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Construction 005: Similis

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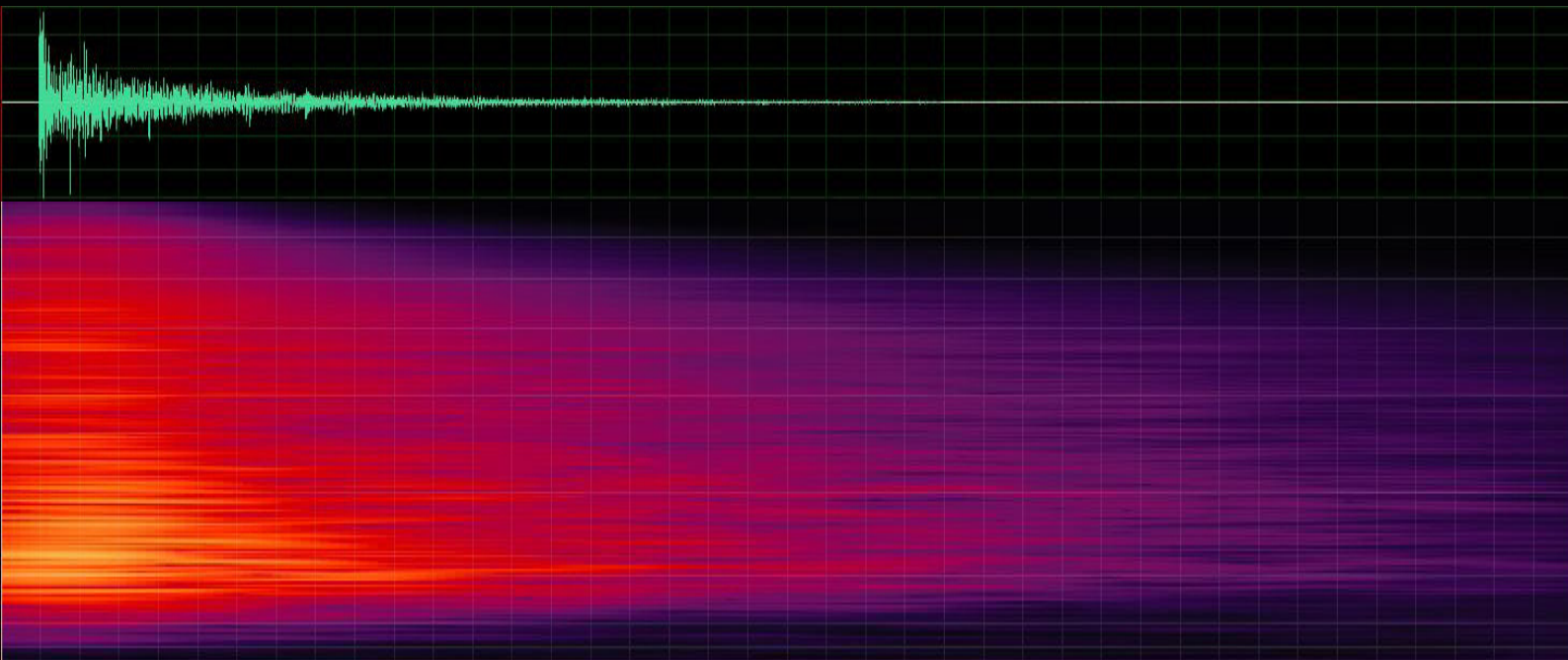
