

# ELECTRONIC MUSIC WITH PROFESSOR MONTY ADKINS AND DR SAM GILLIES

## TALKING POINTS

### KNOWLEDGE

1. What is electronic music?
2. What is digitisation?

### COMPREHENSION

3. Why is electronic music not considered a 'genre' in the same way as, for example, country, rock or jazz?
4. Why had electronic music in England been slow to develop prior to Gerhard's work?
5. Why is Gerhard considered a pioneer of electronic music?

### APPLICATION

6. If you could, what questions would you ask Gerhard about how his personal life influenced his work?
7. Why do you think Monty and Sam include both the raw audio file (a direct transfer of everything from the original tape) and an edited version of each of Gerhard's recordings in their archive? How might a listener, composer or researcher use each version?
8. What parallels can you draw between the emergence of modernist music and the emergence of modernist art? Consider artists such as Pablo Picasso, Georgia O'Keeffe and Jackson Pollock.

### ANALYSIS

9. Do you think the issue of the 2012 digitisation of Gerhard's work becoming unusable could have been avoided? What lessons could be learned from this event?

### EVALUATION

10. How could you assess whether the Roberto Gerhard Digital Archive fulfils its intended function - to make Gerhard's music accessible and inspire a new generation of composers? To what extent do you think it is important to track the impact of the archive?

### CREATIVITY

11. Based on the parallels between technological and musical advancements in the twentieth century, what new musical trends do you think might emerge over the next few decades, based on how you predict technology to develop?

## MORE RESOURCES

- Monty has his own website where he posts his own compositions. Can you detect any Gerhard inspirations within his work?  
[www.monty-adkins.com](http://www.monty-adkins.com)
- This YouTube video provides a musical 'timeline', with examples of electronic music from 1929 to 2019. Use it to find pieces or sounds that interest you then research them further:  
[www.youtube.com/watch?v=MqukyEC3qWM](https://www.youtube.com/watch?v=MqukyEC3qWM)



Gerhard in his studio. © Cambridge University Library, Roberto Gerhard Archive



## ACTIVITIES

### THE GERHARD ARCHIVES

Visit the Roberto Gerhard Digital Archive and explore musical recordings and other artefacts: [www.heritagequay.org/rgda/roberto-gerhard](http://www.heritagequay.org/rgda/roberto-gerhard)

Listen to the following tracks and consider the following questions:

- Tape 269: Audiobile No. 2: DNA ([www.heritagequay.org/archives/GER/269/01](http://www.heritagequay.org/archives/GER/269/01))
  - How does the structure of the music reflect the structure of DNA?
  - How do you think the sounds in this recording might have been created?
  - Imagine you are experiencing this piece as the soundtrack to a short film, as was intended. What atmosphere does the piece create?
- Tape 271: Audiobile No. 3: Sculpture ([www.heritagequay.org/archives/GER/271/01](http://www.heritagequay.org/archives/GER/271/01))
  - Gerhard used a sculpture to make the percussive sounds you can hear. What sort of structure might the sculpture involve? What materials might it be made from? Visit this page to see if your ideas were correct: [www.heritagequay.org/rgda/electronic-music/works-of-electronic-music/audiobile-no-3-1960](http://www.heritagequay.org/rgda/electronic-music/works-of-electronic-music/audiobile-no-3-1960)
  - What do you think Gerhard is trying to achieve with this piece?
  - What emotions does this piece of music make you feel?
- Tape 272: Lament for the Death of a Bullfighter ([www.heritagequay.org/archives/GER/272/01](http://www.heritagequay.org/archives/GER/272/01))
  - How do the musical sounds complement the narration of this piece?
  - How do you think the sounds in this recording might have been created?
  - How do you think Gerhard's early life might have influenced this piece?

### THE GERHARD MACHINE

The 'Gerhard Machine' is an application developed by the Gerhard Revealed team that approximates some of the technology Gerhard used to make his electronic music. Using this application, you can play with sound in a similar way to Gerhard, sixty years ago!

Visit [www.heritagequay.org/rgda/educational-resources/educational-resources](http://www.heritagequay.org/rgda/educational-resources/educational-resources) and download the application to complete the following tasks:

In the Gerhard Machine:

- Load one of the pre-recorded sounds into the first tape machine. Play back this sound and listen to its contents. Experiment with playing it back in different ways, e.g., change the speed or reverse the audio.
- Once you have found a way of playing back the sound that you like, record it to another tape machine. Notice how you can further manipulate the sound by playing back this new recording at another speed!
- See how unrecognisable you can make the sound in ten manipulations or less.
- When you have recorded a few different manipulations of the source sounds, look at ways you can combine them by recording multiple sound sources to a single tape machine. This is what Gerhard would call an 'assemblage'.
- Export your sounds using the 'write' button for the respective tape reel.

Consider the following questions:

- What do you notice about working with audio recordings in this way?
- Do your processed sounds still sound like the original recordings? In what ways are they different?
- How do you think working with audio recordings in this way changes or affects the kind of music that you make?

In mixing software such as Audacity ([www.audacityteam.org](http://www.audacityteam.org)), Garageband ([www.apple.com/mac/garageband](http://www.apple.com/mac/garageband)) or Reaper ([www.reaper.fm](http://www.reaper.fm)):

- Import the sounds you exported from the Gerhard Machine.
- Play around with the ability to cut, edit, crossfade and overlay different audio tapes in the mixing software.
- Use these techniques to create a short composition (~1 minute long).

Consider the following questions:

- What kinds of expressivity is possible with cutting and splicing audio?
- How does using crossfades change the feel of the piece, compared to using straight cuts?
- How do you think layering different audio recordings might offer more opportunities for musical expression?



Tapes of Gerhard's recordings to be digitised