at double speed; the recording was kindly made available by the BBC through the listening service of the British Library at request of the author (not yet catalogued).

<sup>&</sup>lt;sup>44</sup> Audience Research Report, 15 September 1955, WAC, Audience Research Reports, R9/6/45.

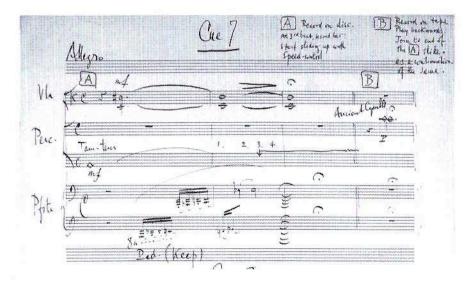


Figure 13.1 Gerhard, *A Leak in the Universe*, cue 7 *Source*: CUL, Gerhard 3.35.

about the incidental music and the sound effects. Some listeners described the music as a 'dismal noise, hideously discordant and unpleasant', but the majority thought that they were 'expressive, witty and appropriate'. The sound effects were 'imaginative and well handled' but for others 'tiresome and exaggerated'.

# The Unexpected Country

The seventh of the *Writing for Radio* series, edited by David Thomson, was Olwen Wymark's play produced by Sasha Moorsom. *The Unexpected Country* was recorded in May 1957 and broadcast by the Home Service on 7 June of the same year. For this play Gerhard was asked to prepare a sound montage in collaboration with Christopher Terry, involving the recording and manipulation of sound effects on tape 'somewhat in the nature of an experiment'.<sup>45</sup> There are no explicit references to this play in the Gerhard Tape Collection and it is unlikely that a score for the sound composition was devised. One of the few references to Gerhard's involvement are the annotations found in one of the composer's notebooks,<sup>46</sup> which refer to eight cues including the sounds of a tap dripping, wind noises and percussion. The 30-minute feature was nevertheless included by the

BBC in a list of programmes of 'radiophonic interest',<sup>47</sup> which describes those cues as 'obsessive background sounds of the type most easily produced by tape loops'.<sup>48</sup> The small fee (£16), to be divided between Gerhard and Terry, suggests that their contribution to *The Unexpected Country* was minor, and Gerhard even queried the authorship of the project at a later date.<sup>49</sup>

#### Gerhard and the Radiophonic Workshop

The initial concept for the Radiophonic Workshop was to set up a laboratory to supply Features and Drama with background sounds and effects, as well as for pure experimentation similar to the facilities in France, Germany, Italy and the USA. To this end, a plan to attract composers to undertake experimental work for the BBC was initiated by Douglas Cleverdon, who embraced the name 'radiophonic music' to refer broadly to all kinds of 'experimental recordings in the field of electronic music, *musique concrète* and other forms'. However, when the Radiophonic Workshop officially opened (1 April 1958), the Radiophonic Effects Committee decided that works involving *musique concrète* would only be undertaken where music was incidental to the spoken word. Eventually the BBC decided that it would not be possible to widen the scope of the Radiophonic Workshop, the word 'music' was set aside and the trademark 'radiophonic sound' was adopted.

During this period Gerhard intensified the use of manipulated tape in his music, including the theatre play *Pericles*, <sup>52</sup> the two television features *All Aboard* and *Your Skin* in 1958, and, more substantially, in *Coriolanus*, *Asylum Diary* and *Lament for the Death of a Bullfighter* in 1959. The composer's change of address to 14 Madingley Road, Cambridge, in October 1958 is considered to be the date for the official founding of Gerhard's 'Home Office'<sup>53</sup>. Around the same

Elsie Wakeham, letter to Roberto Gerhard, 16 April 1957, WAC, Roberto Gerhard, BBC File II 1955–62.

<sup>46</sup> CUL, Gerhard 10.108, fol. 6v.

The other BBC programmes mentioned are Night Thoughts, All That Fall, Opium, The Quincaphone, The Unexpected Country, The Disagreeable Oyster, Private Dreams and Public Nightmares and Death of Grass; List of productions and compositions of Radiophonic interest, 3 October 1957, WAC, Radiophonic Workshop, R97/11/1, Radiophonic Workshop General, p. 3.

<sup>48</sup> Ibid.

Roberto Gerhard, letter to Hugh Davies, 2 January 1967, CUL, Gerhard 14.105.

Niebur, Special Sound, pp. 35-6.

Douglas Cleverdon, 2 May 1957, WAC, Radiophonic Workshop, R 46/734/1 Radiophonic Music File I.

Gerhard seems to have resorted to the assistance of an external collaborator to produce the aggregate compounds in this play. See Roberto Gerhard, letter to Bill Walton, 11 July 1958, CUL, Gerhard 14.442.

For a detailed description of Gerhard's studio, see Gregorio García Karman, 'Roberto Gerhard's Tape Collection: The Electronic Music', *Proceedings of the 1st International Roberto Gerhard Conference* (Huddersfield, 2010), pp. 106–121.

time, Gerhard also started to use the self-coined term 'sound composition'.<sup>54</sup> He would favour it to describe his contributions for *Asylum Diary* and *Lament for the Death of a Bullfighter*, as well as in the title of his talk 'Concrete and Electronic Sound Composition'<sup>55</sup> – an attempt to demystify the German, French and Italian schools of electronic music, with ideas that can be traced back to 1956.<sup>56</sup> The term 'sound composition' was Gerhard's disapproving response both to the arrogance of serialist manifestos and to those seeking to draw a separating line with 'what is condescendingly called "the other music";<sup>57</sup> and, more positively, it can also be an attempt to find an open concept that embraced the productions of the Parisian and Cologne schools and the results of his own experiments.

Gerhard's interest in the use of manipulated tape to complement theatre, radio drama, television and film, the indistinct use of acoustic as well as electronic sounds, a more intuitive approach to composition, and a criticism of the German school were not uncommon in Gerhard's British contemporaries. Likewise, certain characteristics, such as Gerhard's interest in the evocative potential of stylized sound effects, bring to mind principles of radio sound advocated by McWhinnie's influential work *The Art of Radio*, <sup>58</sup> and the impact of the surreal and the 'Theatre of the Absurd' movement in radio drama. Gerhard's sound compositions – together with other BBC productions like *Private Dreams and Public Nightmares* (1957), *The Ocean* (1958) or *Under the Loofah Tree* (1958) – were considered among the most important and innovative radiophonic works produced by the Radiophonic Workshop in the late 1950s. At the same time, Gerhard's status as an independent composer who received assistance from the Workshop was an exception to the model advocated by the BBC.

#### Gerhard's collaborations with the BBC Radiophonic Workshop

Asylum Diary

Asylum Diary was an adaptation of Aufzeichnungen aus einem Irrenhaus written by the Austrian National Literature Prize award-winning author, Christine Lavant. The BBC advertised the play as a fantasy, even though the book is based on the true experience of Lavant's wilful admission as a patient to the state mental hospital in Klagenfurt and can be seen as a portrait of the cynicism and the violence of such institutions during Nazism. The play, translated from the German by Nora Wydenbruck, was produced by Michael Bakewell for the Features Department and read by Joan Plowright. Gerhard's involvement is first mentioned in a note from Geoffrey Bridson to Sasha Moorsom, referring to the initial negotiations with the Third Programme:

I attach a note I have had from the Third Programme Music Organiser, regarding the music for the above programme. As I suspected, the estimate of £60 is quite unrealistic in so far as it would cover merely straightforward composition and takes no account of the time which would be required to work this up mechanically in the studio, a job which Roberto would have to supervise at every stage. If, on the other hand, he decides that musique concrete [sic] would be ruled out by the time factor, the estimate takes no account of the musicians who would have to be booked to perform music in the old-fashioned sense. Will you please get in touch with Roberto and ask him:

- a) whether he would like to take the job on, and if so in which terms.
- b) what he thinks he would be prepared to accept, provided the figure was acceptable to Copyright Department. In other words, ask him for a rough estimate without prejudice.
- c) if he decides on straightforward music, what sort of an orchestra would he require.<sup>59</sup>

In his note, Peter Crossley-Holland, the Third Programme Music Organizer, had stressed his concern with arriving at a reasonable costing system and with the limitations of the Corporation's equipment. Crossley-Holland's plan was to pay a fee for the finished product and not on the basis of the hours involved, arguing that Gerhard would feel compensated by the opportunity to learn to use and experiment with the equipment at the BBC. In response to Bridson, Sasha Moorsom reported that Gerhard agreed to compose '50 minutes of *musique concrète*' for a fee of £75.