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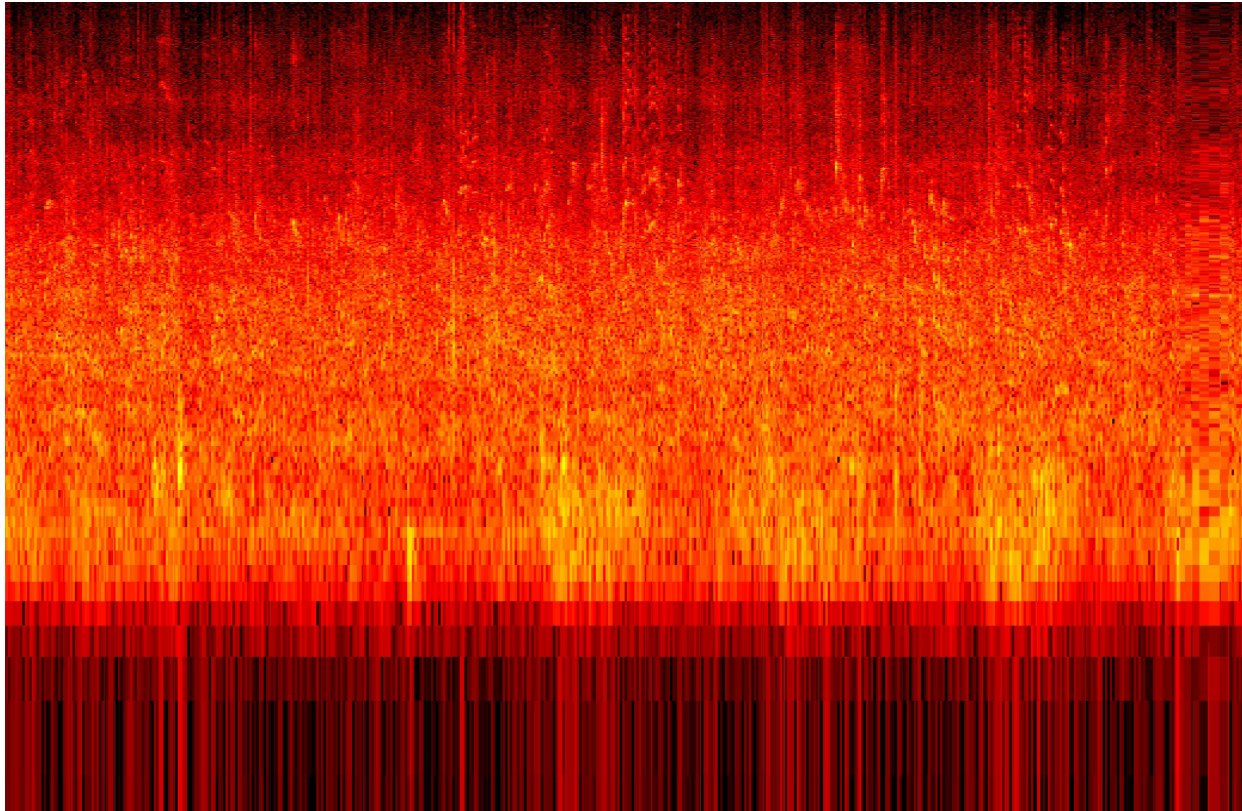
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Emma-Kate Matthews

