

All of old.

for piano quartet (violin, cello, synth and piano)

Pangur

00110010 00110000 00110010 00110000 00110000 00110001 00110010 00110001 01111001 01100101 01101110
01110100 01110010 01100001 01100011 01100011 01101101 01101101 01100001 01100100 01100001

0.1 Appendix

All of old

Nothing else ever. Ever tried. Ever failed. No matter. Try again. Fail again. Fail better.

– Samuel Beckett, Worstword Ho

for piano quartet (violin, cello, modular synth and piano)

Duration ca. 14'

Notes on performance

Tuning

24 tone equal temperament is used throughout the piece. The following



accidentals are used to indicate pitches in quarter tone steps from $\frac{3}{4}$ flat – $\frac{3}{4}$ sharp

Dynamics

There are just five dynamic levels used in the piece, the distribution of dynamics between the instruments is one of the primary ways that the three different *colors* are distinguished from one another.

- ppp*** – at the limits of audibility, a mixture of white noise and tone
- pp*** – very quiet tone, clear and delicate
- p*** – soft and clear
- mp*** – full tone, to the fore of the sound
- mf*** – loud clear tone, clearly in the foreground

Structure

As mentioned above, there are three different types of material used in the piece for ease of description, I'll use simple primary color names to explain the types. The recurrence of a particular type of material is based on permutations of a pitch class. Each permutation arise from a transposition path (m3-p4-m6, p4-m6-j2-j6), how often any pitch recurs decides the instrumental texture used to color that pitch.

Red

A more metallic and dissonant sounding figure, the material in the right hand of the piano part is in the foreground, with the strings and synthesizer playing microtonal resonance that swells in the background.

2
10

Vln. *sul pont.* *pp* *mp*

Vlc. *sul pont.* *pp* *mp*

Synth. *pp*

Pno. *mf*

The musical score for the 'Red' section, measures 10-12, features a dissonant and metallic sound. The Violin (Vln.) and Viola (Vlc.) parts are marked *sul pont.* (sul ponticello) and play a series of microtonal notes, starting at *pp* (pianissimo) and swelling to *mp* (mezzo-piano). The Synthesizer (Synth.) part also plays microtonal notes, starting at *pp*. The Piano (Pno.) part features a more prominent, metallic-sounding figure in the right hand, starting at *mf* (mezzo-forte) and swelling.

Green

The idea here is to create a figure is softly focused in the lower register. Matched articulation on the strings over clarity of pitch.

43

Vln. *sul tasto* *p* *mf*

Vlc. *sul tasto* *p* *mf*

Synth. *p* *mf* *p*

Pno. *ppp una corda* *tre corde*

The musical score for the 'Green' section, measures 43-45, features a softly focused figure in the lower register. The Violin (Vln.) and Viola (Vlc.) parts are marked *sul tasto* (sul tasto) and play a series of notes, starting at *p* (piano) and swelling to *mf* (mezzo-forte). The Synthesizer (Synth.) part also plays a series of notes, starting at *p* and swelling to *mf*. The Piano (Pno.) part features a more prominent, metallic-sounding figure in the right hand, starting at *ppp una corda* (pianissimo, una corda) and swelling to *tre corde* (tre corde).