On the cover of Gerhard's copy of the script the composer added the words 'sound composition' under the line 'Music by Roberto Gerhard'; CUL, Gerhard 13.2.

Paper read by the composer at the Joint Congress of the International Association of Music Libraries and the Galpin Society, 1 July 1959; published as Roberto Gerhard, 'Concrete and Electronic Sound Composition', in Unity Sherrington and Guy Oldham (eds), *Music Libraries and Instruments* (London, 1961), pp. 30–37.

<sup>&</sup>lt;sup>56</sup> 'I should welcome an opportunity to view the electronic "mutation" in a larger perspective'; Roberto Gerhard, letter to Roger Fiske, 6 February 1956, WAC, Roberto Gerhard, File II 1953–62, 145.

<sup>&</sup>lt;sup>57</sup> One of the main reasons why Gerhard disliked the term *musique concrète*. See CUL, Gerhard 7.115, fol. 20.

Donald McWhinnie, *The Art of Radio* (London, 1959), pp. 78–82.

Geoffrey Bridson, letter to Sasha Moorsom, 11 July 1957, WAC, Roberto Gerhard, File II 1950–62.

She anticipated that the production would keep the composer busy for a period of eight days spread over three or four weeks working with a studio manager, and foresaw four more weeks of independent work from the staff of the BBC, putting forward the name of Daphne Oram. However, the Third Programme decided to back out, concerned with the need to gather more information about the new facilities for making *musique concrète* that were being readied by the BBC, and *Asylum Diary* was temporarily shelved. Eventually Moorsom, one year later, handed the project over to the young producer Michael Bakewell. Bakewell met Gerhard in November 1958 to discuss the music and scheduled the production for the first quarter of 1959. The new agreement proposed that the creation of the radiophonic soundtrack would mainly be fashioned by the composer on his own equipment. A revised estimate of £268 included the provision for three musicians to record the source material for Gerhard's subsequent tape manipulations.

During the first weeks of production, Bakewell visited Cambridge on two occasions to discuss the script. Through him, we know that in February Gerhard was still thinking of involving instruments, 61 but possibly encouraged by the composers' courses organized by the Radiophonic Workshop, 62 which Gerhard, along with Mátyás Seiber, had attended on 16–17 March 1959, the composer changed his mind and decided not to use instruments as source materials. At the beginning of May, Bakewell instructed the Copyright Department to offer Gerhard a formal commission at the original fee, in view of the considerable amount of work involved, and in spite of the fact that the duration of the music (about 20–25 minutes) was much shorter than that first negotiated with Sasha Moorsom. Gerhard supported Bakewell's arguments, giving the following account of his work to the Copyright Department:

The music cues for the above-mentioned feature are over 40 ... The making of each sound-image may involve any number of retakes until the final version is

arrived at: the time factor may oscillate from hours to whole days, according to the complexity of the texture one is trying to build up. I spent the best part of six weeks exclusively on this job, more precisely: five weeks solid, Sundays included, with never less than six hours a day and often up to 10 hours. I used nearly five 7" reels of tape and incurred a number of additional expenses on editing tapes, extra-lengths of coaxial cable for the recording in a specially reverberating room, not counting the wear and tear of my machines and electricity. Discussions with the producer, Mr Michael Bakewell, and attendance at the recording of Joan Plowright and at Maida Vale studio of the Radiophonic Workshop for the final checking and copying of my tapes involved five journeys to London. 63

In this letter, Gerhard also insisted on receiving a higher fee of £200 for his sound composition. Gerhard's demand far exceeded the standard fee that the BBC paid at that date for 'top-ranking composers' and was also significantly higher than the £150 commission fee negotiated for his Symphony No. 2, which was about to receive its premiere. This request was considered by the departmental heads of the BBC, stimulating a far-reaching debate about the need to resource external composers to produce radiophonic music. Further points discussed included the ownership of the recordings, the relative contribution of the composers and technicians in radiophonic productions and whether compositions were even subject to copyright when no score was produced. The BBC finally agreed to pay Gerhard the requested sum in view of the time spent using his own equipment, with the proviso that the arrangement should not be taken as a precedent. The controversy surrounding the production of *Asylum Diary* is an important chapter in the history of the BBC's sceptical policy with regard to the support of electronic music.

The logbooks of the Radiophonic Workshop indicate that work on *Asylum Diary* took place on 2, 7, 28 and 30 April and 6 May.<sup>66</sup> Interestingly, Gerhard would later maintain that all his works had been produced in his own permanent studio 'except for the final assembly (montage) of the ingredients that went into the examples for *Asylum Diary*'.<sup>67</sup> This would imply that Gerhard considered the time spent

Daphne Oram's name and address are scribbled in Gerhard's notebooks on at least two occasions (CUL, Gerhard 9.103, fol. 6; CUL, Gerhard 10.135, fol. 9v), although there is no evidence of joint work with Gerhard in *Asylum Diary*. Oram had left the BBC six months after the inception of the Radiophonic Workshop but she continued to visit the Workshop for private commitments until around March 1959; E.W.S. Porter, letter to Desmond Briscoe, 20 March 1959, WAC, Radiophonic Workshop, R 97/9/1 Radiophonic Effects Committee.

Michael Bakewell, letter to Roberto Gerhard, 24 February 1959, CUL, Gerhard 15.1.47.

for It had been decided that composers could be commissioned to work at the Radiophonic Workshop in collaboration with the staff, but this was conditional on a two-day course of instruction. The invitation to spend two days in the Workshop was made to Roberto Gerhard, Humphrey Searle and Mátyás Seiber and remained open to other composers; Minutes of Radiophonic Effects Committee Meeting, 4 July 1958 and 31 July 1959, WAC, Radiophonic Workshop, R 97/7/1 Radiophonic effects and electronic music 1956–63.

Roberto Gerhard, letter to the Copyright Department of the BBC, 18 May 1959, WAC, Roberto Gerhard, File II 1955–62.

<sup>&</sup>lt;sup>64</sup> At this date the BBC paid composers according to a three-class system: 'beginner (£3½ per minute), established (£4½ per minute), and top ranking (£5 per minute)'; Head of Copyright, letter to Roberto Gerhard, 8 June 1959, WAC, Roberto Gerhard, File II 1955–62.

<sup>&</sup>lt;sup>65</sup> 'Fees for composing music', correspondence between Departmental Heads, 15 May to 8 June 1959, WAC, Roberto Gerhard, File II 1955–62.

Daily work diary of the Radiophonic Workshop, April 1959 and May 1959, WAC, Radiophonic Workshop, R 97/7/1, Radiophonic effects and electronic music 1956–63.

The other exception mentioned by Gerhard is *The Anger of Achilles*, whose sound effects were executed by Delia Derbyshire; Roberto Gerhard, letter to Hugh Davies, 27 January 1967, CUL, Gerhard 14.105.

at the Radiophonic Workshop in April and May as negligible compared with the time spent working on the piece in his studio. It is possible that the 'examples' to which Gerhard referred were those used in his radio talk *Audiomobiles*<sup>68</sup> recorded by the BBC in September, which also incorporated the *Capriccio in the Manner of Goya*?<sup>69</sup> This explanation would fit with the three additional days that are indicated in the daily work diary of the Radiophonic Workshop in relation to *Asylum Diary* after May.<sup>70</sup> The evidence relating to the members of staff that collaborated with Gerhard is also confusing. Maddalena Fagandini – a newcomer from the Drama Department, brought in as a studio manager following the departure of Daphne Oram – is credited with the project of *Asylum Diary*.<sup>71</sup> Fagandini, however, seems to have started working at the Radiophonic Workshop only at the end of June, <sup>72</sup> and would therefore only have been able to participate in the latter sessions in July and September.

Asylum Diary was first broadcast by the Third Programme on 10 November 1959. In the Gerhard Tape Collection there are two tapes that contain consecutive excerpts of the complete feature: the first 5 minutes<sup>73</sup> and a longer recording of the following 35 minutes, <sup>74</sup> together roughly corresponding to the first half of the play. The collection also features three reels of tape, each one of them containing a series of cues without the voice. <sup>75</sup> Those cues are spliced together and labelled with Gerhard's annotations on pieces of leader tape at the beginning and at the end of each cue (Table 13.2). A closer examination of Gerhard's working principles, including a detailed account of some of the cues fashioned by the composer for Asylum Diary, will be provided in the last section of this chapter.

