

Jonathan Harvey  
*Ricercare una melodia*  
1985

portage2020  
2020



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The setup and the execution of the electroacoustic part  
of this work requires a Computer Music Designer (Max expert).

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## Work related information

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### Performance details

- Jan. 10, 1985, <p>Royaume-Uni, Londres, Purcell Room</p>

Publisher : Faber Music

### Detailed staff

- soloist: trumpet

### Realisation

- John Whiting

### Useful links on Brahms

- [Ricerca una melodia](#) for trumpet and electronic device (1984), 6mn
- [Jonathan Harvey](#)

## Version related information

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Documentation date: April 30, 2020

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### Documentalist

Etienne Demoulin (Etienne.Demoulin@ircam.fr)

You noticed a mistake in this documentation or you were really happy to use it? Send us feedback!

### Realisation

- Alexis Baskind (Computer Music Designer)
- Elsa Biston (Computer Music Designer)

Version length: 6 mn

Default work length: 6 mn

### Upgrade Motivation

documentation update

### Comment

untested in concert !

### Other version(s)

- [Jonathan Harvey - Ricercare una melodia - Forked portage2020 \(June 30, 2023\)](#)
- [Jonathan Harvey - Ricercare una melodia - Forked portage2020 \(June 30, 2021\)](#)
- [Jonathan Harvey - Ricercare una melodia - maxmsp5-version-unttested \(Nov. 10, 2010\)](#)
- [Jonathan Harvey - Ricercare una melodia - transfert\\_mustica\\_ftp \(April 14, 2010\)](#)

## Electronic equipment list

### Computer Music Equipment

- 1 Macintosh - *Apple Desktops* (Apple)
- 1 Max 8 - *Max* (Cycling74)
- 1 Fireface 802 - *Sound Board* (RME)
- 1 Footswitch / Sustain Pedal - *Footswitch / Sustain Pedal*
- 1 iConnectMIDI2+ - *MIDI Interfaces* (iConnectivity)

### Audio Equipment

- 1 Microphone - *Microphone*
- 4 Loudspeaker - *Loudspeakers*

Files

File	Type	Author(s)	Comment
<a href="#">Ricerca-2020</a>	Patch		

# Instructions

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## Audio setup

This is a lightweight patch and does not require a powerful computer.

You will need a soundcard with 1 input and 4 outputs.

## Loudspeaker setup

The routing of outputs 1-4 depends on the particular system configuration (requires a 4-channel audio card). You can change the output channels number with the four number boxes, bottom left, near the dac object. The outputs 1 to 4 correspond to the loudspeakers like this :

1	3
2	4

## Midi setup

use a midi pedal to trigger events.

pedal settings : set the input controller midi name, controller number, pedal polarity. It may be useful to open "p infortlin" to monitor the midi input messages your computer receives.

## DSP setup

double-click on the dac~ object opens the dsp status window, where you can choose the sound driver, etc.

The four number boxes above the dac~ object let you change the names or orders of the outputs : for instance, when in rehearsal, you can output on "1 2 1 2" if you've got only two output channels.

## Software installation

put the folder Ricercare-2020 in your file preferences directory and launch Ricercare-2020.maxpat

## System calibration and tests

Level settings. It's always better to let the master out level at the maximum;

Part one has one fader, because the output signals are exactly the same in the four loudspeakers (but delayed)

Part three has four faders, corresponding to the four transpositions, or to the four sounds, and to the four loudspeakers.

## Initialization routine

clicking on "reset" open the dac, pedal reception, initializes patchers and cues;

makes it ready to play from the beginning.

For the rehearsal, click and drag on the number box "Next Cue" : the patch wait for a pedal trigger or space bar to play that cue.

"enter" stops the event being played and re-position at the beginning of this cue (waiting for pedal trigger or space bar).

## Patch presentation

What happens? :

1. incoming signal is delayed 3 sec in channel 1, and 6, 9, 12 sec respectively in channels 2, 3, 4.
2. Start automatic fader play

3. Fade out
4. close the delay lines
5. after 6, 18, 42, 90 sec, with the same durations the incoming signal is transposed, delayed and feds the channels 1, 2, 3, 4
6. stops the recording of the buffer for transpositions
7. 12 sec fade out

## Performance notes

this version has not been played in concert.