Blue

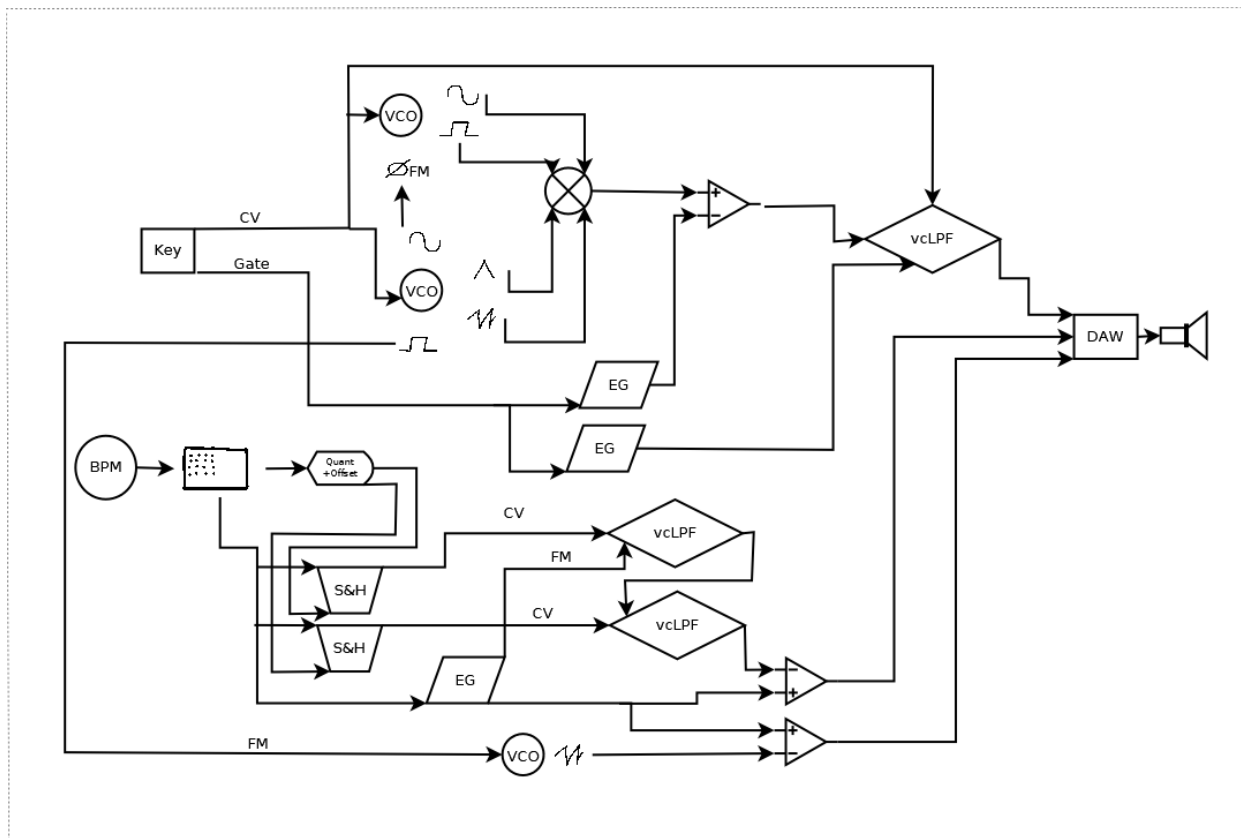
A clear, balanced sound where all instruments play at the same dynamic level and the tuning should be more clearly focused than the other section

The musical score for 'Blue' is presented in a system of five staves. The Violin (Vln.) staff is in treble clef, starting with a 4-measure rest followed by a half note G#4, a quarter note A4, and a half note B4, with a 'V' marking above the B4. The Viola (Vlc.) staff is in bass clef, starting with a 4-measure rest followed by a half note G#3, a quarter note A3, and a half note B3, with a 'pp' dynamic marking. The Synthesizer (Synth.) staff is in bass clef, starting with a 4-measure rest followed by a half note G#3, a quarter note A3, and a half note B3, with a 'pp' dynamic marking. The Piano (Pno.) staff is in grand staff (treble and bass clefs), starting with a 4-measure rest followed by a half note G#3, a quarter note A3, and a half note B3, with a 'pp' dynamic marking. The score is written in 4/4 time and spans three measures.

Modular Synthesizer

The part for synthesizer has two voices: a simple subtractive bass voice that acts as an extension of the cello and left hand piano parts and a percussive figure in the higher register that is created using filter resonance. Although the rhythm is precisely notated in the score, this figure is actually a repeating sequence and sounds best when it is combined with a delay that shifts the pitch microtonally. The patch diagram on the next page outlines what modules are required to realize the synth voice. I used a small *eurorack* modular system to realise the voices in the first performance, but any sort of digital equivalent would work also.

