

Vicente Hansen Atria

Speleology

for piano, violin, and cello

(2016)

SCORE

Duration: 6'

General

Speleology is an attempt to dwell: in tight musical cells, in the elision of phrases, in the impossibility of genuine repetition, in the infinite quarry of sound, where stone changes as its sediments are uncovered. Repetition is approached, in this piece, as an attempt to squeeze out as much meaning as possible from each building block and from their juxtapositions — building blocks that are conceived of as related to yet different from each other, like parts of a rhizome or chambers of a cave, always leading unexpectedly back into each other — exhibiting/celebrating the quotidian yet uncanny capacity of things to look different while remaining the same.

Performance Notes

- Accidentals apply throughout the measure and are octave-specific.
- Two notes on string articulation: A) sideways/tilted “downbow” markings (resembling a backwards “C”) indicate a downbow starting from a sul tasto position and ending in a sul ponticello position. In this piece these are always used as deliberately rhythmicized ricochets, which should speak softly although clearly. B) Staccato-tenuto markings (always accompanied by specific up and down bow directions) indicate either a heavy, short crunch downbow played *on* the string or a similarly accented upbow playing *off* the string (usually following a downbow-staccato-tenuto articulation). Both of these techniques borrowed from contemporary bluegrass string playing.

Microtonal Notation and Just Intonation

In this work, microtones are often (but not always) used to approximate acoustically consonant, just-intoned harmonies. When this is the case, microtonal

accidentals should be used by musicians as an approximation to the correct pitches, such that small adjustments should be made in order to play pitches in tune.

The following accidentals are used as approximations to the exact pitches:

$\flat\sharp$ — $\sharp\flat$ approximately 1/4 tone flat or sharp

$\flat\flat$ — $\sharp\sharp$ — \downarrow — \uparrow — $\flat\sharp$ — $\sharp\flat$ approximately 1/6 tone flat or sharp

$\flat\sharp$ — $\sharp\flat$ — $\flat\sharp$ — $\sharp\flat$ — $\flat\sharp$ — $\sharp\flat$ approximately 1/12 tone flat or sharp

The first, quarter-tone alteration corresponds to the difference between the 11th partial and the equal tempered perfect fourth — that is, approximately 50 cents.

The second, sixth-tone alteration corresponds to the difference between the 7th partial and the equal tempered minor seventh — that is, approximately 33 cents.

The third, twelfth-tone alteration corresponds to the difference between the 5th partial and the equal tempered major third — that is, approximately 16 cents. Given the subtlety of this difference, it might be best to ignore these accidentals in the first few readings of the piece.

Again, the best way to play these intervals in tune is for the performer to recognize their role in the overall harmony, and to keep in mind that these harmonies are often acoustically consonant.

Piano

The piano ought to be prepared by threading small coins (dimes, or single-cent Euros) between the strings of the following notes of the piano: Eb3, Ab3, F4, Ab4, C#5.

The pitches will be lowered, and correspond roughly (within a quarter tone) to: D3, F#3, Db4, E4, G4, respectively. The character of the four highest prepared notes ought to be clear and resembling a bell; the Eb3 note can produce somewhat of a buzzing sound.

These notes are notated with hollow triangle noteheads — they are played normally (although they sound softer, so the performer might have to compensate for this by playing them slightly louder in order to maintain even dynamics).

Speleology

♩ = 72-77

Violin: 5/16, IV m.s.p. 3:2, *sfz*; 3/16 on the string ord., *f*; 2/8 IV m.s.p. 3:2, *sfz*; 5/16 ord., *>*; 3/16 IV m.s.p. 3:2, *sfz*

Cello: pizz., *f*; arco s.p. II, *sfp*; I m.s.p., *sfz*; ord., *mf*; II m.s.p., *sfz*; ord., *sfz*

Piano: *f*; 6:4, *>*; *mf*; 8^{va}

Vln.: 5/16 p.s.p., *sfz*; 2/8 III m.s.p. 3:2, *sfz*; 5/16 *f*; x3 3/16 III m.s.p. 3:2, *sfz*; 2/8 p.s.p., *sfz*; 2/16 IV m.s.p. harm. gliss., *sfz*

