

SPIRAL
for solo violin and ensemble

Robert Hasegawa
2008

PERFORMANCE NOTES

Spiral is a study in sustained timbral combinations, drones, and just intonation harmony. The harmonic language of the piece is based on a progression of overtone series chords. These chords are centered around five successive drones—on the third, fifth, seventh, ninth, and eleventh overtones of a low F. Harmonies are arranged around each drone so that the drone pitch is heard successively in different harmonic meanings: for example, the initial C drone is heard first as the 3rd overtone of F, then the 5th overtone of A-flat, then the 7th-overtone of D, and so on. A low F appears at the beginning of each of the five sections, as one drone gives way to another.

Microtonal pitches are notated as follows:

closed-headed arrows indicate an adjustment of 16 cents (a sixth of a semitone) up or down

open-headed arrows indicate an adjustment of 33 cents (a third of a semitone) up or down

Altered accidentals indicate quartertones:

quartertone sharp: †

quartertone flat: ‡

The notated pitches are the closest approximations in 72-tone equal temperament of pitches in just intonation: players may make slight adjustments to make the just intervals perfectly in tune. In a few instances, a held note must be corrected by a small 16-cent interval—here, a dashed tie indicates that the pitch adjustment should be made without a new attack.

Long tones for wind instruments should be played in one breath where possible—when this is impractical, a brief break in the tone and a discreet re-entrance is acceptable. String instruments should change bow as necessary. Both wind and string instruments should play with a full, rich tone without vibrato.

Duration: ca. 7'45"

This piece is dedicated to Gabriela Diaz, Eric Hewitt, and the White Rabbit Ensemble.

Spiral

Robert Hasegawa (2008)

♩ = 80

4/4 breathe as necessary - re-enter as unobtrusively as possible **3/4** **4/4**

Flute
pp *cresc. poco a poco* *p*

Oboe
pp *cresc. poco a poco* *p*

Clarinet in B \flat
pp *cresc. poco a poco* *p*

Bassoon
p *dim. poco a poco* *pp* unison w. hn

4/4 breathe as necessary - re-enter as unobtrusively as possible **3/4** **4/4**

Horn in F
pp *cresc. poco a poco* *p*

Trumpet in C
pp *cresc. poco a poco* *p*

Trombone
pp *cresc. poco a poco* *p*

4/4 **3/4** **4/4**

Solo Violin
p *cresc. poco a poco*

Violin
pp *change bow as necessary* *pp* *cresc. poco a poco* *p*

Viola
pp *change bow as necessary* *pp* *cresc. poco a poco* *p*

Violoncello
p *change bow as necessary*

Double Bass (sounds 8ve lower)
mp *pp* *cresc. poco a poco* *p*

12

Fl. *cresc. poco a poco* **3/4** *mp* **4/4** **3/4** **4/4**

Ob. *cresc. poco a poco* *mp*

Cl. *cresc. poco a poco* *mp* unison with solo violin's upper note *mp* *cresc. poco a poco*

Bsn. *p* *cresc. poco a poco* *mp* *cresc. poco a poco*

Hn. *cresc. poco a poco* **3/4** *mp* **4/4** *cresc. poco a poco* **3/4** **4/4**

Tpt. *mp*

Tbn. *cresc. poco a poco* *mp* *mp*

Solo Vln. 12 **3/4** **4/4** *mp* *mf* *mp* **3/4** **4/4**

Vln. *mp*

Vla. *p* *cresc. poco a poco* *mp* *cresc. poco a poco*

Vc. *p* *cresc. poco a poco* *mp* *cresc. poco a poco*

Db. *cresc. poco a poco* *mp*

21 $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$

Fl. *p* *mf* *dim. poco a poco*

Ob.