Table 13.2 Contents of Tape 390 and correspondence with cue numbers in the sound script

Cue	Label	Duration	Ingredients
4	'Aeiou' background	01:09	Running down glissando (oscillator)
5	Hunchback, p. 4	00:32	Hunchback pattern 1
			White noise through filter sweep, cresc.
7	Hunchback, p. 6	00:45	Hunchback pattern 2
			Accordion chord (double speed)
8	Insomnia, p. 6	00:51	Rhythmic delay with feedback of two piano (?) sounds (minor third)
			Train-like siren (same rhythm and pitch as asylum chords)
9	Whispering voices	00:25	Several layers of whispering voices in French (played backwards)
10	Love, p. 8	00:25	Piano note
			Strings, sustained chord
			Reed instrument: four-note melody played back through a delay unit
	848		Two different blocks of filtered noise
11	A curse on Austria!	00:27	Chords (double speed)
			Mouth harp rhythmic figure (double speed)
			Recording played back at variable speed (unrecognizable)
			Distorted percussion
			Etc.
14	Hunchback, bottom	00:13	Hunchback pattern 3 (double speed)
	p. 11		Accordion chord (double speed)
			Brass chord (minor triad)
?	Nightmare	00:18	Accordion (2 chords)
			Shortwave radio (Morse code)

Source: RGTC, CUL OR01 Gerhard 039001

## Lament for the Death of a Bullfighter

The 'radiophonic poem'<sup>76</sup> Lament for the Death of a Bullfighter is considered Gerhard's most important accomplishment in the field of sound composition.<sup>77</sup> The

Production for the radio of Gerhard's speech 'Concrete and Electronic Sound-Composition', given at the Galpin Society, which included sound examples of Berio's *Mutazioni*, Stockhausen's *Gesang der Jünglinge* and Schaeffer and Henry's *Symphonie pour un Homme Seul*, as well as various specimens of his own making. It was recorded by Sasha Moorsom on 23 September 1959 and broadcast by the Third Programme under the title *Audiomobiles*, 23 July 1960, WAC, Roberto Gerhard, File II 1953–62. The Gerhard Tape Collection holds a recording of the broadcast: RGTC, CUL\_OR01\_Gerhard\_020601.

<sup>&</sup>lt;sup>69</sup> The first of a series of compositions entitled *Audiomobiles* that Gerhard presented as an example of autonomous work in his script *Audiomobiles*. This two-minute *étude* is based on sounds that were also used by Gerhard in *Asylum Diary*.

<sup>&</sup>lt;sup>70</sup> 23 July, 24 July and 10 September; daily work diary of the Radiophonic Workshop, July 1959 and September 1959, WAC, Radiophonic Workshop, R 97/7/1, Radiophonic effects and electronic music 1956–63.

BBC Radiophonic Workshop Catalogue of Works, Card TRW 1076, courtesy of Mark Ayres.

<sup>&</sup>lt;sup>72</sup> R.E. Brett, Central Programme Operations, letter to AEO(S), 17 March 1960, WAC, Radiophonic Workshop, R 97/9/1 Radiophonics effect committee 1956–68.

<sup>&</sup>lt;sup>73</sup> RGTC, CUL OR01 Gerhard 036901, corresponding to pages 1-4 of the script.

RGTC, CUL\_OR01\_Gerhard\_029101.

<sup>75</sup> RGTC, CUL\_OR01\_Gerhard\_002001; CUL\_OR01\_Gerhard\_008301; CUL\_OR01\_Gerhard\_039001.

McWhinnie described the term 'radiophonic poem' as 'a poetic experience, which only exists in terms of a sound complex'; Donald McWhinnie's introduction to *Private Dreams and Public Nightmares*, www.youtube.com/watch?v=6N1I\_03wPEE (accessed 3 August 2012).

<sup>&</sup>lt;sup>77</sup> See Ates Orga, 'The Man and His Music: An Essay', in Atherton, *Programme Book for the London Sinfonietta*, p. 91.

artistic ambition of this work can be attributed to Gerhard's personal bond with and admiration for Federico García Lorca (a friendship that dated back to the 1920s) and the *carte blanche* that the composer was given on this project.

In May 1959, shortly before Asylum Diary was finished, Bridson sounded Gerhard out about the possibility of composing a musical setting for Lorca's Llanto por la muerte de Ignacio Sánchez Mejias in the translation by A.L. Lloyd. Gerhard accepted the commission to record a continuous soundtrack of up to 15 minutes on his own apparatus for a composition fee of £100. He started to work on the piece towards the end of September, after receiving the tape with the recording of the poem read by Stephen Murray. This is how Gerhard described the onset of his work:

First of all, the whole poem was recorded on its own in English. This recording of the spoken poem I consider, so to speak, as my given theme, as the main thread in the texture I was to weave with other strands of sound. My only interference with the tape carrying the spoken word consisted in lengthening by a matter of seconds the pauses, which separate the four sections. Otherwise I left it untouched; in other words, I took over the whole internal economy of the poem, its word-music and word-rhythm intact ... The emotional note of the poem is one of desolation maintained throughout with variations of intensity only.<sup>78</sup>

At home, Gerhard mapped out 'the length of lines, value of breathing pauses ... changes in speed of speech and levels of vocal loudness'. The condition he then imposed on the composition was not to compromise the intelligibility of the speech at any of the semantically critical moments. Gerhard then started collecting the 'ingredients', which included electronic sounds and tapes of the composer's own music as well as various sounds recorded with a microphone. Among the latter, there were a large number of self-made piano recordings (mainly extended techniques inside the piano) and percussion sounds, recorded by the percussionist Gilbert Webster in a session carried out at the BBC on 25 November. Webster describes this collaboration:

I was once engaged to do a session with Roberto at Maida Vale ... He wanted me to extemporise on about six cymbals, gongs, bass-drums, snare-drums. He just told me what he wanted. I thought it was strange because to me it didn't make any sense, just rolling on a cymbal and rolling on another one. He said, 'Give me four minutes of that, will you Gilbert?' I said, 'Oh yes, right'. I did all this and the session came to an end, and of course I promptly forgot it. But, lo and

behold, I listened to the broadcast of the 'Death of a Bullfighter', which is like a symphony! ... I said, 'That can't be me', so I got in touch with him. I said, 'What did you do with all these sounds? It's absolutely fantastic!' He said, 'I took the tape home, I got all my recording apparatus going and I did something with the sounds'. 'Well,' I said, 'You are marvellous, marvellous!'<sup>80</sup>

The composer took the recordings back home and transformed them in different ways to make them 'flexible enough to be used as a strand or thread in the total fabric'. Each of the four sections of the poem was treated in a different way in terms of 'sound-colour and patterning'. The resulting textures consisted of 'many tape-loops run together, sometimes as many as ten'. The treatment of the spoken word as the main thread of the musical texture can be seen as a response to the dilemma, formulated by the composer more than 30 years earlier, of setting a poem to music and keeping the identity of the poem as a finished artefact. The analysis of the composition reveals that he also experimented with the integration of speech and sound at the phonetic, metric and semantic levels, although intuition also played an important role in shaping the work. In reference to the correspondence of speech and sound composition Gerhard wrote:

This involves careful, even meticulous timing. On the other hand it is often possible to compose a longer sequence freely and then check it against the speech. If it doesn't fit, adjustments are sometimes possible through tape cutting. If that doesn't help, the whole sequence may have to be re-composed afresh. The technique, then, is one that can be described as combining steered operations and chance operations.<sup>84</sup>

According to Desmond Briscoe, who supervised the final stages of the production, the reading of the poem and Gerhard's electronic setting were fitted together in the Radiophonic Workshop during two sessions on 16 and 30 December, and the daily work diary of the Radiophonic Workshop also refers to work on the piece on 17 December. In all, Gerhard recalls having attended only one of the mixing sessions.<sup>85</sup>

<sup>&</sup>lt;sup>78</sup> Gerhard's introduction to the broadcast of the *Lament for the Death of a Bullfighter*; RGTC, CUL\_OR01\_Gerhard\_030701.

<sup>&</sup>lt;sup>79</sup> Roberto Gerhard, 'Introduction to Lament for the Death of a Bullfighter (1960)', in Bowen, Gerhard on Music, p. 185.

<sup>80</sup> RGTC, CUL OR01 Gerhard\_059901L01\_pres.wav, 00:35:56-00:37:04.

Gerhard, 'Introduction to Lament for the Death of a Bullfighter', p. 186.

<sup>82</sup> Ibid., pp. 185-6.