Vc.: I m.s.p., *sfz*; s.t., *mf*; II m.s.p., *p*; *sfz*; I m.s.p., *sfz*

Pno.: *p*; *mf*; 6:4, *>*; 8^{va}

Vln.: 9 heavy 12/16, *mp*; *f*; *sfz*; IV m.s.p. x7, *sfz*; 7/16, *sfz*; IV m.s.p. 3:2, *sfz*; 3/16 III m.s.p. 3:2, *sfz*; 2/8, *>*

Vc.: ord., *mf*; *f*; m.s.t. 5:3, *p*; ord., *mf*; *f*; pizz., *f*; arco s.p., *sfp*; on the string ord., *f*; II m.s.p., *sfz*

Pno.: *p*; 6:4, *>*; 8^{va-1}; 6:4, *>*; 8^{va-1}; 8^{va}; Sos. Ped.

Speleology

2

17 $\frac{5}{16}$ $\frac{3}{16}$ $\frac{2}{8}$ $\frac{5}{16}$ $\times 2$ $\frac{3}{16}$

Vln. *sfz* *sfz* *sfz* *sfz* *sfz*

Vc. *p* *sfz* *p* *f* *f* *sfz*

Pno. *p* *mf* *8va*

23 $\frac{2}{8}$ $\frac{3}{8}$ $\frac{3}{8}$ $\times 3$ $\times 5$

(tempo II: ♩ = 100) (maybe) poco piu mosso

Vln. *sfz* *sfz* *sfz* *pp* *sfz* *sfz*

Vc. *p* *f* *sfz* *pp* *mp* *f* *sfz*

Pno. *pp* *8va*

Una corda

♩. ≈ ♩. = 58 (tempo I: ♩ = 72)

28 $\frac{5}{16}$ $\frac{3}{16}$ $\frac{2}{8}$ $\frac{5}{16}$ $\frac{2}{8}$

Vln. *sfz* *sfz* *sfz* *sfz* *sfz*

Vc. *f* *sfz* *on the string* *sfz* *ord.*

Pno. *8va*

5 3 2 5
16 16 8 16
IV m.s.p. IV m.s.p. IV m.s.p. IV m.s.p.
harm. gliss. 3:2 5:6 3:2 III x2 3:2 III x6

Vln. *sfz* *sfz* *sfz* *sfz*

Vc. *f* *sfp* *sfz* *f* *sfz* *sfz*

Pno. *f* *sfp* *sfz* *f* *sfz* *sfz*

arco s.p. II spiccato I m.s.p. spiccato

6:4 8va

2 5 2 9 heavy 6
8 16 16 16 16
IV m.s.p. IV m.s.p. IV m.s.p. IV m.s.p.
harm. gliss. harm. gliss. harm. gliss. harm. gliss.

Vln. *sfz* *sfz* *sfz* *mp* *f* *sfz* *mp*

Vc. *sfz* *f* *sfp* *mf* *f* *p* *mf* *f*

Pno. *p*

6:4 6:4 6:4 6:4

8va 8va 8va 8va

Sos. Ped.

3 mysterious x7 3 x5 2
8 8 8 8
IV m.s.p. IV m.s.p.

Vln. *mf* *f* *mf* *f* *sfz*

Vc. *mf* *f* *sfz* *mf* *f* *mf*

Pno. *mp* *f* *mp*

8va (1x only) 8va (1x only) 8va 8va

Una corda + 1/2 Ped

Speleology

4

tempo I: ♩ = 72

a tempo

9 heavy
16

IV m.s.p. x2 7
16

5 IV
16 m.s.p.

3
16 on the string
p.s.p.

