

Gregory Lee Newsome

Ambitus

for alto flute and digital signal processing

Acknowledgment

Ambitus was commissioned by Daniel Cooper for Mark Takeshi McGregor. I am sincerely grateful for their support.

Duration

11:15

Instrumentation

- Alto Flute
- Digital Signal Processing (with operator)
 - microphone (omnidirectional headset)
 - audio interface (minimum one input, two output)
 - computer with software capable of stereo delay and stereo convolution reverb
 - stereo sound system

Performance Instructions

Alto Flute

No vibrato throughout.

Digital Signal Processing

The signal chain is microphone → audio interface → computer → stereo sound system.

The delay and reverb should each have their own stereo auxiliary channel in the software, with each receiving the microphone signal.

The delay setting should be: left 624 ms, right 468 ms, feedback 33%.

The reverb should use convolution and be ~8 seconds in duration. It should be diffuse, expansive, and transparent, never blurry or overwhelming.

The operator is to perform the delay and reverb as per the score.

Both the microphone signal and the signal processing should go to the sound system, with the signal processing ~3dB quieter than the microphone signal.

Multiphonics



1 3 4 | 2 A B 5 (or alternative on E)



1 2 4 | 4 5 (or alternative on B-flat)

Symbols



aeolian tone

[f]

voiceless labiodental fricative (IPA), e.g. "ph" in "phantasm"

t.r.

tongue ram



mouthpiece normal



mouthpiece covered



mouthpiece closed



transition between mouthpiece positions



brief pause to reset mouthpiece

Premiere

Ambitus was premiered by Mark Takeshi McGregor on October 16th, 2015 at Open Space in Victoria.

Version

2018-10-08 (ISO)

Programme Note

Ambitus has a specific meaning for a musician—the distance between the highest and lowest notes in a composition. This Latin term for *going round* was originally an accusation of exerting soft power in Ancient Rome, and is the root of the English word *ambition*.

This dual meaning is at the heart of *Ambitus*. In the first sense, the work is a literal exploration of range and register, though also a metaphorical one, traversing duration, pitch, texture, and timbre. The second sense comes from the commission, which had a single condition—the work must be a virtuosic, ambitious endeavour for both the composer and the performer.

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for Mark Takeshi McGregor

Ambitus

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♩ = 72, furious

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Alto Flute

ff
delay on
reverb off

9

mf *mp* *ff* *f* *mf*

16

mp *mf* *f* *ff*

23

f *mf* *mp* *ff*

31

f *mf* *mp* *ff*

40

f *mf* *f* *ff*

48

f *mf* *f* *ff*

56

56-64

f *mf* *ff* *f* *mf*

Staff 56-64: Treble clef, key of D major. Measures 56-64. Rhythms include 15/64, 3/16, 1/4, 3/16, 15/64, 9/64, 3/16, 1/4, 3/16. Dynamics: *f*, *mf*, *ff*, *f*, *mf*. Phrasing slurs and accents are present.

65

65-73

f *ff* *f* *ff*

Staff 65-73: Treble clef, key of D major. Measures 65-73. Rhythms include 9/32, 1/4, 3/8, 15/64, 9/64, 3/16, 1/4, 3/16. Dynamics: *f*, *ff*, *f*, *ff*. Phrasing slurs and accents are present.

74

74-84

f *ff*

Staff 74-84: Treble clef, key of D major. Measures 74-84. Rhythms include 1/4, 3/16, 1/4, 15/64, 9/32, 3/8, 1/4. Dynamics: *f*, *ff*. Phrasing slurs and accents are present.

85

85-96

f *ff*

Staff 85-96: Treble clef, key of D major. Measures 85-96. Rhythms include 3/8, 3/32, 9/64, 1/4, 3/8, 1/4, 3/8, 1/4. Dynamics: *f*, *ff*. Phrasing slurs and accents are present.