Roberto Gerhard, 'Music and Poetry (1935)', in Bowen, *Gerhard on Music*, pp. 53-6.

<sup>84</sup> Ibid.

<sup>65 &#</sup>x27;... in connection with it, my expenses have been three journeys to London (recording of the poem, by Stephen Murray; recording of percussion sequences, by Gilbert Webster; and mixing of speech and sound at the Radiophonic Workshop)'; Roberto Gerhard, letter to Elsie Wakeham, 2 January 1960, WAC, Roberto Gerhard, File II 1955–62.

Roberto Gerhard's BBC Sound Compositions

Together with an introduction by the composer, and the English and Spanish readings of the poem, Gerhard's setting of Lament for the Death of a Bullfighter was first broadcast on 22 May 1960. The audience gave the programme an appreciation index above average, and the majority of the listeners agreed that the broadcast was 'most rewarding'. 86 Gerhard's introduction to the broadcast was warmly received, although those who thought that his musical setting 'gave another dimension to the work ... were less in evidence'. Furthermore, the opinion was divided about the sonority and beauty of the poem. Several found the Spanish version 'considerably more telling and satisfying than the translation', and there were 'scattered criticisms about Stephen Murray's heavy, theatrical reading' whereas others considered his performance 'an admirable one ... full of feeling'.

The Gerhard Tape Collection contains two recordings of the electronic setting of the poem,<sup>87</sup> as well the composer's introduction to the broadcast,<sup>88</sup> the reading by Stephen Murray,<sup>89</sup> a brief excerpt of the Spanish reading by R.M. Nadal,<sup>90</sup> and a large number of ingredients that Gerhard used to construct the radiophonic part of the work.<sup>91</sup> The documentary evidence, and the remarkable amount and nature of the magnetic tape sketches in the composer's collection related to this composition, appear to reveal a trend toward the composer's increasing technical self-sufficiency.

Symphony No. 3 'Collages'

In the 1950s and 1960s, a growing number of contemporary classical composers created works that combined instruments with tape. Maderna's *Musica su due dimensioni* (1958), Xenakis's *Analogique A* + *B* (1958–9), Berio's *Différences* (1958–60), Stockhausen's *Kontakte* (1959–60) and Davidovsky's *Synchronism No. I* (1963) were all works that, like Gerhard's Symphony No. 3 'Collages', acknowledged their hybrid media in their titles. Similar to Luening and Ussachevsky's *Rhapsodic Variations* (1953–4), Varèse's *Déserts* (1954) and Boulez's withdrawn *Poésie pour Pouvoir* (1958), Gerhard's Symphony No. 3 'Collages' attempted this synthesis of instruments and tape in a larger orchestral

context. They were all compositions that combined instruments and tape, pushing the limits of modern music.

Gerhard's Symphony No. 3 was a work of its time, although one of the few to obtain wider recognition outside avant-garde musical circles. It was certainly the only one of its kind to receive support from the Radiophonic Workshop, most likely due to the advocacy of William Glock and his efforts to subvert the policy of the Music Department towards electronic music. 92 Composed in autumn 1960, the symphony was premiered at the Royal Festival Hall, London, on 8 February 1961 by the BBC Symphony Orchestra conducted by Rudolph Schwarz. The Head of the Radiophonic Workshop, Desmond Briscoe, wrote of the symphony:

The year 1961's most ambitious collaboration was with anglicised Spanish composer Roberto Gerhard, which culminated in Dick Mills supporting live performances of Gerhard's work at both the Royal Albert Hall and also the Royal Festival Hall ... The work was extremely serious in intent, and generally well received by the critics. In the spirit of the collage technique, pre-recorded tape-sounds and orchestral passages were mixed and matched, sometimes in conflict, sometimes in relaxation. Some music lovers, however, found it ahead of its time, as was to be proved at the public concert at the Royal Festival Hall.<sup>93</sup>

Dick Mills, veteran engineer at the Radiophonic Workshop, states that when Gerhard came to work in the studio he already had a solid picture of what he wanted:

all the time we worked with Roberto we were always working with Roberto's material. He didn't come to the Workshop and say: 'Can we make this?' He would bring his material, and may well say, 'Could we filter this a bit or could we put acoustic on it?' ... he came along with a bundle of tapes. What we liked about him is that he understood recording techniques and recording problems ... I think what he really came to the Workshop for was to put his composition into the order he wanted it. He had recorded all the ingredients and then he came to the Workshop and we put it together, mixed it etc.<sup>94</sup>

Mills recalls that the first job involved the transferring of Gerhard's tapes to the BBC standard of 15 ips, as well as a certain amount of cleaning of Gerhard's

The appreciation index of the broadcast was 68, above the average index (62) for poetry readings on the Third Programme; Audience Research Department, 21 June 1960, WAC, Audience Research Reports, R9/6/45 September 1955.

RGTC, CUL\_OR01\_Gerhard\_027201; CUL\_OR01\_Gerhard\_038701. Recordings are also available through the listening services of the British Library Sound Archive and the Biblioteca de Catalunya.

<sup>88</sup> RGTC, CUL\_OR01\_Gerhard\_043701.

RGTC, CUL\_OR01\_Gerhard\_041701.

<sup>90</sup> Ibid.

<sup>&</sup>lt;sup>91</sup> See Gregorio García Karman, 'Playing to be Gerhard', paper given at the 2nd International Roberto Gerhard Conference, Barcelona (April 2012).

William Glock led an attempt to foster the creation of an 'Electronic Composition Workshop' in which selected musicians could compose electronic music. See the minutes of the meetings of the Radiophonic Technical Sub-Committee, 24 November 1960, and the Radiophonic Effects Committee, 18 October 1960, WAC, Radiophonic Workshop, R 97/7/1 Radiophonic effects and electronic music 1956–63.

<sup>&</sup>lt;sup>93</sup> Desmond Briscoe and Roy Curtis-Bramwell, *The BBC Radiophonic Workshop* (London, 1983), pp. 38–9.

<sup>&</sup>lt;sup>94</sup> Dick Mills, personal interview conducted by the author, May 2012.

Roberto Gerhard's BBC Sound Compositions

recordings. If there was any editing or mixing involved, Gerhard would take the role of artistic director rather than intervening at a practical level, in accordance with the regular practice of the unit:

We were there to do Roberto's bidding – what he wanted us to do with his material. If he had brought components, he would say, 'Could we mix these three together?' and we would do it, and he would sit back and would become the director. He wouldn't actively do it.<sup>95</sup>

The tape for Symphony No. 3 'Collages' consisted of ten tape inserts, each referred to by Gerhard as a 'Band' and numbered 1–10. The composer liked to stress that the ingredients for the tape were mainly sounds recorded with the microphone. Some of the acoustic sources include musical sounds such as snaredrum rolls (cue 1), timpani glissandi (6), castanets (6 and 7), piano and harpsichord (7 and 10), or what are probably sounds obtained from everyday objects (3 and 5). There were also pre-existing materials, including samples from previous works like *Asylum Diary* (2) and *Lament for the Death of a Bullfighter* (4 and 5). Despite Gerhard's preference for acoustic sources, the tape part also comprises a number of electronically generated and processed sounds, such as filtered white noise (1, 2, 4, 5 and 10), oscillator glissandi (2), and other electronic ingredients retrieved from various sources available in the Gerhard Tape Collection, which included a catalogue of electronic sounds (see Table 13.3).

One of the most notable differences between the tape cues for Symphony No. 3 'Collages' and previous sound compositions was the focus on the layering of sounds. With the exception of the first and last tape cues, in which the individual sound events are distinct, the rest of the tape cues are based on textures made up from a number of longer, continuous strands of sound. Gerhard referred to the idea of texture by analogy with the collage technique in painting, pointing out that 'one obvious common feature is the particular interest in texture, which is what stimulates the inclusion of materials that are extraneous to the traditional sound or visual media'. <sup>97</sup> In a manner similar to the painter, Gerhard declared that his aim in Symphony No. 3 'Collages' was to exploit the textural counterpoint between the orchestra and the tape:

to reflect this opposition with the utmost possible sharpness, any sort of sound behaviour that could as well have been produced by the orchestra is, necessarily, avoided by the tape ... The sound structure of the tape material differs from that of the orchestra in two decisive variables: in the first place, it tends more to an

undetermined or fluctuating pitch, and secondly, to a more rhythmically free than metrically bound motion ... The orchestra and the tape were conceived simultaneously. Their mutual structural influence was one of the constant driving forces in the creative process.<sup>98</sup>

This counterpoint goes beyond the mere superposition of an element of freedom to the orchestral canvas. The presence or absence of the tape part is a means to articulate the global form of the symphony,<sup>99</sup> and the first and last tape cues establish points of contact between the orchestra and tape that serve as points of departure and arrival in the opening and closing sections. Moreover, the empirical approach taken in the creation of the tape, the fact that it was 'produced and judged through direct listening, intended as immediate acoustic image', '<sup>100</sup> should not divert attention from Gerhard's detailed consideration of the dynamic interplay between orchestra and tape. The importance given to the dynamics of the tape and its gestural shape is reflected across various notebooks of the composer (see Figure 13.5).<sup>101</sup> The interaction between the dynamic contours of the orchestra and the tape – in the composer's words, 'growing into one another' <sup>102</sup> – plays a fundamental role in both the articulation and the unification of the two textures, and encourages a 'musical' interpretation of the sounds on tape.