Vln. 47 *mp* *f* *sfz* *sfz* *sfz* *f*

Vc. 47 *mf* *f* *p* *mf* *f* *f* *sfz* *sfz*

Pno. 47 *p* *f* *mp*

Annotations: *harm. gliss.*, *ord.*, *m.s.p.*, *5:3*, *6:4*, *8va*, *Sos. Ped.*, *pizz.*, *arco s.p.*, *II*, *3:2*

Vln. 51 *sfz* *sfz* *mp* *f* *sfz* *mp* *sfz* *sfz*

Vc. 51 *mf* *f* *p* *mf* *f* *sfz*

Pno. 51 *p* *mf* *f*

Annotations: *harm. gliss.*, *ord.*, *m.s.p.*, *5:3*, *6:4*, *8va*, *8va staccato possibile*, *(1x only)*, *Sos. Ped.*, *3:2*, *x3*

♩ = ca. 66

Vln. 56 *mf* *f* *mf* *sfz* *p* *f* *sfz*

Vc. 56 *mf* *f* *mf* *f* *sfz* *sfz* *ord.*

Pno. 56 *f* *f*

Annotations: *harm. gliss.*, *pull string to bend pitch*, *ord.*, *m.s.p.*, *5:4*, *6:4*, *8va*, *Una corda*, *+ 1/2 Ped*, *3:2*, *x11*

61 11 16 3 8 11 16

Vln. *f* *sfz* *f*

Vc. *f* ord. *f*

Pno. 5:4

ff *ff*

tempo I: ♩ = 72 (or a bit slower)

64 5 16 IV m.s.p. 2 8 IV m.s.p. 7 16 3:2 6 16 x2 5 16 IV m.s.p.

Vln. *sfz* *f* *sfz* *f* *sfz* *f*

Vc. *f* *sfp* *sffz* *f* *sfp*

Pno. 6:4 *ff* *ff*

staccato possibile

tempo II: ♩ = 100

69 2 8 IV m.s.p. 4 8 5 16 IV m.s.p. 2 8 7 16 2 4 x3 8va ord.

Vln. *sfz* *sfz* *sffz* *f* *ff*

Vc. *sffz* *f* *f* *sfp* *sffz* *f* *sfz* *ff*

Pno. 6:4 *f*

staccato possibile

overpressure, p.s.t., no pitch (count!)

Speleology

♩. = 62

75

Vln. *III* m.s.p. 3:2 x2 *sffz* *8va-* ord. x3 *ff* *mf* *f* x3 *2* tempo II: ♩ = 100 x3 *sffz* x2 *8va-* ord. *ff*

Vc. *I* m.s.p. 3:2 *sffz* *sffz* *ord.* *ff* *mf* *f* *sffz* *sffz* *ord.* *ff* *harm. gliss.*

Pno. *staccato possibile* *8va-* *Una corda + 1/2 Ped*

80

Vln. ♩. = 62 *8va-* x9 *mf* *f* *mp* *fp subito* *sempre m.s.p. (no fundamental heard!)* *3* *7*

Vc. ♩. = 58 poco meno *sempre m.s.p. (no fundamental heard!)* *2* *4* *3* *8* *fp subito*

Pno. *staccato possibile* *5:4* *fp* *8va-* *Una corda + 1/2 Ped*

85

Vln. *5* *8* x2 *3* *8* x5 *5* *8* x2 *3* *8*

Vc. *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2* *3:2*

Pno. *8va-*

Speleology

8

106

Vln. $\frac{2}{4}$ $\frac{3}{8}$ x3 $\frac{2}{8}$ $\frac{3}{4}$ poco piu mosso $\frac{5}{8}$

Vc. $\frac{2}{4}$ $\frac{3}{8}$ x3 $\frac{2}{8}$ $\frac{3}{4}$ m.s.p. harm. gliss. $\frac{5}{8}$ m.s.p. harm. gliss.

Pno. $\frac{2}{4}$ $\frac{3}{8}$ x3 $\frac{2}{8}$ $\frac{3}{4}$ $\frac{5}{8}$

111

Vln. $\frac{3}{8}$ a tempo x3 $\frac{3}{4}$ poco piu mosso $\frac{5}{8}$ $\frac{3}{8}$ $\frac{2}{8}$ x9 $\frac{8}{8}$

Vc. $\frac{3}{8}$ a tempo x3 $\frac{3}{4}$ m.s.p. harm. gliss. $\frac{5}{8}$ m.s.p. harm. gliss.