## Performance Instructions from the original analog version

### *Performance Instructions*

Two four-track tape recorders and a reverberation unit are needed. The tape-recorders should be set up to a tape-delay of three seconds. The trumpet has a microphone which records onto Track 1 of Tape-recorder (TR) 1. When the signal has travelled to TR 2 (3 seconds later) the signal should be split: sent to Loudspeaker 1, and folded back to TR 1 to be recorded on Track 2. Track 2's signal now travels to TR 2 (3 seconds later) and is again split: to Loudspeaker 2 and to TR 1 to be recorded on Track 3. Track 3's signal is treated likewise: split to Loudspeaker 3 and TR 1's Track 4. Track 4 is simply sent from TR 2 to Loudspeaker 4. Consecutive tracks should not be connected to consecutive speakers, but arranged in one of the following patterns:

I III or I III II IV, etc. Or, in stereo, I+III / II+IV  
II IV

The two tape-recorders should be placed beside each other, with the 3-second loop hanging into a bin (a 1/3 inch-wide glass-faced box). The 3-second mark can be made on the glass, enabling the tape to be maintained *precisely* at it, with a varispeed on TR 2.

The work has been performed without a bin, though there is a slight risk of tape-tangling.

The sound-projectionist should adjust the various levels to keep an *equal balance* between the sound sources. Where the live trumpet is silent, the playback levels may be momentarily increased.

0.9 seconds of reverberation should be added to the recording of Track 1 only. This will, of course, automatically be lengthened with the delay system for the remaining tracks.

Another way to perform the piece, (the most often used), is to make a four-track tape-recording of the delayed lines in a studio, and to perform live against the play-back of this quadraphonic tape. Further information concerning the technical requirements is available from the publishers.

Accidentals carry through only to immediately repeated notes.

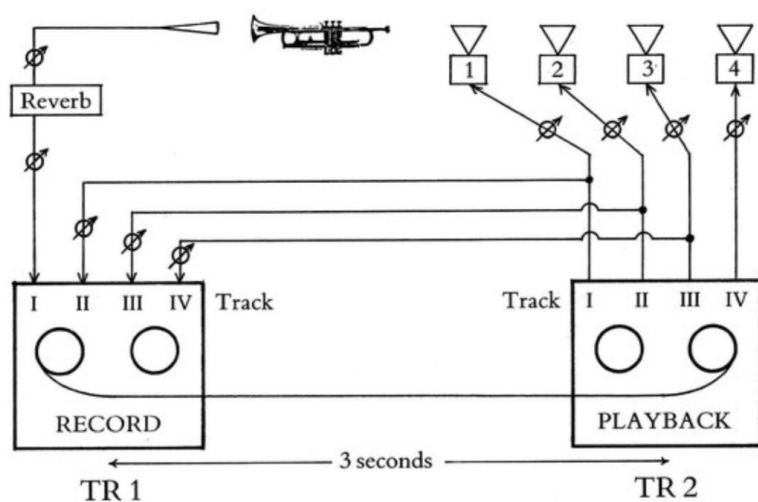
Mutes needed: Melowah, Straight, Harmon.

▲ = highest possible note

The trumpet is notated in C

In the first part of the score, up to the beginning of page 6, the two staves beneath the trumpet part provide indications only for correct ensemble playing, rather than notating all four tracks all the time. From page 6 onwards all the tape-delay is notated.

### Circuit Diagram



### Programme Note

Ricercare means literally 'to seek', and in musical usage it signifies a fugal, often rather strict movement. Here, a five-part canon is obtained by means of a tape-delay system, and when the 'sought-after' melody is 'found', the canon is by progressive augmentation and at the interval of the octave.

## Program note

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La pièce a été écrite initialement pour trompette mais peut être jouée par tout instrument. Il en existe des versions pour trombone, hautbois et violoncelle. « Ricercare » signifie littéralement « rechercher ». Dans le langage musical ce terme désigne un mouvement de fugue, souvent assez strict. Ici, l'écho électrique (« delay ») assure un canon à cinq voix, dont émerge une mélodie résultante. Un second canon se développe alors, dans lequel chaque voix nouvelle est traitée cette fois à demi-vitesse et une octave plus basse que la précédente.

Jonathan Harvey, note de programme du concert ManiFeste du 25 juin 2021 au Centre Pompidou

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