Symphony No. 3 is the most represented work in the Gerhard Tape Collection. The recordings of historical performances include the 1961 premiere at the Royal Festival Hall, <sup>103</sup> the live broadcast of the 1967 performance at the Royal Albert Hall with Prausnitz and the BBC Symphony Orchestra, <sup>104</sup> and the stereo recording made by EMI, <sup>105</sup> as well as a rehearsal – probably for the first

<sup>95</sup> Ibid.

<sup>&</sup>lt;sup>96</sup> 'The ingredients of the tape assembly are mainly acoustic (recorded with the microphone), in other words, not of electronic-synthetic origin'; CUL, Gerhard 9.112, fol. 57v.

<sup>97</sup> CUL, Gerhard 10.121, fol. 29.

<sup>98</sup> CUL, Gerhard 9.112, fols 57v-56v; author's translation.

Most apparent is the absence of tape in the central section: 'the only in which the tape is not used, [which] works as a hinge for the entire Symphony'; Fernando Buide, 'Unity and Process in Roberto Gerhard's Symphony No. 3 "Collages", *Proceedings of the 1st International Roberto Gerhard Conference* (Huddersfield, 2010), p. 103.

<sup>100</sup> CUL, Gerhard 9.112, fols 57v-56v; author's translation.

In this regard see the following Gerhard notebooks: CUL, Gerhard 9.104, fols 2–3; CUL, Gerhard 7.116, fols 1–13; CUL, Gerhard 7.127, fols 27–8.

Those words were used by Gerhard to describe the sought-after organic interaction between the elements of an assembly; RGTC, CUL\_OR01\_Gerhard\_020601L01\_pres. way, 00:22:16.

RGTC, CUL\_OR01\_Gerhard\_029901. The recording can be easily identified because it captures a member of the audience shouting 'Rubbish!' at the end of the performance. In this regard, see Briscoe and Curtis-Bramwell, *The BBC Radiophonic Workshop*, p. 40.

<sup>104</sup> RGTC, CUL\_OR01\_Gerhard\_012601.

Roberto Gerhard, *Symphony No. 3 'Collages'*, BBC Symphony Orchestra, Frederik Prausnitz, ASD2427 (London, EMI, 1968). Also available in the Gerhard Tape Collection:

performance – that bears instructions given by the composer to the musicians. 106 Noteworthy are a set of ten small 3-inch reels recorded at 71/2 ips that contain the first version of the tape inserts that were used for the concert in 1961.107 These probably hold the assembly of components that Gerhard took with him to the Radiophonic Workshop, from which the first performance tape was produced. Additionally, there are three different single-reel assemblies holding the contents of the aforementioned 1961 set of tapes with minor variations. 108 For the 1967 performance at the Royal Albert Hall, a subsequent revision of the cues was made at the Radiophonic Workshop following Gerhard's instructions, 109 probably in the absence of the composer. The actions undertaken comprised substantial dynamic corrections and a certain amount of editing. The former had the purpose of fixing on the tape part the dynamic variations that were performed live in 1961. The latter included reassembling the beginning of the first cue, and re-recording the four piano and harpsichord string sounds to be used in the final cue. A new version of cue 6 was also made, in which the castanets were removed and two of the tape cues (1a and 7) were subjected to further processing, converting them to stereo. The collection also holds what is probably the 15-ips master tape of this revision<sup>110</sup> (which is identical to the concert material currently available for rental from Oxford University Press as a CD).

In his account of the first concert in the Royal Festival Hall, Dick Mills recounts that the BBC had not realized the difficulties involved in performing the symphony: 'at that time they thought it was just the question of putting up four big loudspeakers'. <sup>111</sup> For the premiere in the Royal Festival Hall, four BBC LS-10 studio loudspeaker units were placed in the orchestra, and Mills and a studio manager of the BBC operated the tape recorder from a flying box. The conditions in the Royal Albert Hall in 1967 were more favourable. Dick Mills and David Cain were at the back of the orchestra with the tape recorder and the public address system: two Vitavox Bass Bins and two pairs of multi-cell horns 'that really pushed it out'. <sup>112</sup>

RGTC, CUL\_OR01\_Gerhard\_012301; CUL\_OR01\_Gerhard\_012401.

# The Anger of Achilles

This is the last of the four works in which the BBC Radiophonic Workshop was involved. According to Gerhard, his contributions to the *Anger of Achilles* were the only ones that were not produced in his own studio: 'these were planned and discussed, in a few instances I intervened actively, with Deliah Darbisher [sic] of the BBC Radiophonic Workshop who executed them'. <sup>113</sup> The orchestral score is divided into 45 sections and only a few cues receive the observation '+ radiophonics'. <sup>114</sup> In comparison with *Asylum Diary* or *Lament for the Death of a Bullfighter*, the shift to electronically generated sounds is apparent. The most obvious among the three or four contributions of radiophonic sound to the play is a 20-second ascending glissando loop that is used as a background motive to identify the appearance of Achilles's mother, Thetis (cues 9a–11). Gerhard wrote an 80-minute orchestral score for this play, and although diegetic sound effects of wind, sea, crowds and swords brandishing were used, along with reverberation chambers to establish locale, the significance of the tape part is minor.

#### Other contributions to radio plays

#### The Overcoat

A small number of 3-inch tapes in the Gerhard Tape Collection have the word 'Gogol' written on them. Listening to their contents does not clarify whether they correspond to the 6 minutes of 'radiophonic sound on which to "float" the ghosts' that the composer fashioned for *The Overcoat* or rather to early stages of that work, although it gives an idea of the haunting quality that Gerhard sought for this production. Neither the combinations of loops of electronic glissandi, timpani roll with glissandi, and the strumming of strings inside the piano (all sounds that Gerhard had already used in *Asylum Diary* and *Lament for the Death of a Bullfighter*) nor the instrumental score suggest that Gerhard's intentions extended beyond producing a stylish background of radiophonic sound.

# Caligula

Gerhard's music for the BBC production of Caligula is scored for three flutes, three trumpets, two tenor trombones, one bass trombone, one mandolin and

<sup>106</sup> RGTC, CUL OR01 Gerhard 005101.

Gerhard\_030001-04; CUL\_OR01\_Gerhard\_30101-04; CUL\_OR01\_Gerhard\_30201-02. This set includes an additional insert tape that bears relation to 'Band 4', perhaps conceived as an alternative version of that cue: CUL\_OR01\_Gerhard\_030201.

See RGTC, CUL\_OR01\_Gerhard\_007901; CUL\_OR01\_Gerhard\_030202; CUL\_OR01\_Gerhard\_030301.

<sup>109</sup> See CUL, Gerhard 7.116, fols 1-13.

RGTC, CUL\_OR01\_Gerhard\_015901. In this respect, see Christopher Samuelson, letter to Roberto Gerhard, 6 November 1967, CUL, Gerhard 15.1.75.

<sup>111</sup> Dick Mills, interview.

<sup>112</sup> Ibid.

Roberto Gerhard, letter to Hugh Davies, 27 January 1967, CUL, Gerhard 14.105. The 'special effects' were acknowledged as being produced by the Radiophonic Workshop in the credits of the play.

Score of The Anger of Achilles, CUL, Gerhard 3.57.