Patch diagram



BPM = clock source

CV = control voltage

DAW = digital audio workstation

EG = Envelope Generator

FM = frequency modulation (linear and thru-0 used)

Key = keyboard

Mix = mixer (circle with a big X)

Quant & Offset = quantizer with offset (a diatonic 10th sounds good)

S&H = sample and hold

VCA = voltage controlled amplifier (sideways triangle with + and - poles)

vcLPF = voltage controlled low pass filter

VCO = voltage controlled oscillator (using multiple waveforms)

0.2 Score

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adam mccartney

The musical score for "The Day After Tomorrow" is presented in a five-staff format. The top staff is for Violin, followed by Cello, Seq. Perc. VCF, Synthesizer, and Piano. The key signature is one sharp (F#), and the time signature is common time (C). The tempo is marked as J = 40. The score is divided into three measures. The first measure shows the Violin and Piano parts with a forte (f) dynamic. The second measure features a piano (pp) dynamic for the Violin and Piano, with a "ord." (order) marking above the Violin staff. The third measure continues the piano (pp) dynamic for the Violin and Piano, with a "V" marking above the Violin staff. The Seq. Perc. VCF and Synthesizer parts are marked with a "C" (Cello) and a "V" (Violin) respectively, indicating their roles in the sequence.

7

Vln. bow tremolo *pp* *mp*

Vlc. bow tremolo *pp* *mp*

Synth. *pp*

Pno. *mf*

10 ²

Vln. *sul pont.*
pp *mp*

Vlc. *sul pont.*
pp *mp*

Synth.

Pno. *mf*

13

Vln. *bow tremolo*
pp *mp*

Vlc. *bow tremolo*
pp *mp*

Synth.

Pno. *mf*

16

Vln. *sul pont.* *sul tasto*
pp *mp* *p*

Vlc. *sul pont.* *sul tasto*
pp *mp* *p*

Synth.

Pno. *mf*

ppp una corda

20

Vln. *mf* *p* sul tasto

Vlc. *mf* *p* sul tasto

Synth. *mf* *p*

Pno. *tre corde* *ppp una corda*

23

Vln. *mf* *p* sul tasto

Vlc. *mf* *p* sul tasto

Synth. *mf* *p*

Pno. *tre corde* *ppp una corda*

26

Vln. *mf* *pp* ord.

Vlc. *mf* *pp* ord.

Synth. *mf* *p* *pp*

Pno. *tre corde*

4

29

Vln.

Vlc.

Synth.

Pno.

ord.

pp

ord.

#2

pp

pp

pp

33

Vln.

Vlc.

Synth.

Pno.

sul tasto

p

mf

sul tasto

p

mf

p

ppp una corda

36

Vln.

Vlc.

Synth.

Pno.

sul tasto

p

mf

sul tasto

p

mf

p

tre corde

ppp una corda

39

Vln. *ord.* *pp* *ord.* *#2*

Vlc. *pp* *#2*

Synth. *pp*

Pno. *pp*

tre corde

43

Vln. *sul tasto* *p* *mf*

Vlc. *sul tasto* *p* *mf*

Synth. *p* *mf* *p*

Pno. *ppp una corda* *tre corde*

46

Vln. *bow tremolo* *pp* *mp* **B** *sul pont.* *pp* *mp*

Vlc. *bow tremolo* *pp* *mp* *sul pont.* *pp* *mp*

Synth. *pp* *pp*

Pno. *mf* *mf*

6
51

Vln. *sul tasto*
p *mf*

Vlc. *sul tasto*
p *mf*

Synth. *p* *mf* *p*

Pno.

ppp *una corda* *tre corde*

55

Vln. *sul tasto*
p *mf*

Vlc. *sul tasto*
p *mf*

Synth. *p* *mf* *p*

Pno.

ppp *una corda* *tre corde*

58

Vln. *bow tremolo*
pp *mp*

Vlc. *bow tremolo*
pp *mp*

Synth. *pp*

Pno. *mf*

61

Vln. *sul pont.*
pp *mp*

Vlc. *sul pont.*
pp *mp*

Synth.