Cl. *mf*

Bsn. *mf* *dim. poco a poco*

Hn. $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ *mf*

Tpt. *cresc. poco a poco* *mf*

Tbn. *cresc. poco a poco* *mf*

Solo Vln. $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ *mf* *f* *peak speed of tremolo* *slower tremolo and fade out...*

Vln. unison with solo violin's lowest note *mf*

Vla. *mf* *f* *dim. poco a poco*

Vc. *mf* *f* *dim. poco a poco*

Db. *p* *mf*

29 adjust pitch slightly upward:
unison with bass harmonic

Fl. *mp* *dim. poco a poco* **3/4** **4/4** *p* *dim. poco a poco* **3/4** **4/4**

Ob. *p* *dim. poco a poco*

Cl. *p*

Bsn. *mp* *mp*

Hn. 7th harmonic of A (T2) *ppp* *mp* *dim. poco a poco* *p* **3/4** **4/4** **3/4** **4/4**

Tpt. *p*

Tbn. *mp* *dim. poco a poco*

Solo Vln. 29 **3/4** **4/4** **3/4** **4/4** *mp* *cresc. poco a poco*

Vln. *p*

Vla. *mf* *dim. poco a poco* *mp* *p*

Vc. *mf* *dim. poco a poco* *mp* *p*

Db. 7th harmonic on A string *mp* *dim. poco a poco*
(harmonics also notated 8ve above the sounding pitch)

39 $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$

Fl. *pp*

Ob. *pp*

Cl. *p*

Bsn. *p*

Hn. $\frac{4}{4}$ 7th harmonic of G (T12) (unison with solo violins) $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$

Tpt. *p*

Tbn. *p*

Solo Vln. $\frac{4}{4}$ change tremolo speed slow... fast... slow... $\frac{3}{4}$ $\frac{4}{4}$ gradually accelerate tremolo... $\frac{3}{4}$ $\frac{4}{4}$ *mf* *p* *mp*

Vln. match pitch with the solo violin *p*

Vla.

Vc. *p*

Db. *p*

46 $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$

Fl. *mf*

Ob. *mf* *dim. poco a poco* *mp*

Cl. *mf* *dim. poco a poco* *mp*

Bsn. *mf* *mp*

Hn. *mf* *dim. poco a poco* *mp*
horn ossia: tacet until 57, then enter with a crescendo from niente (only if necessary for endurance)

Tpt. *mf* *dim. poco a poco* *mp*

Tbn. *mf* *mp*

Solo Vln. *f* *p* *cresc. poco a poco*
tremolo gradually slower... end on high B♭

Vln. *mf* *dim. poco a poco* *mp*

Vla. *mp* *mf* *mp*
7th harmonic on C string
harmonic gliss beginning on downbeat

Vc. *mf*

Db. *f* *mp*
4th harmonic on A string

65 $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ unison with oboe *mp* *cresc. poco a poco*

Fl.

unison with flute *mp* *cresc. poco a poco*

Ob.

f *dim poco a poco* *mf* *dim poco a poco* *mp*

Cl.

f *dim poco a poco* *mf* *dim poco a poco* *mp*

Bsn.

$\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ 5th harmonic of D \flat (23) *mp* *horn ossia: tacet until 87 (only if necessary for endurance)*

Hn.

f *mf* *dim. poco a poco* *mp*

Tpt.

f *mf* *dim. poco a poco* *mp*

Tbn.

65 $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ tremolo gradually slowing... non trem. A to harmonic... and fade out *ff* *mp* *p* *cresc. poco a poco*

Solo Vln.

f *mf* *mp* *p* *cresc. poco a poco*

Vln.

f *mf* *mp*

Vla.

f *mf* *mp*

Vc.

f *mf* *dim. poco a poco* *mp*

Db.

f *mf* *dim. poco a poco* *mp*

75

Fl. $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ *mf*

Ob. *mf*

Cl. *cresc. poco a poco* *mf* *cresc. poco a poco*

Bsn. *cresc. poco a poco* *mf*

Hn. $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ *cresc. poco a poco* *mf*

Tpt. *cresc. poco a poco* *mf* *cresc. poco a poco*

Tbn. *mf* *cresc. poco a poco*

Solo Vln. 75 $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ *mp*

Vln. *mf* *mf* *cresc. poco a poco*

Vla. *cresc. poco a poco* *mf*

Vc. *mp* *cresc. poco a poco* *mf* *cresc. poco a poco*

Db. *cresc. poco a poco* *mf*

86

Fl. *dim. poco a poco* **3/4** *mp* *dim. poco a poco* **4/4** **3/4**

Ob. *dim. poco a poco* *mp* *dim. poco a poco*

Cl. *f* *dim. poco a poco* *mf*

Bsn. *f*

Hn. *f* *dim. poco a poco* *mf* **3/4** **4/4** **3/4**

Tpt. *f* *dim. poco a poco* *mf*

Tbn. *f* *dim. poco a poco*

Solo Vln. 86 **3/4** **4/4** *mf* *trem. faster...* **3/4** *tremolo slowing...* *f*

Vln. *f* *dim. poco a poco* *mf*

Vla. *f*

Vc. (slight pitch adjustment, no new attack) *f*

Db. *f*

105

Fl. $\frac{3}{4}$ $\frac{4}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{3}{4}$

Ob.