Charles Lefeaux, letter to the Controller of the Third Programme, 27 January 1961, WAC, Roberto Gerhard, File II 1950–62.

percussion. Although it appears as one of Gerhard's works that uses magnetic tape in Davies's catalogue, and the Performing Rights Society's listing of the work makes reference to a score for '11 solo instruments and tape, 10 min. 25 June 1961', neither the score nor the recording of the complete feature reveals electronic music content. <sup>116</sup> It may be that the use of tape was initially intended but plans were changed, and the composer recycled the materials in the later concert tape composition of the same name, which was performed at the Dramatic Arts Centre, Ann Arbor, Michigan, on 18 February 1962 (also included in Davies's catalogue). The Gerhard Tape Collection contains two recordings of this sound composition and some empty tins are marked with this name, but the true history of this work or works remains unclear.

## The technique of sound composition

This final section will examine Gerhard's technique of sound composition more closely, using evidence provided by the Gerhard Tape Collection. 117 Specific aspects that will be considered are: the design of patterns, motives and sound images; the relationship between background and foreground music; the technique of sound montage and the metamorphosis of components; borrowing and recycling as a creative method; and balance and performance.

# Radiophonic sound composition

The 'sound-images'<sup>118</sup> of *Asylum Diary* epitomize Gerhard's idea of the structural simplification and allusive power called for by incidental music in a strictly subsidiary and functional role.<sup>119</sup> Distinct features of Gerhard's sound composition for *Asylum Diary* include:

- the use of brief sound events, mainly as links or backgrounds alternating with longer sections of the narrator's solo voice;
- the use of those events primarily as motives, linked to moods and characters and the (near) absence of diegetic sounds;

 the predominance of sounds produced by musical instruments as raw materials – frequently altered by means of transposition and/or backwards payback, and mixed with other layers of sound;

the non-existence of vocal transformations such as filtering or delay, in contrast with other BBC productions of the period (such as *Private Dreams and Public Nightmares* (1957), *The Ocean* (1958) or *Under the Loofah Tree* (1958));

 the tendency to connect speech and sound images at the semantic level, although sonorous bonds are also exploited.

The features listed above depict the composer's response to the traits of this play, namely a 74-minute-long monologue, the unreal atmosphere of the asylum and the existential conflict of the narrator. An anonymous audience member at Gerhard's speech for the Galpin Society explains the composer's approach to the composition of one of the cues for *Asylum Diary*:

When briefed by the producer he tried to form a mental picture of the condition to be depicted, e.g., imagining the feelings of a madwoman with the world swaying round her. This suggested to him the chromatic timpani, and he would record it in waves of sound, then re-record it and play one against the other, etc., until he had built up an appropriate sound picture. The final result must be judged by the composer's musical imagination. <sup>120</sup>

The following example will examine more closely one of the sound illustrations of *Asylum Diary* – a link/background motive, based on what Gerhard called the 'Hunchback' pattern. Thereafter, this cue will be compared with the more elaborate opening theme of the same production.

The third element on Tape 390,<sup>121</sup> labelled as 'Hunchback, page 6', (see Table 13.2), corresponds to cue 7 of the script. The 'Hunchback' cue is introduced directly after the last words of the first paragraph of page 6 ('... a little interview'), serving as a 10-second link between the two blocks of text. When the speech resumes, what was previously a foreground link is now shifted to the background, where it remains steady for a further 25 seconds until the sentence 'her hunchback becomes more and more pronounced'. At this point, the background starts fading out, until it completely disappears 6 seconds later. The start and end points of this cue, the indication 'in and under', as well as the fade-out are all precisely marked on Gerhard's sound script.<sup>122</sup>

The principle by which the 'Hunchback' sound-image was created is illustrated in Figure 13.2. Its building blocks consist of three tape loops of different lengths,

 $<sup>^{116}</sup>$   $\,$  Recording kindly provided by the BBC through the listening service of the British Library.

For an introduction to the idea of 'sound composition' see Monty Adkins, Carlos Duque and Gregorio García Karman, 'The Electronic Music of Roberto Gerhard', paper given at the 2nd International Roberto Gerhard Conference, Barcelona (April 2012).

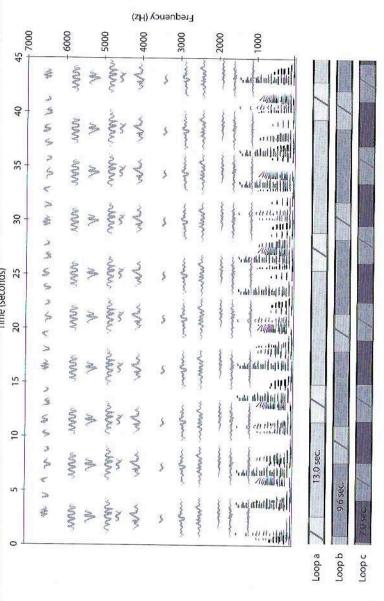
Gerhard referred to the cues of *Asylum Diary* as 'sound-images'; Roberto Gerhard, letter to the Copyright Department, 18 May 1959, WAC, Roberto Gerhard, File II 1955–62.

Gerhard draws a simile to the style of newspaper headlines and poster technique; Roberto Gerhard, 'Concrete Music and Electronic Sound Composition', in *Hinrichsen Music Yearbook*, 11 (London, 1961), p. 35.

<sup>&#</sup>x27;Notes on R. Gerhard's lecture 16.6.59', unidentified author, WAC, Roberto Gerhard, File II 1955-62.

<sup>121</sup> RGTC, CUL\_OR01\_Gerhard\_039001.

<sup>122</sup> CUL, Gerhard 13.2.



Gerhard, Asylum Diary, cue 7, 'Hunchback, page 6': analysis of the tape assembly Figure 13.2

combined to produce a complex, non-periodical pattern. Loop 'a' is based on the three-fold repetition of the same accordion figure - a major third (E-G#), played back at double speed. In the lower register, loops 'b' and 'c' are irregular rhythmic patterns made up of sound variations of a C-C‡ alternating octave figure on the piano, which is subjected to different degrees of sound metamorphosis, such as filtering, transposition and distortion. This pattern is a recurring motive in Asylum Diary, linked to the character of 'the hunchback Queen'. It can be heard as a sonorous metaphor for the grotesque, irregular rhythm of the skeleton of the limping hunchback, which, according to Gerhard, in this cue awakens a feeling of 'fear' and 'revulsion' in the narrator.

The 'Hunchback' cue is one of 43 that make up the sound composition for Asylum Diary. The cues range in duration from a few seconds up to 1 minute. The characteristic simplicity of such links and backgrounds range from straightforward patterns to more stratified compounds. These motives serve to identify certain characters or situations, underline the poetic range of words, suggest the moods of apprehension of the narrator, or describe the delirium of the asylum's inmates. Apart from the 'Hunchback' motive, other characteristic motives are the 'Asylum chords' and a series of melodic cells played by different wind instruments associated with the theme of 'Love'. In Gerhard's view, the expressive range of such sound images suggested that the medium was 'better suited to the fantastic than traditional music'.123

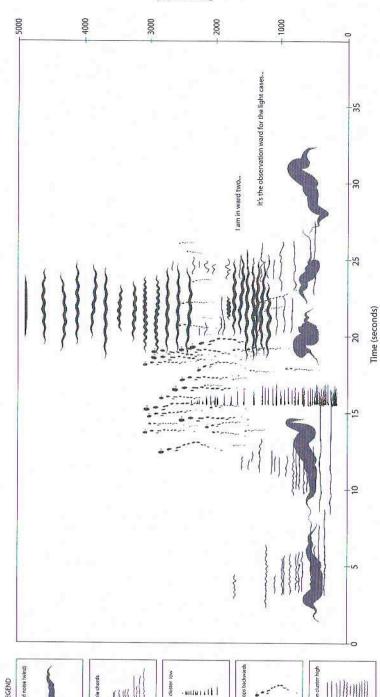
The second cue from Asylum Diary to be considered here is entitled 'Asylum' and opens the production (Figure 13.3). This cue is based on five sorts of ingredients: wind-like, white filtered noise; a sequence of F-minor and F-augmented eerie chords, probably of synthetic origin; a damped cluster in the lower region of the piano; the sound of water droplets played backwards; and a high-pitch sustained accordion cluster, slowly fading in and out. The cue is dominated by the sequence of eerie chords, which are suddenly interrupted by a percussive attack on the piano which has the effect of increasing the tension of the passage. The last seconds of the introduction overlap with the initial words of the play - 'I am in Ward Two. It's the observation ward for the "light cases"" - which emerge within the almost synthetic character of the accordion. In the background is filtered noise. The assembly of these building blocks gives this cue a more articulate, 'musical' character than most sound illustrations in Asylum Diary, demonstrating Gerhard's different conceptions of foreground - what the composer called 'unimpeded listening time'124 - and background music.