Pno. *mf*

64

Vln. *sul tasto*
p *mf*

Vlc. *sul tasto*
p *mf*

Synth. *p* *mf* *p*

Pno. *ppp una corda* *tre corde*

67

Vln. *sul pont.*
pp *mp*

Vlc. *sul pont.*
pp *mp*

Synth.

Pno. *mf*

70

sul tasto

Vln. *p* *mf*

Vlc. *p* *mf*

Synth. *p* *mf* *p*

Pno. *ppp una corda* *tre corde*

73

sul tasto

Vln. *p* *mf*

Vlc. *p* *mf*

Synth. *p* *mf* *p*

Pno. *ppp una corda* *tre corde*

76

ord.

Vln. *pp* *ord.*

Vlc. *pp*

Synth. *pp*

Pno. *pp*

79

Vln. *pp* bow tremolo *mp*

Vlc. *pp* bow tremolo *mp*

Synth. *pp*

Pno. *mf*

82

Vln. *pp* sul pont. *mp*

Vlc. *pp* sul pont. *mp*

Synth. *pp*

Pno. *mf*

85

Vln. *pp* ord. *pp* *ord.* *pp*

Vlc. *pp* *ord.* *pp*

Synth. *pp*

Pno. *pp*

88

ord.

Vln. *pp*

Vlc. *pp*

Synth. *pp*

Pno. *pp*

91

bow tremolo

Vln. *pp* *mp*

Vlc. *pp* *mp*

Synth. *pp*

Pno.

94

bow tremolo

Vln. *pp* *mp*

Vlc. *pp* *mp*

Synth. *pp*

Pno.

D

97

Vln. bow tremolo *pp* *mp*

Vlc. bow tremolo *pp* *mp*

Synth. *pp*

Pno.

100

Vln. bow tremolo *pp* *mp* sul tasto *p*

Vlc. bow tremolo *pp* *mp* sul tasto *p*

Synth. *pp* *p*

Pno.

ppp una corda

104

Vln. sul tasto *p*

Vlc. sul tasto *p*

Synth. *mf* *p* *p* *mf* *p*

Pno.

tre corde *ppp* una corda

12
108

Vln. *sul tasto*
p

Vlc. *sul tasto*
p

Synth. *p* — *mf* — *p*

Pno.

tre corde *ppp* *una corda* *tre corde*

112

Vln. *ord.*
pp

Vlc. *ord.*
pp

Synth. *pp*

Pno. *pp*

116

Vln. *sul tasto*
p

Vlc. *sul tasto*
p

Synth. *p* — *mf* — *p*

Pno.

ppp *una corda*

120

E sul tasto

Vln. *p*

Vlc. *p* sul tasto

Synth. *p* *mf* *p*

Pno.

tre corde *ppp* *una corda*

123

ord.

Vln. *pp* ord.

Vlc. *pp* ord.

Synth. *pp*

Pno. *pp*

tre corde

127

sul tasto

Vln. *p*

Vlc. *p* sul tasto

Synth. *p* *mf* *p*

Pno.

ppp *una corda* *tre corde*

14
130

Vln. bow tremolo *pp* *mp*

Vlc. bow tremolo *pp* *mp*

Synth. *pp*

Pno.

133

Vln. bow tremolo *pp* *mp*

Vlc. bow tremolo *pp* *mp*

Synth. *pp*

Pno.

136

Vln. *p* sul tasto

Vlc. *p* sul tasto

Synth. *p* *mf* *p*

Pno. *ppp* una corda tre corde

139

Vln. *sul tasto*
p

Vlc. *sul tasto*
p

Synth. *p* — *mf* — *p*

Pno.

ppp *una corda* *tre corde*

142

Vln. *bow tremolo*
pp — *mp*

Vlc. *bow tremolo*
pp — *mp*

Synth.

Pno.