Construction 005: Similis
June 2019



“Construction 004: Similis”
The Barbican Centre
June 2019

Written for and released at the Barbican Centre, London for Musicity and Culture Mile London, June 2019

This piece serves as a representation and a simulation of the spatio-sonic properties of the Barbican’s main foyer space.

Constant improvements to the portability of recording and listening devices is changing the way that we understand relationships between sound and space. Recorded content in music and sonic art is very often dissociated from the context of its origins, as the spaces in which content is originally captured are often anywhere except where we end up listening to it once it has been processed into new work. This freedom from site-specificity is accompanied by a desire to access and replicate the acoustic character of ‘other’ spaces.

Ambisonic simulation tools are able to offer sonic insights into the way that reflected sound behaves in both built and unbuilt spaces, without the need to physically set foot in them.

In response to these recent shifts in typical listening habits, ‘Similis’ composes an overlay of multiple spatio-sonic realities, which can be independently discussed as sampled, depicted and simulated space. ‘Sampled space’ is heard in the unavoidable capture of the acoustic properties of the space in which the sounds were originally recorded. Even when the recording space is acoustically very dry, the sonic signature of that space is embedded in the recording. ‘Depicted space’ is heard and perceived in the spatial organisation of instruments and their proximity to the microphone and each other. In the case of this piece, the proximity of the instruments to the microphone is particularly important as a representational tool. ‘Simulated space’ is heard in the convolution reverb effect that is applied to the dry recording, to simulate how the music would sound in the Barbican, without the need for any physical interaction between the origins of the sounds and the foyer space. As a result, it’s possible to access the spatial characteristics of the Barbican foyer through listening to the piece, and without the need for the music and the listener to physically occupy that space, and at the same time.

The Barbican foyer is a horizontally-deep, transitional space which defines an architectural and programmatic separation between the external courtyard and the main auditorium. Large concrete structural elements organise the expansive but intimate interior; the depth of which is revealed slowly as you enter the space and discover its many pockets. The foyer’s layered, almost cave-like interior presents a dislocation between sounds and any clear visual links to their origins, reinforcing a sense of horizontal depth.

Similis responds to this spatial condition by presenting sounds that are timbrally similar to each other, at a range of distances to the listener, using only Clarinet and bowed Bass. To replicate the distances as experienced in the Barbican foyer, the track is recorded with a microphone situated at a range of positions, relative to the instruments.

In addition to this sonic representation of the space, the piece is also subjected to an ambisonic simulation of the acoustic performance of the foyer. An acoustic impulse response is first captured in the space and provides information as to how sound across a wide range of frequencies is reflected amongst the Barbican’s textured concrete surfaces. This information is then used to simulate how the piece would sound if played back in the foyer.

The low Clarinet and bowed Bass parts, provide frequencies which sit below the majority of the foyer’s ambient noise; from air handling units, conversation and catering. The low register in which the music is written, deliberately coincides with the most intense region of the impulse response file, as visualised by the spectral frequency display. This means that the music contains a lot of energy around the frequencies which the foyer is particularly reflective to, capitalising on the reverberant potential of the space and thus its ability to ‘blend’ sounds as they are reflected, as if the foyer has the ability to become an instrument itself.

E K Matthews

Construction 005: Similis

Notes:

Please note that this score is intended as a guide only and the following notation may differ slightly from the released recording.

Bb instruments have been transposed.

(Released 10th June 2019 by Musicity)

Instrumentation:

Clarinet in Bb x 3
Bass Clarinet in Bb x 3
Bassoon x 2

1

Cl.
Cl.
Cl.
B. Cl.
B. Cl.
B. Cl.
Bsn.
Bsn.

ppp *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

ppp *fff* *ppp* *ppp* *fff* *ppp* *ppp* *fff* *ppp* *ppp* *fff* *ppp*

ppp *very soft* *ppp* *ppp* *very soft* *ppp* *ppp* *very soft* *ppp*

ppp *ppp* *ppp*

13

subtle trem using breath

Cl.
Cl.
Cl.
B. Cl.
B. Cl.
B. Cl.
Bsn.
Bsn.

