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J A B

PIANO

(2021)

ALEX TAY

Jab is dedicated to Adam Łukawski, a gifted composer who radically changed how I regard Shepard tones. He himself is carrying out important research which implements both Shepard tone principles and Artificial Intelligence technologies. This piece would have taken a very different course if not for many of our perspective-altering conversations. *Jab* is directly influenced by many of Adam's ideas.

Jab is a simultaneous expression of turmoil and joy. At the time of composing *Jab*, I experienced frustration, anger, fear, rejection and loss. At the same time, there was laughter, exhilaration, discovery and rebirth. While sketching, composing and extensively recomposing, I constantly questioned what exactly I wanted to deliver.

Was it a joke or swear? A punch line or a sucker punch? Ultimately, I couldn't decide.

The piece is built on six contrasting gestures. The first, at bar 1, is a cluster that peels away to reveal diatonic harmonies and then a scale (such gestures are found in Dutilleux, Nielsen and Schumann). The second, at bar 5, is a twinkling two part counterpoint. The third, at bar 8, is a bulldozer in a China shop, a spectacle which misdirects. The fourth, at bar 23, is a slow, ornamental, Finnisian melody with morphs into two. The fifth, at bar 33, is a Shepard tone texture. The Shepard tone textures in particular are inspired by Adam's research. While formulating his theories and ideas, he showed me Shepard tones built on parallel chords and what he described to me as "gravity lines". On hearing these "gravity lines", I realised that a descending tone suspended in the air by piano resonance could be answered either immediately with a downward scale and/or its next descending tone in its downward trajectory could arrive much later. When both of the above are implemented, two scales descending in different timescales are heard, such is the power of pitch-proximate stream segregation. This way of increasing the scalic potential of each tone in a Shepard tone texture only enhances the illusion's effect. The sixth and last gesture, at bar 51, consists of lithe arpeggiations which excite ghostly harmonics from strings sustained in the sostenuto pedal. These seemingly appear from nowhere. Across the piece I combine and recombine these gestures; push them through Risset accelerations and decelerations; throw and muddy them.

Jab was commissioned by John Woolf through the Ralph Vaughan Williams Trust. Initially, Dominic Degavino, a Park Lane Group young artist, was due to premier the piece. However, because of the coronavirus pandemic, the Park Lane Group were unable to mount a premier of the piece. Instead, Ben Smith premiered the piece in November 2021 at the Guildhall School of Music and Drama.

The tempi marked in this piece are ideals: although they cannot be fully realised by a human pianist, they should be strived for. In the fastest passages, pianists should decide their own maximum tempi and scale the tempi in the rest of the piece accordingly. Where certain composed details prevent performers from realising the full effect which they interpret that any given passage of *Jab* should have, performers may edit or even omit any of those aforementioned details.

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JAB

♩ = ca. 104 rit.

♩ = ca. 88

Strike keys, left hand gradually releases over the indicated duration

Piano

f vicious

♩ = ca. 92, con rubato

rit.

♩ = 80

Subito ♩ = 96

♩ = 116

♩ = 144

Pno.

pp molto leggero, starlight

sub. p, wraith

f

mf *p* *fp* *mf* *f*

f, boisterous

sub. mp *mf*

sf

Ped.

♩ = 120

♩ = 150 rit.

♩ = 96

♩ = 68 rit.

♩ = 48

♩ = 144

molto rit.

♩ = 116

Pno.

più f *mf* *p* *ff*

sub. p, cresc.

mp, cresc.

f *pp* *molto cresc.*

f *pp* *mf, molto cresc.*

rit. $\text{♩} = 86$ rit. $\text{♩} = 54 \leftarrow \text{♩} = 150$ molto rit. $\text{♩} = 68 / \text{♩} = 136$ $\text{♩} = 150 / \text{♩} = 300$

41

Pno.

f *p* *mf* *ff* *più ffp* *f* *fff*

7 3 7:5

3 5 3 5

rit. $\text{♩} = 47 / \text{♩} = 94$ $\text{♩} = 80$ $\text{♩} = 64$ $\text{♩} = 54 \leftarrow \text{♩} = 150$

46

Pno.

fp *ff* *sub. p* *ppp* *mf* *p* *ff*

7:6 3 5 3 3

3 3 3

D ♩ = 54/♩ = 108

accel.