145

Vln. *bow tremolo*
pp — *mp*

Vlc. *bow tremolo*
pp — *mp*

Synth.

Pno.

148

Vln. *sul tasto*
p

Vlc. *sul tasto*
p

Synth. *p* — *mf* — *p*

Pno.

ppp *una corda* *tre corde*

151

Vln. *bow tremolo*
pp — *mp*

Vlc. *bow tremolo*
pp — *mp*

Synth. *pp*

Pno.

154

Vln. *sul tasto*
p

Vlc. *sul tasto*
p

Synth. *p* — *mf* — *p*

Pno.

ppp *una corda* *tre corde* *ppp* *una corda*

158

Vln. I

Vln. II

Synth.

Pno.

mf *p*

pp *ord.*

pp

pp

tre corde

163

Vln. bow tremolo *pp*

Vlc. bow tremolo *pp*

Synth. *pp*

Pno.

166

Vln. bow tremolo *pp* *mp*

Vlc. bow tremolo *pp* *mp*

Synth. *pp*

Pno.

0.3 Parts

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0.3.1 Violin

all of old
violin part

adam mccartney

Violin

$\text{♩} = 40$

ord.

pp

pp

bow tremolo

pp < *mp*

10

sul pont.

pp < *mp*

bow tremolo

pp < *mp*

sul pont.

pp < *mp*

sul tasto

p

20

sul tasto

mf

p

mf

p

mf

27

ord.

pp

ord.

pp

sul tasto

p

35

mf

p

mf

ord.

pp

43

sul tasto

p

mf

bow tremolo

pp < *mp*

B

sul pont.

pp < *mp*

52

sul tasto

p

mf

p

mf

bow tremolo

pp

59

sul pont.

mp

pp < *mp*

sul tasto

p

mf

134 Vln. *mp* *p* sul *tasto* *p* sul *tasto*

142 Vln. *pp* < *mp* bow tremolo *pp* < *mp* bow tremolo *p* sul *tasto*

151 Vln. *pp* < *mp* bow tremolo *p* sul *tasto* *p* sul *tasto*

159 Vln. *pp* ord. *pp* bow tremolo *pp* < *mp* bow tremolo

0.3.2 Cello

all of old
cello part

adam mccartney

Cello

$\text{♩} = 40$ ord. *pp* *pp* *pp* *mp* bow tremolo

10 Vlc. *pp* *mp* sul pont. bow tremolo *pp* *mp* sul pont. *pp* *mp*

19 Vlc. *p* *mf* sul tasto *p* *mf* **A** *p* sul tasto

26 Vlc. *mf* ord. *pp* ord. *pp* *p* sul tasto

35 Vlc. *mf* sul tasto *p* *mf* ord. *pp*

43 Vlc. *p* *mf* sul tasto bow tremolo *pp* *mp* **B** sul pont. *pp* *mp*

52 Vlc. *p* *mf* sul tasto *p* *mf* bow tremolo *pp*

59 Vlc. *mp* *pp* *mp* sul pont. *p* sul tasto *mf*

67 C

Vlc. *sul pont.* *pp* *mp* *sul tasto* *p* *mf* *sul tasto* *p* *mf*

75

Vlc. *ord.* *pp* *pp* *mp* *sul pont.* *pp* *mp*

85

Vlc. *ord.* *pp* *pp* *pp* *mp* *bow tremolo* *pp* *mp* *bow tremolo* *pp*

95 D

Vlc. *mp* *pp* *mp* *pp* *mp* *sul tasto* *p*

105

Vlc. *sul tasto* *p* *sul tasto* *p*

111

Vlc. *ord.* *pp* *pp* *pp* *sul tasto* *p*

119 E

Vlc. *sul tasto* *p* *pp* *ord.* *pp*

126

Vlc. *sul tasto* *p* *pp* *mp* *bow tremolo* *pp* *mp* *bow tremolo* *pp* *mp*

135

Vlc. *p* sul *tasto* *p* sul *tasto*

142

Vlc. *pp* < *mp* *pp* < *mp* *p* sul *tasto*

151

Vlc. *pp* < *mp* *p* sul *tasto* *p* sul *tasto*

159

Vlc. *pp* *ord.* *pp* *pp* < *mp*

0.3.3 Synthesizer

adam mccartney

42
Synth. 

Example 10

2
54

Synth.