Cl. unison with tbn
(can be omitted if no viable
fingering can be found)

Bsn.

Hn. $\frac{3}{4}$ $\frac{4}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{3}{4}$

Tpt. 5th harmonic of G (13)

Tbn.

Solo Vln. $\frac{3}{4}$ $\frac{4}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{3}{4}$

Vln.

Vla.

Vc. 5th harmonic on G string

Db. 5th harmonic on G string

mp *mf* *f* *ff*

115 $\frac{3}{4}$ $\frac{4}{4}$ $\frac{5}{8}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$

Fl.

Ob.

Cl.

Bsn.

Hn.

Tpt.

Tbn.

Solo Vln.

Vln.

Vla.

Vc.

Db.

mf

mp

f

dim. poco a poco

fade out F#

fade out top note

125 $\frac{4}{4}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$

Fl. *pp* *f*

Ob. *pp* *f* *mf*

Cl. *f* *mf*

Bsn. *pp* *f*

Hn. $\frac{4}{4}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$ *f*

Tpt. *f*

Tbn. *f*

Solo Vln. trem slow... fast... slowing... non trem. $\frac{4}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$ trem slow... fast... *f* *mf* *ff*

Vln. *mf* *f*

Vla. *f* *f*

Vc. *f*

Db. *ff* *f*

133

Fl. $\frac{5}{8}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{5}{8}$ $\frac{4}{4}$

Ob. mp mf

Cl. mp

Bsn. mp mf

Hn. $\frac{5}{8}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{5}{8}$ $\frac{4}{4}$

Tpt. mp mf

Tbn.

Solo Vln. *slowing...* $\frac{5}{8}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$ $\frac{5}{8}$ $\frac{4}{4}$
 mp mf *cresc. poco a poco*

Vln. mp mf

Vla. mp

Vc. *7th harmonic on D string* mp mf

Db. *4th harmonic on G string* mp

143 $\frac{4}{4}$ $\frac{5}{8}$ $\frac{3}{4}$ $\frac{4}{4}$ $\frac{5}{8}$

Fl. *f*

Ob. *f* *dim. poco a poco* *mf*

Cl. *mf* perfect 5th above flute

Bsn. *f* *dim. poco a poco* *mf*

Hn. *f* *mf* seventh harmonic of $\frac{4}{4}$ (T12)

Tpt. *f* *dim. poco a poco* *mf*

Tbn. *ff* (perfect 4th below db) *f*

Solo Vln. *f* *dim. poco a poco* *mf* *cresc. poco a poco* (ossia: alternate stopped notes ad lib with natural harmonics)

Vln. *f*

Vla. *f* *espressivo*

Vc. *f* *mf*

Db. *ff* *mf*

161 **168** **3/4** unison with trumpet **4/4** **3/4** **4/4** **3/4**

Fl. *mf*

Ob. unison with hn *mf*

Cl. *mf* *dim. poco a poco*

Bsn. *mf*

Hn. **168** **3/4** **4/4** unison with oboe **3/4** **4/4** **3/4**

Tpt. 5th harmonic of B \flat (1) unison with flute *mf*

Tbn. *mf*

Solo Vln. (semitone trill to B-1/4tone-flat) **161** **3/4** **4/4** **3/4** **4/4** **3/4** *f* *dim. poco a poco*

Vln. *mf* *espressivo, legato*

Vla. *mp* *cresc. poco a poco*

Vc. unison with clarinet *mf* *dim. poco a poco*

Db. *f* *espressivo*

170 $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$

Fl.

Ob.

Cl.

Bsn.

mp

dim. poco a poco

$\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$

Hn.

Tpt.

Tbn.

mp

unison with db

mp

$\frac{4}{4}$ 7th harmonic of D $\frac{4}{4}$ (2)

170 $\frac{3}{4}$ $\frac{4}{4}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{4}{4}$

Solo Vln.

mf

dim. poco a poco

mp (keep E \flat soft but intense until

Vln.

Vla.

Vc.

Db.

mp

mf

dim. poco a poco

mp

mf