♩ = 120

51

Pno.

p, nervous

p

mp

pp

f

Sost. Ped. sempre

Ped.

1/2 Ped.

(full)

rit. ♩ = 108

accel.

♩ = 120 molto rit.

57

Pno.

sub. mp
(Sost. Ped. sempre cont.)

ff

p

f

sf

Ped.

Ped.

♩ = 54 ← ♩ = 90 → ♩ = 120 ← ♩ = 180 → ♩ = 108

accel.

62

Pno.

sub. p cresc.

f

pp

mf

ff

pp

pp

pp

Sost. Ped. sempre cont.

Ped.

Ped.

Ped.

♩ = 120 rit. ♩ = 80 ← ♩ = ♩ = 120 molto rit. ♩ = 72

Piano score for measures 67-71. The score is written for piano (Pno.) with treble and bass staves. It features complex rhythmic patterns, including 5/16, 9/16, 4/4, 3/4, and 5/16 time signatures. Dynamics range from *sub. p* to *ff*. Performance instructions include *f, cresc.*, *(Ped.)*, and *(Sost. Ped. sempre cont.)*. Fingerings and articulations are indicated throughout.

poco rit. ♩ = 32 ← ♩ = ♩ = 160 poco accel.

Piano score for measures 72-76. The score continues with piano (Pno.) notation. It includes time signatures of 5/16, 3/16, 3/4, 15/16, 9/16, and 5/16. Dynamics include *ff*, *p*, *pp*, *mf*, and *mp*. Performance instructions include *(Ped.)* and *(Sost. Ped. sempre cont.)*. The piece concludes with a *pp* dynamic.

E

♩ = 180 (♩ = 120) accel. ♩ = 144 molto rit. ♩ = ca. 48, con molto rubato

Piano score for measures 79-83. The score is written for piano (Pno.) with treble and bass staves. It features complex rhythmic patterns, including 5/16, 7/8, 3/4, 2/4, and 2/2 time signatures. Dynamics range from *pp* to *fff*. Performance instructions include *(Ped.)*, *(Sost. Ped. cont.)*, and *sub. ppp, sotto voce ma cantabile*. The piece concludes with a *(full)* dynamic.

87

Pno.

p *pp* *mp > p* *mf > p* *mp* *mf*

(Ped.) (1/2) (1/4) (full) (1/4) (1/2)

91

Pno.

mp, poco cresc. *mf, poco marcato, cresc.* *f, marcato* *sf* *f*

(Ped.) (1/2) (1/2) (full) (sim.)

F

8^{va}.1 *mp*

95

Pno.

p *mf* *p* *mf* *sub. mp* *f* *p* *f*

(Ped.)

8^{va} *8^{va}*

99

Pno.

p *f* *p* *f*

poco accel.

(Ped.)

8^{va} *8^{va}*

102

Pno.

poco a poco cresc.

ff

(Ped.)

poco a poco cresc.

G Subito Meno Mosso ♩ = 48

poco accel.

105

Pno.

sub. ppp

ff

sub. pp

pppp

Una Corda

Sost. Ped. sempre

109

Pno.

ppp

ppp

pp

pp

f

pp < ff

pp < f

pp

< f

(Una Corda)

(Sost. Ped. sempre cont.)

Ped.

Ped.

Ped.

Ped.

H WINDING, TIGHTENING
accel.

p $\text{♩} = 60$ *mp* $\text{♩} = 70$ *ppp* $\text{♩} = 80$ *p* *pp* *mp* *pp*

Pno.

p, poco a poco cresc.
(Sost. Ped. sempre cont.)

Ped.

mp sub. mf sub. p mf

$\text{♩} = 90$ $\text{♩} = 100$ $\text{♩} = 110$ $\text{♩} = 120$

Pno.

sub. p sub. pp *sub. p* *ppp* *mp* *mf* *p* *pp* *p sub. pp* *mf*

mp, poco a poco cresc.
(Sost. Ped. sempre cont.)

mf, poco a poco cresc.