Sound-montage, metamorphosis and recycling

When studying the magnetic tape sketches in the Gerhard Tape Collection, one of the most challenging tasks is to trace the use of sound ingredients and compound

RGTC, CUL OR01 Gerhard 020601L01 pres.wav, 00:23:27.

Roberto Gerhard, interview with John Amis, RGTC, CUL OR01 Gerhard 020801.



Gerhard, Asylum Diary: spectromorphological analysis of the opening cue

mixes to form final montages. A number of ingredients are reused in different sound compositions, and compound mixes reappear here and there as variations or alternative renderings of similar combinations of sounds. Moreover, raw materials and compounds played back in both directions and at different speeds<sup>125</sup> can be combined and re-recorded potentially ad infinitum. It is this potential permutation of ingredients and compounds that, in all likelihood, led Gerhard to conceive the idea of audio-mobiles.

Gerhard's technique is a result of his fascination arising from the assembly of a number of individual components to create a new sonic identity:

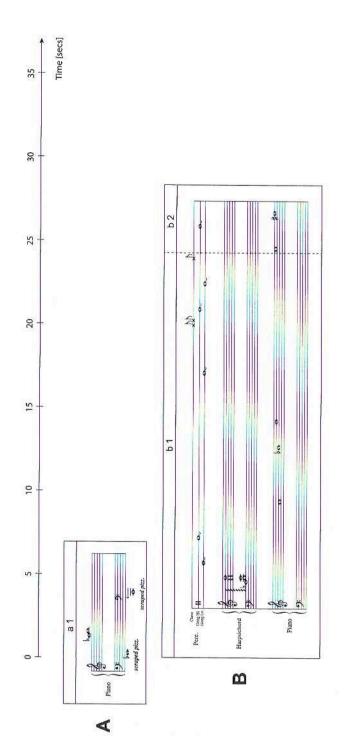
If the result of sound-montage (which is here, of course, the crucial operation) is not a new and compelling overall structure in which the component parts as if under a magic spell are made to play new roles, musical roles I mean, to which their original identity could never have given us a clue, then sound-montage remains somewhat of a game; something like a jig-saw puzzle with pieces upside down or the wrong way round, bumping into one another and thus emphasizing their isolation, rather than giving them a common purpose which would lift them onto a plane of poetic imagery. <sup>126</sup>

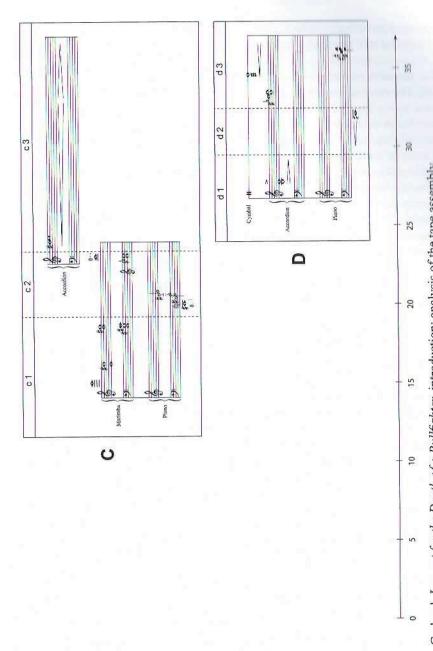
A sound montage that exemplifies this declaration of principles is the introductory tape solo of *Lament for the Death of a Bullfighter*. It also offers a unique opportunity to examine the operations involved in the assembly of the composition, which can be inferred from the available ingredients in the Gerhard Tape Collection (Figure 13.4):

- Component [A] is a 5-second section of tape containing three sounds derived from experiments with extended string techniques inside of the piano.
- Component [B] is a 24-second section of tape borrowed from the bridge of
  an orchestral cue of the television series War in the Air (1954). Comparison
  with the source recording shows that [B] is actually a montage of two
  sequential extracts of that bridge ([b1], [b2]) spliced together.
- Component [C] is a 22-second section of tape combining elements [c1], [c2] and [c3] played back at half speed. Both [c1] and [c2] are brief excerpts of an unidentified recording of marimba and piano. Element [c3] is a crescendo-diminuendo gesture of a semitone interval played by the accordion.
- Component [D] is a 10-second section of tape made up of three sequential elements: [d1] a perfect fourth played by the accordion, [d2] a low piano

The question of determining the 'correct' playback speed of certain ingredients and compounds in the Gerhard Tape Collection can be problematic because of their reappearance at various playback speeds in different contexts.

Gerhard, 'Concrete and Electronic Sound Composition', p. 35.





ly used to reference longer Gerhard, Lament for the Death of a Bullfighter, introduction: analysis of the tape assembly Note: Each note consumes an amount of horizontal space exactly equivalent to its rhythmic duration. Note-head valuad shorter sounds. Transcription by the author (Pitches are approximate due to speed variations of the tape). Figure 13.4

note played backwards, and [d3] a crescendo of the accordion chord and cymbal roll, suddenly interrupted by the piano.

The assembly process involved splicing together the components [A + C] and [B + D]. The resulting two tapes were then played back simultaneously, and the mix recorded on to a third reel-to-reel tape recorder. Upon examination, it is also possible to infer that in the course of this operation the volume of one of the machines was dynamically adjusted, temporarily lowering the level around [c2] in order to take away some of the darker sounds of the piano. With the contribution of [A] and [C], component [B] – formerly a background texture – is transformed into the backbone of the musical line, and – what is most important – the identity of the individual layers vanishes in favour of the global line. As such, this transformation may rightfully be considered a 'striking metamorphosis'. 127

This example also demonstrates a common feature of Gerhard's sound compositions, namely the recycling of recordings from the composer's own instrumental scores. Other instrumental works that Gerhard recycled in his sound compositions include a longer excerpt of Symphony No. 2 (played back at half speed in 'Absent Soul', the fourth section of Lorca's poem) and the music from the radio play *Good Morning Midnight*. <sup>128</sup> In turn, fragments from *Asylum Diary* and *Lament for the Death of a Bullfighter* were subsequently reused in the composition of the tape for Symphony No. 3 'Collages'. The question is, whether such fragments are meant to be heard as intertextual phenomena. The materials chosen by Gerhard intentionally avoid strongly characteristic excerpts, favouring more ductile materials that are easier to fit in new contexts, and it is highly unlikely that even a trained listener familiar with them could establish a link to the original sources. Eventually, it may be argued that the sound image of unusual textures and orchestrations can become referential, contributing, in turn, to the coherency of Gerhard's instrumental output and his sound compositions.

Gerhard also uses other pre-existing materials as ingredients. A curious instance is the source for the second sound illustration labelled as 'Flying horses' in *Asylum Diary*. <sup>129</sup> This sound was borrowed from one of the 45-rpm discs that were released together with the *Gravesaner Blätter*, <sup>130</sup> a copy of which is held on tape in the Gerhard Tape Collection. This tape also contains raw materials used

in a number of other sound compositions (Table 13.3), including significantly the 'aleatoric soundtrack' for the film *DNA* in *Reflection*.<sup>131</sup> While Gerhard's disavowal of electronic sounds should be played down, attention ought to be drawn towards the composer's freedom in the choice of ingredients, and his forward-looking intuition, in practice, of eroding musical hierarchies inherent in recording and electronic technologies.<sup>132</sup>

# Balance! - performance

The sound score of King Lear<sup>133</sup> reveals that one of the methods Gerhard used to obtain the desired intermingling between the different strands of a sound compound was to apply dynamic contours to the ingredients. As previously illustrated in the example from Lament for the Death of a Bullfighter, this could be achieved by playing back the ingredients and re-recording them on to a further tape while adjusting the volume of the two sound sources during the recording process.

The balancing of sound layers also played an important role in *Coriolanus* (1959), a 32-cue theatrical production in which live playback of two simultaneous decks was involved. The sound script contains instructions concerning the level adjustments ('fade ad lib', 'swell to climax') and the dynamic relation between the sound and the actor's voices ('fade behind speech'). <sup>134</sup> The two decks were often played back in alternation in order to give the sound operator an opportunity to prepare the next cue or to achieve continuity of effects and backgrounds. Where two sequences of sound are overlayed, Gerhard variously calls for 'balance!' or for a certain deck to predominate, as well as giving instructions to the operators to vary the dynamics, alternating periodically between the two layers of sound. These techniques, common in theatrical and radiophonic sound production, most likely reflect the way Gerhard worked, shaping the dynamic contours of his compounds. The majority of Gerhard's sound compositions do not have scores; if anything, they consist of timings and loose instructions provided in the form of sound scripts. <sup>135</sup>

<sup>127</sup> Ibid.