ppp *fff* *ppp* *ppp* *fff* *ppp* *ppp* *fff* *ppp* *ppp* *fff* *ppp*

ppp *fff* *ppp* *ppp* *fff* *ppp* *ppp* *fff* *ppp* *ppp* *fff* *ppp*

ppp *ppp* *ppp*

25

subtle trem using breath

Cl. *mf* *fff* *ppp* *mf* *ppp*

Cl. *mf* *fff* *ppp* *mf* *ppp*

B. Cl. *ppp* *fff* *ppp* *ppp* *f* *ppp*

B. Cl. *ppp* *fff* *ppp* *ppp* *f* *ppp* *ppp* *f*

B. Cl. *ppp* *fff* *ppp* *ppp* *f*

Bsn. *ppp* *ppp* *mf*

Bsn. *ppp*

35

subtle trem using breath

Cl. *ppp* *f* *ppp* *f* *ppp* *f*

Cl. *ppp* *f* *ppp* *f* *ppp* *f*

Cl. *ppp* *f* *ppp* *f*

B. Cl. *ff* *mf* *fff* *mf* *fff*

B. Cl. *ppp* *f* *p* *fff* *ppp* *f* *p* *fff*

B. Cl. *ppp* *f* *ppp* *f* *ppp* *f* *ppp*

Bsn. *ppp* *mf* *ppp* *mf*

Bsn. *ppp* *mf* *ppp* *mf*

45

Cl. *ppp* *f* *pp* *f*

Cl. *ppp* *f* *ppp* *f*

Cl. *ppp* *f* *ppp* *f*

B. Cl. *f* *fff* *f* *fff* *f* *fff*

B. Cl. *ppp* *f* *p* *fff* *ppp* *f* *p* *fff*

B. Cl. *f* *ppp* *f* *ppp* *f*

Bsn. *ppp* *mf* *ppp* *mf* *ppp* *mf*

ppp *mf* *ppp* *mf*

55

Cl. *ppp* *f* *pp* *ff* *ppp* *f*

Cl. *ppp* *f* *ppp* *f* *pp* *ff* *ppp* *f*

Cl. *ppp* *f* *ppp* *f* *pp* *ff* *ppp* *ff* *ppp*

B. Cl. *f* *fff* *ppp* *f* *pp* *ff* *ppp* *ff*

B. Cl. *p* *fff* *pp* *ff* *pp* *ff* *pp* *ff*

B. Cl. *pp* *ff* *pp* *ff* *pp* *ff*

Bsn. *ppp* *mf* *ppp* *mf*

ppp *mf* *ppp* *mf* *ppp* *mf*

68 bend between notes with embouchure

Cl. *ppp* *ff* *ppp* *ff*

Cl. *ppp* *ff* *ppp*

Cl. *ff* *ppp* *ff* *ppp* *ff* *ppp*

B. Cl. *ppp* *ff* *ppp*

B. Cl. *pp* *ff*

B. Cl. *pp* *ff*

Bsn. *ppp* *mf* *ppp* *mf*

Bsn. *ppp* *mf* *ppp* *mf*

ppp *mf* *ppp* *mf*

ppp *mf* *ppp* *mf*

Dynamic markings: *ppp*, *ff*, *mf*. Performance instructions: "bend between notes with embouchure".

76 bend between notes with embouchure

Cl. *ppp* *ff* *ppp* *ff*

Cl. *ff* *ppp* *ff* *ppp*

Cl. *ff* *ppp* *ff* *ppp* *ff* *ppp*

B. Cl. *ff* *ppp* *ff* *ppp*

B. Cl. *pp* *ff* *pp*

B. Cl. *pp* *ff* *pp*

Bsn. *ppp* *mf* *ppp* *mf*

Bsn. *ppp* *mf* *ppp* *mf*

ppp *mf* *ppp* *mf*

ppp *mf* *ppp* *mf*

Dynamic markings: *ppp*, *ff*, *mf*. Performance instructions: "bend between notes with embouchure".

84

Cl. *ppp* *ff* *ppp* *ff* *ppp* *ff* *ppp* *ff*

Cl. *ff* *ppp* *ff* *ppp* *ff* *ppp* *ff*

Cl. *ppp* *ff* *ppp* *ff* *ppp* *ff*

B. Cl. *ff* *ppp* *ff*

B. Cl. *ff* *pp* *ff*

B. Cl. *pp* *ff*

Bsn. *ppp* *mf* *ppp* *mf*

Bsn. *ppp* *mf* *ppp* *mf*

ppp *mf* *ppp* *mf*

92

Cl. *ppp* *ff* *ppp* *mf* *ppp* *mf*

Cl. *ppp* *ff* *ppp* *mf* *ppp* *mf*

Cl. *ppp* *ff* *ppp* *mf* *ppp* *mf*

B. Cl. *ppp* *ff* *ppp* *mf* *ppp* *mf*

B. Cl. *ppp* *ff* *pp* *mf* *ppp* *mf*

B. Cl. *ppp* *ff* *pp* *mf* *ppp* *mf*

Bsn. *ppp* *ff* *ff* *improvise a broken call and response based on written notes / rhythm*