I **più accel.**
 $\text{♩} = 60$ $\text{♩} = 78$ $\text{♩} = 96$

Pno.

ff pp, leggiero *mp ppp <>* *mp* *pp <>* *mp > pp* *pp* *pp* *p* *pp* *mp* *pp* *p* *pp* *mp*

ff *sf mp* *sf* *mf* *mf* *mf* *mp* *smf* *smf* *smf* *mp* *mf* *sf*

(Sost. Ped. cont.)

Ped.

J più accel.

♩ = 114 ♩ = 132 ♩ = 150 ← ♩ = ♩ → ♩ = 75

Pno.

121

pp *mp* *pp* *p* *pp* *mf* *mp* *f* *f* *sf* *mp* *pp* *mf* *pp* *mf*

mf *sf* *sf* *sf* *sub. p* *sub. mf* *sff* *sf* *f* *f* *p* *f* *mf* *p* *mf* *pp* *fp* *mf* *ff*

più f, explosive *sub. mf* *sff, feroce*

Ped. Ped. Ped. Ped. Ped. Ped. Ped. Ped. Ped. Ped. Ped. Ped.

K più accel.

♩ = 102 ♩ = 128 ♩ = 154 ♩ = 180 ← ♩ = ♩ → ♩ = 90

Pno.

124

pp *f* *mf* *p* *mf* *pp* *f* *p* *mf* *pp* *f* *pp* *mf* *mf* *sub. p* *mf sfp* *f* *f* *pp* *fp* *sub. f* *sff* *fp* *sub. p* *fp* *mfp* *sf*

ffp *mf* *f* *ff, explosive* *mf sff* *sf* *mp* *sf* *sf* *pp* *mf* *sff* *mf* *sub. f* *mp* *sf* *p* *ff* *ff* *sf*

Ped. Ped. Ped. Ped. Ped. Ped. Ped.

L più accel.

♩ = 130 ♩ = 170 ♩ = 210 ← ♩ = ♩ → ♩ = 105 ♩ = 172 ♩ = 240 ← ♩ = ♩ →

Pno.

128

sub. p *p* *fp* *f* *mf* *sf* *ff* *mp* *f* *sf* *sff* *sub. mf* *mf* *p* *mfp* *mf* *mfp* *mfp* *mfp* *mf* *sf* *mf* *ff*

ff *f* *sf* *sff* *mp* *f* *sf* *mf* *p* *mfp* *mf* *mfp* *mfp* *mfp* *mf* *sf* *mf* *ff* *ff* *ff* *mf* *f* *p* *f*

Ped. Ped. Ped. Ped. Ped.

♩ = 120 ♩ = 80 ♩ = 54 ← ♩ = ♩ → ♩ = 108

ppp *pp* *ppp* *pp* *ppp* *pp*

ppp, cresc. *p, cresc.* *mp smf mp* *mf > p*

ppp, cresc. *p, cresc.* *mp smf mp* *gliss.*

132

Ped.

♩ = 68 ♩ = 26 ← ♩ = ♩ → ♩ = 80 ♩ = 40 ← ♩ = ♩ →

mf *pp* *f > pp* *ff* *pp* *mf* *sub. ppp* *ff*

mf *sub. mp* *mf* *f* *ffp* *mfp* *f* *p*

135

rit.

♩ = 160

♩ = 138

♩ = 120 ← $\frac{1}{2}$ ♩ = ♩ →

137

Piano part with dynamics: *ffp*, *mp*, *sf*, *sub. mp*, *fpp*, *mp*, *sf*, *sub. mp*, *mf*, *sf*, *pp*, *fp*, *mf*, *ff*.

Articulations: *gliss.*, *gliss.*, *gliss.*

Rhythmic markings: 6:5, 9, 10, 6:5, 11, 6, 7, 7, 7, 7.

N

rit.

♩ = 120 /
♩ = 420

♩ = 385

♩ = 350

♩ = 315

139

Piano part with dynamics: *ffp*, *p*, *mf*, *f*, *p*, *mf*, *mf*, *ppp*, *mf*, *mf*, *ff*, *mf*, *fp*, *f*, *mp*, *sf*, *p*, *mfp*.