97

97-108

f

Staff 97-108: Treble clef, key of D major. Measures 97-108. Rhythms include 3/16, 3/8, 1/4, 3/8, 3/16, 3/8, 1/4, 3/32, 9/32. Dynamics: *f*. Phrasing slurs and accents are present. The word "angry" is written above measure 104.

109

109-115

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

Staff 109-115: Treble clef, key of D major. Measures 109-115. Rhythms include 9/32, 9/64, 3/16, 9/32, 9/64, 1/4, 3/8. Dynamics: *mf*, *mp*, *p*, *mp*, *mf*, *f*. Phrasing slurs and accents are present.

116

116-123

mf *mp* *mf*

Staff 116-123: Treble clef, key of D major. Measures 116-123. Rhythms include 3/8, 1/4, 3/16, 9/32, 3/16, 9/32, 3/16, 3/8. Dynamics: *mf*, *mp*, *mf*. Phrasing slurs and accents are present.

124

124-131

f *mf* *mp* *f*

Staff 124-131: Treble clef, key of D major. Measures 124-131. Rhythms include 1/4, 9/64, 9/32, 3/64, 3/16, 1/4, 3/16, 3/16. Dynamics: *f*, *mf*, *mp*, *f*. Phrasing slurs and accents are present.

134 *mf* *mp* *mf* *f* *mf* *mp*

142 *f* *mf* *mp*

154 *mf* *f* *mf* *f*

166 *mf* *f* *mf* *f*

tense

177 *mf* *mp* *p* *mp* *mf*

186 *mp* *p* *mf*

196 *mp* *p* *mp* *mf*

206 *mp* *mf*

219 *restless*

mp

230

p pp p mp

241

p mp

253 *calm*

p

264

pp p

275 *still*

pp

287

297

305 *nothingness*

ppp

♩ = 54, murmuring

delay $\longrightarrow$ off
reverb $\longrightarrow$ on

309

[f] *pp* *p* *pp* [f] *pp* *p* [f] *pp* *p* [f] *pp* *p*

320

mp [f] *p* [f] *p* *p* *mf* *p* [f] *pp* [f] *pp*

330

[f] *p* [f] *pp* *p* [f] *p* *mf* [f] *p* *mf*

340

mp [f] *p* *mp* [f] *p* [f] *p*

350

[f] *pp* *p* [f] *pp* *mp* [f] *pp* *p* [f] *p*

360

pp *mp* *pp* [f] *pp* [f] *pp* *p* [f] *pp* *p*

6
370

t.r. □ → ● , □

[f] *pp* < *p* *mp* [f] *p* < *mf* *p* *mp*

380

t.r. □ → ● 5 t.r. □ → ● , □

[f] *p* < *mf* *p* [f] *p* < *mf* *p* *mp*

389

t.r. □ → ● t.r. □ → ● , □ t.r. □ → ● 5 ,

[f] *p* [f] *pp* *mp* [f] *p* < *mf* *p*

399

t.r. □ → ● t.r. □ → ● t.r. □ → ● , □

mp [f] *p* [f] *pp* [f] *pp* *mp*

409

t.r. □ → ● 5 , □ t.r. □ → ●

[f] *p* < *mf* *p* [f] *pp* < *p*

418

t.r. □ → ● , □ t.r. □ → ●

[f] *p* < *mf* *p* *mp* *pp* [f] *pp*

426

t.r. □ → ● t.r. □ → ● t.r. □ → ●

[f] *pp* *mp* [f] *p* [f] *pp*

436 t.r. $\square \rightarrow \bullet$, $\square$ t.r. $\square \rightarrow \bullet \blacksquare$

[f] *pp* *mp* *mp* *p* < *mf* *p*

445 t.r. $\square \rightarrow \bullet \blacksquare$, striving

[f] *p* < *mf* *p* *mp* reverb dimin. to m. 470

451

457

463

470

p *pp* *ppp*

reverb quiet but present