$p < mf$ p pp

61

Synth.

pp

p < mf > p

67

Synth.

pp

p *mf* *p* *p*

C

74.

Synth.

mf/p *pp* *pp*

Musical score for 'Synth.' (Synthesizer). The score is written on a grand staff with a treble and bass clef. The key signature has one sharp (F#). The tempo is marked 'Allegretto' and the time signature is 3/4. The score consists of 82 measures. The melody in the treble clef is a continuous eighth-note pattern. The bass clef part features a series of chords and single notes, including a prominent F# in the first measure and a series of chords in the final measures. The dynamics are marked 'pp' (pianissimo) in the first and last measures.

88.

Synth.

pp

94

Synth.

pp

97 **D**

Synth.

pp *pp* *p <*

104

Synth.

mf *p* *mf* *p* *pp* *p* *pp* *p*

119 **E**

Synth.

mf *p* *mf* *pp* *p* *mf* *p*

129

Synth.

pp *p*

133

Synth.

pp *p < mf > p*

139

Synth.

p < mf > p *pp*

145 **F**

Synth.

pp *p < mf > p*

151 ⁴

Synth.

pp *p < mf* *p < mf*

159

Synth.

pp *pp*

166

Synth.

pp

0.3.4 Piano

all of old
piano part

adam mccartney

Piano

$\text{♩} = 40$

pp

Pno.

5

mf

10

mf

15

mf

ppp
una corda

20

tre corde *ppp*
una corda

24

tre corde *ppp*
una corda

tre corde

2

28

Pno.

pp

33

Pno.

ppp

una corda

tre corde

37

Pno.

ppp

una corda

tre corde

pp

41

Pno.

ppp

una corda

45

Pno.

mf

tre corde

49

Pno.

mf

ppp

una corda

B

53

Pno.

tre corde **ppp** una corda

56

Pno.

tre corde **mf**

60

Pno.

mf **ppp** una corda

65

Pno.

tre corde **mf**

69

Pno.

ppp una corda tre corde

73

Pno.

ppp una corda tre corde **pp**

77

Pno.

mf

Measures 77-81: The right hand plays chords and single notes, while the left hand plays a rhythmic pattern of eighth notes. Dynamics include *mf*.

82

Pno.

mf *pp*

Measures 82-86: The right hand plays chords and single notes, while the left hand plays a rhythmic pattern of eighth notes. Dynamics include *mf* and *pp*.

87

Pno.

pp

Measures 87-91: The right hand plays chords and single notes, while the left hand plays a rhythmic pattern of eighth notes. Dynamics include *pp*.

92

Pno.

Measures 92-95: The right hand plays chords and single notes, while the left hand plays a rhythmic pattern of eighth notes.

96

Pno.

D

Measures 96-99: The right hand plays chords and single notes, while the left hand plays a rhythmic pattern of eighth notes. A dynamic marking **D** is present.

100

Pno.

ppp una corda

Measures 100-103: The right hand plays chords and single notes, while the left hand plays a rhythmic pattern of eighth notes. Dynamics include *ppp* and *una corda*.

104

Pno.

tre corde **ppp** una corda

108

Pno.

tre corde **ppp** una corda tre corde

112

Pno.

pp **pp**

117

Pno.

ppp una corda tre corde

121

Pno.

E

ppp una corda tre corde

125

Pno.

ppp una corda

129

Pno.

tre corde

133

Pno.

ppp una corda

137

Pno.

ppp una corda

141

Pno.

tre corde

145

Pno.

ppp una corda

149

Pno.

tre corde

153

Pno.

ppp una corda *tre corde*

157

Pno.

ppp una corda *tre corde* *pp*

161

Pno.

165

Pno.