Articulations: *gliss.*, *gliss.*, *gliss.*

Rhythmic markings: 9, 3, 3, 3, 3, 5, 3, 5, 5, 7:6, 4:3, 5:3, 11.

♩ = 280

♩ = 245

♩ = 60 / ← ♩ = ♩ = 120
♩ = 210

♩ = 112

mf — *p*

f — *pp* *marcato*

fffpp — *mp*

Piano score for measures 143-152. The score is written for piano (Pno.) with treble and bass clefs. It features complex rhythmic patterns, including triplets, sextuplets, and a 9:10 ratio. Dynamics range from *mf* to *fff*. Performance instructions include *gliss.*, *marcato*, and *sub. pp*. Measure numbers 143, 147, 151, and 152 are indicated. A tempo change to *O rit.* is shown at the top right.

♩ = 102

♩ = 94

♩ = 85

♩ = 77

sfp — *mf*

f — *pp*

fp — *f*

fp — *ff* — *mp*

Piano score for measures 147-152. The score is written for piano (Pno.) with treble and bass clefs. It features complex rhythmic patterns, including triplets, sextuplets, and a 10:10 ratio. Dynamics range from *sfp* to *ff*. Performance instructions include *gliss.* and *più f*. Measure numbers 147, 151, and 152 are indicated.

P rit.

♩ = 68 ♩ = 60 ← ♩ = ♩ → ♩ = 120 ♩ = 104 ♩ = 90

151

marcato

sfp *f*

ff *gliss.* *gliss.*

fffppp *fffppp* *p sub.ppp* *pp sub.ppp* *pp*

fff *fff* *p sub.ppp* *p*

fff *fff*

ffp *sf* *sub.mf*

gliss. *gliss.* *gliss.* *gliss.*

Sost. Ped. sempre

rit.

♩ = 76 ♩ = 60 ← ♩ = ♩ → ♩ = 120 ♩ = 104

155

p *sub.ppp* *mp* *sub.ppp* *p*

sub.mf *sub.p* *mf* *f* *mp* *mf* *pp* *sfp* *ff* *p*

mp sub.p

mp sub.p *mp* *sub.mf* *sub.mp* *mf* *sub.mp* *f* *sub.mf* *f* *sf* *ff* *p*

gliss. *gliss.* *gliss.* *gliss.*

Sost. Ped. sempre cont.

♩ = 88

sf *ff* *mp* *fp* *ffp* *sf* *fff* *mp* *ff* *fff sub. mf* *ff* *pp*

158

Pno.

sf *ff* *mf* *sf* *ff* *sub. mf* *ff* *fff* *f* *ff* *fff sub. f* *fff* *f*

(Sost. Ped. sempre cont.)

♩ = 56

fff *sub. mf* *f* *pp* *ff* *fff* *p* *ff*

160

Pno.

fff *sub. mf* *f* *sub. p* *mfp* *f* *fff*

più fff, sonoro *sub. mf* *f* *ff* *sub. mp, cantabile* *fff*

più fff, sonoro

(Sost. Ped.)

162

Pno.

sub. p

sub. mf < ffp *ffp* *fff*

fff, sonoro

fffmp

fff, sonoro

fff

(1/2) (1/2) (full) (1/2) (1/2) (full)

164

Pno.

f

mf *ff*

p

fff, molto sonoro

fff, molto sonoro

fff, molto sonoro

fff, molto sonoro

sub. f < ff

sub. p

fff, molto sonoro

Ped.

Sost. Ped. sempre

$\frac{7}{3} = \text{rit.}$

9

Piano score for measures 167-172. The score is in 2/4 time. Measure 167 starts with a forte (*ff*) dynamic and includes a *(Ped.)* instruction. Measures 168-170 feature complex rhythmic patterns with 5, 7, and 3 note groupings. Measure 171 includes a *gliss.* instruction and a *fff* dynamic. Measure 172 features a dynamic range from *fff* to *pp* and back to *ff* and *pp*. A *(Sost. Ped. sempre cont.)* instruction spans the entire passage.