This radio play is referenced in one of the lists of ingredients for *Asylum Diary*; CUL, Gerhard 7.116, fol. 45i.

An electronic representation of 'a vision of flying horses with golden manes'; Gerhard, 'Concrete and Electronic Sound Composition', p. 36. See also RGTC, CUL\_OR01 Gerhard 020601L01 pres.way, 00:25:38.

The series in which Hermann Scherchen's Gravesano Electro-Acoustic Institute published the results of its activities between 1955 and 1966; Dennis Hutchison, 'Performance, Technology, and Politics: Hermann Scherchen's Aesthetics of Modern Music', Ph.D. diss. (Florida State University, 2003), p. 144.

For instance, the characteristic motive of the ascending scale in *DNA* in Reflection corresponds to L. Heck, *Klangumwandlungen durch Frequenzumsetzung*, *Teil 4 – Beispiel B*, played back at double speed; RGTC, CUL\_OR01\_Gerhard\_009801M02\_pres.wav, 00:04:39.

See Jesse Stewart, 'Intervections', Contemporary Music Review, 29/3 (2012), p. 327.

<sup>133</sup> CUL, Gerhard 7.102.

<sup>134</sup> CUL, Gerhard 13.7.

For Gerhard, as for many others, working with tape reduced the significance of the score as the mediator between composition and performance. See Gregorio García Karman, 'Closing the Gap between Sound and Score in the Performance of Electroacoustic Music', in Paulo de Assis and Kathleen Coessens (eds), *Sound and Score* (Leuven, 2012).

Time	Source recording	Description	Identified contributions of ingredients
00:00:17-00:13:27	'Klangumwandlungen durch Frequenzumsetzung' [The transformation of sound through frequency	Sound examples illustrating an article on ring modulation and frequency shifting by L. Heck and F. Bürck	Asylum Diary, DNA in Reflection
10000	shifting], <i>Gravesaner Blätter</i> , 4 (1956)		
00:17:17–00:23:01	L'intrusion de l'électroacoustique en musique' [The intrusion of electroacoustics in music], Gravesaner Blätter, 2–3 (1956)	Catalogue of examples compiled by Pierre Schaeffer, demonstrating the effect of filters, microphone techniques (including piano recordings), sound montage, the transformation of a bell, transposition and reverberation	Lament for the Death of a Bullfighter, DNA in Reflection
00:23:02-00:26:04	Theme and variations on percussion instruments (1956)	Tape assembly with percussion and manipulated sounds by Monique Canon, winner of the Concours Internationale du Meilleur Enregistrement Sonore, 1956	
00:26:04-00:33:29	'Psycho- und Elektroakustik der Schallbildsynthese' [The psychoacoustics and electroacoustics of sound synthesis], Gravesaner Blätter, 10 (1958)	Sound examples of psychoacoustic phenomena, ring modulation, synthetic sounds and filtered white noise, accompanied by a text by Fritz Enkel	Asylum Diary, Lament for the Death of a Bullfighter, Symphony No. 3 'Collages'

Source: RGTC, CUL\_OR01\_Gerhard\_009801L01\_pres.wav

A similar concern with the balance of sound layers is evident in the juxtaposition of components in assemblies. In his BBC talk *Audiomobiles*, Gerhard presented an example of three compounds spliced together without paying attention to their editing: 'There are in fact several distinct patterns in the bit you have just heard simply strung together, not flowing and growing into one another. I would never use it myself in composition in such a mechanical line-up.' <sup>136</sup> The use of dynamics in the mixing process for creating compounds and assemblies was a way to achieve the transformation Gerhard was after in order to bring together the constituent elements of a sound composition. These empirical operations were ultimately judged through direct listening: they were *felt*. Moreover, in the final assembly of sound compositions like *Lament for the Death of a Bullfighter*, Dick Mills indicates that Gerhard would have conducted the members of the Radiophonic Workshop as an ensemble. One person would play the tapes and a studio manager would mix on the console. According to Mills:

by the time you get round to putting it together, you probably might have three tapes for practical reasons, you might be able to get away with it with two. But you'd certainly start the words off and then you'd play the other two tapes in. One of us, Desmond probably, or one of the other studio managers on attachment ... would mix it. And then if we got to a point where it all broke down, we'd go back and mix on from there – and then edit back. It was never done as a continuous pass. 137

As has been noted previously, an exception to the empirical approach to dynamics was Symphony No. 3 'Collages'. Figure 13.5 shows Gerhard's formal scheme for the dynamic profile of Band 3, 138 one of the tape cues for the symphony. The values on top of the curve correspond to time in seconds, whereas the (incomplete) list of numbers under the envelope curve refer to bars. The abundant dynamic markings for the tape in Gerhard's copy of the conductor's score reflect this method, taking account of the internal dynamics of the tape and the adjustments that resulted from the experience of controlling the tape's volume in the rehearsals. 139 Gerhard's score adds detailed dynamic markings – graduated from 0 to 5 – that probably correspond to values in the scale of the tape recorder that was used by the Radiophonic Workshop to perform the work. The dynamic contour of the tape of Symphony No. 3 'Collages' is an integral part of the musical conception of the work, and was initially thought to

<sup>136</sup> RGTC, CUL OR01\_Gerhard\_020601L01\_pres.wav, 00:22:16.

<sup>7</sup> Dick Mills, interview.

See Roberto Gerhard, Symphony 3 'Collages' (London, 1972), pp. 17-29.

CUL, Gerhard 1.11; referred to by Gerhard as the 'control' score. See CUL, Gerhard 10.144, fol. 19.

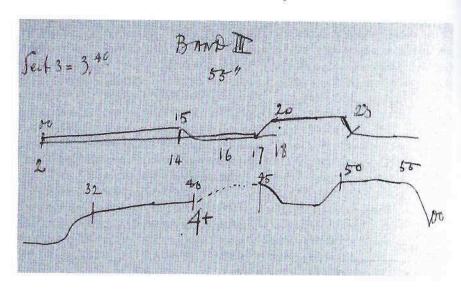


Figure 13.5 Gerhard, Symphony No. 3 'Collages': the composer's outline of the dynamic profile for Band 3

Source: CUL, Gerhard 7.127, fol. 28

be performed live. But the composer's notes found in a second notebook<sup>140</sup> and the examination of the newer version of the tape produced for the concert at the Royal Albert Hall in 1967 confirm that the dynamic profile – shaped live in the premiere – was fixed on the tape for this latter performance.

Gerhard's concern with the dynamic interweaving of the layers of the tape and the orchestra parallels the composer's underlying performative conception of sound composition. In other words, Gerhard treats the orchestra and the tape as multilayered compounds, reflecting – at a different scale – the composer's operations in the studio.

#### Final remark

Gerhard's sound compositions for the BBC include some of the most innovative works in the composer's catalogue. They demonstrate Gerhard's very individual reading of the mannerisms of the electronic avant-garde testing our dependence on musical dogmas and conventions, which the composer professed to abhor. Ultimately, this chapter validates the historical significance of Gerhard's

forward-looking achievements. In conclusion, there works remind us more than ever of Gerhard's advice to the music lover: 'he can be assured that in music the sense is in the sound'.<sup>141</sup>

## Acknowledgements

In addition to the acknowledgements at the beginning of the present volume the author would like to gratefully acknowledge the contributions and assistance of Dick Mills, Mark Ayres, Chris Baume, Samuel Llano, Rosemary Summers, Robin Cunnah, Cecilia Scurfield, Jo Langton, Maddalena Fagandini, Richard Andrewes, Margarida Ullate, Jonathan Summers, Monica Thapar, the BBC Written Archives Centre, British Library Sound Archive, Cambridge University Library, Oxford University Press, Biblioteca de Catalunya, Arnold Schoenberg Centre and the Robert Musil Literatur Museum.

 $<sup>^{140}</sup>$  'Start max. vol. / Lower to medium from 5 to 9 sec. / Fast up to max. from 9 to 15 sec. / Lower to medium from 16 to 19 sec. / Fast up to max. from 19 to 25 sec. / Lower to medium from 26 to 40 sec. / Gradually up to max. from 40 to 50 sec. / Decline slowly from 51 sec. to the end 1 min. 5 sec.' CUL, Gerhard 7.116, fol. 6.

Roberto Gerhard, 'Composer's note', Libra (London, 1970).