Pno. $\frac{3}{8}$ a tempo x3 $\frac{3}{4}$ $\frac{5}{8}$ $\frac{3}{8}$ $\frac{2}{8}$ x9 $\frac{8}{8}$

116

Vln. $\frac{3}{16}$ $\frac{2}{8}$ x3 $\frac{3}{16}$ x3 $\frac{2}{16}$ $\frac{3}{16}$ $\frac{2}{8}$

Vc. $\frac{3}{16}$ $\frac{2}{8}$ x3 $\frac{3}{16}$ x3 $\frac{2}{16}$ $\frac{3}{16}$ $\frac{2}{8}$

Pno. $\frac{3}{16}$ $\frac{2}{8}$ x3 $\frac{3}{16}$ x3 $\frac{2}{16}$ $\frac{3}{16}$ $\frac{2}{8}$

$\text{♩} = \text{♩} = 90$

122 $\frac{3}{16}$ $\frac{2}{8}$ $\frac{3}{16}$ $\frac{2}{8}$ $\frac{3}{8}$ $\frac{2}{8}$ $\frac{3}{8}$ x7

Vln. 8va 3:2

Vc. 5:4 5:4 *pizz.* *sfz*

Pno. *f* *p* *f* *ff* 8va 5:4

129 $\frac{2}{8}$ x2 tempo I: $\text{♩} = 72$ $\frac{7}{16}$ $\frac{5}{16}$ 8va IV m.s.p. IV m.s.p. x2

Vln. *sfz* *sffz* *harm. gliss.* *sffz*

Vc. *pizz.* *sfz* *m.s.p.* 3:2 3:2 *pizz.* *arco s.p.* *f* *sfp*

129 8va *staccato possibile* 5:4 *mf* 6:4 *f*

Pno. *ff* 8va *ff* 8va *f*

133 $\frac{9}{16}$ $\frac{5}{8}$ $\frac{3}{8}$ $\frac{4}{8}$ x3

Vln. 3:2 3:2 3:2 *fff* *sfz* *ff*

Vc. 3:2 3:2 3:2 *fff* *f* *ff*

overpressure, p.s.t. no pitch (count!) IV m.s.p.

133 8va *f* 8va 8va *p* 8va

Pno. *ff* 8va *ff* 8va *f* *p* 8va

Speleology

10

tempo II: ♩ = 100

138 5 16 IV m.s.p. x2 2 4 x3 3 4 x2 2 4 x3

Vln. *sfz* *sffz* *ff* *f* *ff*

Vc. *f* *sfp* *sfz* *ff* *f* *sfz* *ff*

Pno. *f* *f* *f*

Annotations: *harm. gliss.*, *pizz.*, *arco s.p.*, *ord.*, *8va*, *6:4*, *5:4*, *3:2*

142 III m.s.p. x4 3 4 x2 2 4 III m.s.p. x3 x2 8va-1 ord.

Vln. *sffz* *ff* *sffz* *ff*

Vc. *sffz* *sfz* *ff*

Pno. *f*

Annotations: *staccato possibile*, *8va*, *3:2*, *5:4*

146 3 8 heavy 3 4 x4 3 8 a tempo x5 2 8 IV m.s.p.

Vln. *mf* *f* *sfz* *ff* *f non dim.* *mf* *f* *sfz*

Vc. *mf* *f* *ff* *f* *mf* *f* *mf*

Pno. *f* *f* *f* *f*

Annotations: *Una corda + 1/2 Ped*, *8va*, *8va-1 (1x only)*, *8va-1 (not first time!)*, *8va-1 (1x only)*, *5:4*, *3:2*, *heavy*, *a tempo*

tempo I: ♩ = 72
 9 heavy
 16

IV m.s.p.
 6 16

♩ = 62

8va x2 2 8

8va 4

Vln. 151 *mp* *f* *sfz* *mp* *mf* *f* *mf* *f*

Vc. 151 *mf* *f* *p* *mf* *f* *mf* *f* *mf* *f*

Pno. 151 *p* 6:4 5:4 (1x only) 5:4 7-10 seconds

Sos. Ped. 8va 8va 8va

Una corda + 1/2 Ped