Piano score for measures 170-176. Measure 170 begins with a *poco accel.* marking and a forte (*f*) dynamic. Measure 171 includes a *mp* dynamic. Measure 172 features a *gliss.* instruction and a *ff* dynamic. Measure 173 includes a *8^{sub}* marking and a *fff* dynamic. Measure 174 features a *fff* dynamic. Measure 175 includes a *fff* dynamic. Measure 176 ends with a *fff* dynamic. A *(Ped.)* instruction is present, with a *(Sost. Ped. sempre cont.)* instruction covering the passage.

R Subito ♩ = 60 rit. ... ♩ = 40/♩ = 80, con rubato

accel. ... ♩ = 60 rit.

Piano score for measures 173-178. Measure 173 starts with a piano (*p*) dynamic and includes a *sub. mp* instruction. Measure 174 features a *pp* dynamic and a *(Ped.)* instruction. Measure 175 includes a *(Ped.)* instruction. Measure 176 features a forte (*f*) dynamic and a *(Ped.)* instruction. Measure 177 includes a *mp* dynamic. Measure 178 ends with a *mp* dynamic. A *(Sost. Ped. sempre cont.)* instruction spans the passage.

178

Pno.

pp *p* *pp* *p* *pp* *mp* *pp* *mp*

Una Corda
(Sost. Ped. sempre cont.)

183

Pno.

mf *p* *f* *p* *mf*

Tre Corde
Ped.
(Sost. Ped. sempre cont.)

accel. $\text{♩} = 72$ rit. $\text{♩} = 60$ accel. $\text{♩} = 80$ *rall.* $\text{♩} = 160$ $\text{♩} = 126$

ppp, gentile *sim.* *sempre ppp*

187

Pno.

mf *ppp* *ppp* *mp* *mf* *p* *f*

(Ped.)
(Sost. Ped.)

ppp Ped.
Sost. Ped. sempre

$\text{♩} = 92$ $\text{♩} = 60$ $\text{♩} = 40$ accel. $\text{♩} = 72$ rit.

$\text{♩} = 40$
sub. pp *p* *pp* *mp* *pp* *mp* *p* *sub. ppp*
accel.

190

Pno.

mf

sub. pp *p* *pp* *mp* *pp* *mp* *p* *sub. ppp*

p

Ped.

(Sost. Ped. sempre cont.)

$\text{♩} = 80 \leftarrow \text{♩} = \text{♩} \rightarrow \text{♩} = 160 \text{ rit.}$

193

Pno.

mp *mf* *ppp* *sim.* *sempre ppp*

8^{vb}

(Ped.)
(Sost. Ped. sempre cont.)

$\text{♩} = 80 \text{ rall.}$ $\text{♩} = 40$

196

Pno.

mf *mp* *p* *mp* *pp* *mp* *ppp* *mf* *ppp* *mf*

mp *p* *ppp*

(Ped.)
(Sost. Ped. sempre cont.)

199

Piano score for measures 199-201. The piece is in 2/4 time. Measure 199 features a wide interval of 16:15 in the right hand and 18 in the left hand, with an 8vb interval indicated. Dynamics range from *ppp* to *mp*. Pedal markings include *(Sost. Ped. cont.)* and *Sost. Ped. sempre*.

Subito ♩ = 40

poco accel.

♩ = 72 rit.

202

Piano score for measures 202-204. The piece is in 2/2 time. Measure 202 features a wide interval of 16:10 in the right hand and 3 in the left hand. Dynamics range from *pp* to *mp*. Pedal markings include *(Sost. Ped. sempre cont.)* and *Ped.*

♩ = 60 poco accel.

marcato

sim.

With Palms

205

Piano score for measures 205-207. The piece is in 3/4 time. Measure 205 features a wide interval of 7 in the right hand and 5 in the left hand. Dynamics range from *ppp* to *mp*. Pedal markings include *(Ped.)* and *With Palms*.

208 *sim.*

ff

sempre ffff, beserk

(Ped.)

♩ = 120 ← ♩ = ⁻³⁺ → ♩ = 107 poco rall.

T ♩ = 90

(♩ = 60) poco rall.

212 *sim.*

ppp ffff *fff ppp ffff* *ppp < pp* *ppp < pp ff ppp* *sf*

fff, sonoro

fff, sonoro

fff mp pp

(Ped.)