Bsn. *ppp* *ff* *ff* *improvise a broken call and response based on written notes / rhythm*

99

Cl. *ppp* *mf*

Cl. *ppp* *mf*

Cl. *ppp* *mf*

B. Cl. *ppp* *mf*

B. Cl. *ppp* *mf*

B. Cl. *ppp* *mf*

Bsn. *ppp* *ff*
continue improvisation

Bsn. *ppp* *mf*
continue improvisation

4 8

108

Cl. *ppp* *mf*

Cl. *ppp* *fff*

Cl. *ppp* *mf*

B. Cl. *ppp* *fff*

B. Cl. *ppp* *fff*

B. Cl. *ppp* *fff*

B. Cl. *ppp* *mf*

Bsn. *ppp* *fff*

Bsn. *ppp* *fff*

4 8

115

Cl. *ppp* *mf*

Cl. *ppp* *mf*

Cl. *mf*

B. Cl. *mf*

B. Cl. *ppp* *mf*

B. Cl. *ppp* *mf*

Bsn. improvise a broken call and response based on written notes / rhythm 4 8

Bsn. improvise a broken call and response based on written notes / rhythm 4 8

124

Cl. *ppp* *mf*

Cl. *ppp* *mf*

Cl. improvise - frantic but sporadic

B. Cl. improvise - frantic but sporadic

B. Cl. *ppp* *mf*

B. Cl. *ppp* *mf*

Bsn. continue improvisation 12 16

Bsn. continue improvisation 12 16

132

Cl. *ppp* *fff*

Cl. *ppp* *mf* *ppp*

Cl. continue improvisation 4 8

B. Cl. continue improvisation 4 8

B. Cl. *mf* *pp*

B. Cl. *ppp* *mf* *pp* *fff*

Bsn. continue improvisation 20 simplify improvisation to these two notes, at random rhythms 4

Bsn. continue improvisation 20 simplify improvisation to these two notes, at random rhythms 4

140

Cl. *> ppp* *ppp* *fff* *ppp* *mf*

Cl. *< fff* *ppp* *ppp* *fff* *ppp*

Cl. continue improvisation 12 end of improv > tongue these notes

B. Cl. continue improvisation 12 end of improv > tongue these notes

B. Cl. *ff* *pp* *pp* *ff* *pp*

B. Cl. *> pp* *pp* *ff* *pp* *pp*

Bsn. continue improvisation 8 12

Bsn. continue improvisation 8 12

150

Cl. *mf*

Cl. *mf*

Cl. *ppp*

B. Cl. *ppp* *fff*

B. Cl. *pp* *ff* *pp* *pp*

B. Cl. *ff* *pp* *pp* *ff*

Bsn. continue improvisation 16 20

Bsn. continue improvisation 16 20

158

Cl. *mf*

Cl. *mf*

Cl. *fff* *ppp*

B. Cl. *> ppp*

B. Cl. *ff* *pp* *pp* *ff*

B. Cl. *> pp* *pp* *ff* *pp*

Bsn. return to original theme - then converge on notes notated in bar 164 4 end of improv >

Bsn. return to original theme - then converge on notes notated in bar 164 4 end of improv >

165

Cl. *mf*

Cl. *mf* *ppp* *fff*

B. Cl.

B. Cl. *pp* *pp* *ff* *pp*

B. Cl. *pp* *ff* *pp*

Bsn. *ppp* *fff* *ppp* *fff* *ppp* *fff*

Bsn. *ppp* *fff* *ppp*

173

Cl. *ppp* *ff*

Cl. *ppp* *ff*

Cl. *ppp* *ff*

B. Cl.

B. Cl.

B. Cl.

Bsn. *ppp*

Bsn. *fff* *ppp*