Sost. Ped. sempre

♩ = 56

(♩ = 84)

220

ff sub. ppp *sf sub. ppp < p* *pp sub. fff sub. ppp* *pp* *pp* *pp* *sub. fff* *sf* *p < mp* *p* *mp*

mf < ff

sub. ff

ff

(Ped.)

Sost. Ped. sempre cont.

223

Pno.

fff fffmp mf sub. mp mf

mf p mp p mf sf p mp pp mf pp mf pp

fff mp < mfp mp sfp ff

pp p pp mp ppp mp mf

fff ppp p mp mp mf

ppp pp p

Ped. mp

(Ped.)
(Sost. Ped. sempre cont.)

226

Pno.

fff mfp sf pp mp p mf p mf pp mf pp f pp f ppp

fff pp mp pp sf sfp mp pp fp pp mp pp

ffp < mf sub. p mf p pp mf p mp pp mf pp f

f ppp

Ped. Ped.

(Sost. Ped. sempre cont.)

rit.

228

Pno.

fff *mp > p* *sf* *p* *ppp* *pp* *ppp* *fff* *pp* *fff*

p *mp* *sfpp* *fffppp* *mp* *pp* *p* *p* *pp* *mp* *sub. f* *fff sub. p* *sf*

p *ppp < p sub. ppp* *mf* *ff* *pp* *ppp* *mp* *sub. f <* *pppp*

p
(Ped.) _____
(Sost. Ped. sempre cont.)

Ped. _____
(1/2) (1/2) (1/2)

ff
Ped. _____

mp
Ped. _____

Ped. _____
(1/2) (1/2)

♩ = 56 poco a poco accel.

233

Pno.

mf *pp* *mp* *sub. f* *ff* *sub. pp* *sf* *sub. pp* *mp* *sub. f* *sub. ppp* *sub. f* *sf* *mp* *sub. ppp* *sub. mf < f* *sub. mp* *mp*

mf *mp* *ff* *sub. pp* *sf* *sub. pp* *mp* *sub. f* *sub. ppp* *sub. f* *sf* *mp* *sf* *sf sub. mp* *sf*

mp
Ped. _____
(Sost. Ped. sempre cont.)

Ped. _____

mp
Ped. _____

Una Corda *Tre Corde*
Ped. _____

Ped. _____

239 $\text{♩} = 63$ $\text{♩} = 76$

Pno.

mf sf ppp sf sub. f f mp mf p < mf gliss. f l.h. r.h. fp < sf f mf mp < f sub. pp mf

mf ppp sf p < f f mp sf sf mf mp f mf

mf f

Ped. (Sost. Ped. sempre cont.)

più accel.

$\text{♩} = 84$ $\text{♩} = 96$ $\text{♩} = 108$ $\text{♩} = 120$ $\text{♩} = 144$ $\text{♩} = \text{♩} \rightarrow$

245

Pno.

sub. ppp mf sub. pp mf p ff p sf mp mf f ff mf sfp fff sub. f ffff

mp mf pp sf mf sf sf fp mf fpp ff mf fp sf fffp f ff ffff

f p ff ff p ffff

Ped. (Sost. Ped. sempre cont.)

250 **U** **Subito Presto Possibile**

pp, molto leggero *mp sub. pp* *sub. mp* *sub. pp* *sub. mp* *pp sub. mf* *mp* *pp sub. mp* *sub. pp* *sf*

(Ped.) (Ped. off)

(Sost. Ped. sempre cont.)

252

mf *pp mp* *pp* *mf sub. pp* *sf* *sub. f* *pp sub. mf* *sub. pp* *sub. mf* *pp sub. mp* *mf sub. pp* *mp sub. pp* *mf p mf*

(Sost. Ped. sempre cont.)

Repeat this staccato passage more than twice. The performer should decide where it is most fitting to end. The final repeat of this passage may be partial. Once the performer finishes, the bass tones held by the sostenuto pedal should have long died out and only a haze of harmonics should remain.

Hold the sostenuto pedal at least until the harmonics die out.

254

sub. pp *mf* *sub. pp* *sf* *pp sub. mp* *f*

(Sost. Ped.)