

William Kleinsasser

GOSSAMER

for improvising instrument (with or without computer processing),
vibraphone (or electronic piano), electric guitar,
piano, bass, and drums/percussion

(2011)

Duration: c. 15 minutes

For Dave Ballou

PERFORMANCE NOTES

Instrumentation

improvising solo instrument

computer processing using composer-developed Max/MSP software entitled "Spectral Prism" can be used throughout or not at all in performance. See note below.

vibraphone
or 88-key electronic piano
(specific timbre chosen by performers but should be an elec. piano sound and not an imitation of another instrument)

electric guitar (solid or semi-solid body, clean amplification with minimal processing)

piano

bass (preferably lightly-amplified acoustic bass but can be electric bass that balances/blends with ensemble)

improvising drums/percussion

Notation Details

Accidentals apply to all notes of that pitch class regardless of octave and are cancelled by bar lines.

Rhythm in this score is notated using proportional notation[1] in which complex rhythmic events are notated across a time-proportional graphic measure without traditional symbolic durational music notation. This notation is intended to give a degree of rhythmic freedom to each performer in order to support a simpler representation of complex, subtly non-synchronized event timing. These events are to be played while maintaining relative but somewhat flexible beat-to-beat synchronization with the others (indicated by brackets above the measure). No conductor or strict tempo in the drums should be used in performance. In these proportionally-notated measures, the player is not expected to tightly synchronize rhythmic figures with the other players within beats.

[1] In order to simplify the production of this form of notation, the composer commissioned Tobias Giesen to create a Finale software Plug-in that converted complex rhythmic patterns into simplified, proportional, beamed notation. This plug-in is now part of the TG Tools plug-ins for Finale software available from Tobias Giesen (www.tgtools.de).

To use the software, a close-position microphone is used for the improvising instrument ideally with no pickup of instruments other than the improviser.

The screenshot displays the 'Spectral Prism' software interface, divided into two main sections: 'Global preset control' (left, green background) and 'DSP settings' (right, blue background).

Global preset control (left):

- Reset to zero button.
- Current preset number in use: 0.
- Spacebar or MIDI sustain pedal advances.
- Settings presets grid.
- Processing ON/OFF button.
- GLOBAL SETTINGS:
 - 0 = linear arpeggio, 1 = random arpeggio.
 - arp speed basis (ms): 61.
 - pre-transposition factor: 1.
 - number of partials to arpeggiate: 8.
 - portamento time (ms): 1.
 - scale speed to loudness - LOUD: 0.25.
 - scale speed to loudness - SOFT: 2.
 - partials dry mix: 0.228.
 - partials wet mix: 0.9.
 - reverb time (0-127): 110.
 - output transposition (multiplier): 0.5.
 - sync delay to match time with sampler buffering (in samples): 6000.
 - partial chorusing detune (1.0 = unison): 1.0001.
 - voicing transposition offset per partial (semitones): 12.
 - sampler envelope preset: 4.
- ADC input level, Live source analysis signal level, Recorded source signal level, Sinetone partial level, Transposed input partial level, Sampler level, Mixed sinetone and transposed input partial level, Fader ramp time: 4000.
- Source direct thru level, Source reverb, reverb gain, reverb time.
- Output metering (quad), CPU Load: 44%, Final gain scaling: 0.
- Record output to disc button.

DSP settings (right):

- READY status indicator.
- DSP ON / OFF toggle.
- replace, buffer~ source file, Source buffer (default 60 minutes).
- 0, 0, 0 level meters.
- live source, alt source, add noise, alt source.
- live_calc_partials_from_sets, pitch_amp_tracking, A1.
- 115.28 level meter.
- Pre-set partial ratios: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20, 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30.
- partial scaling factor: 1, 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20.
- Sinetone+sample overtone layers: Overtone layer 1-4.
- MIDI partial Layers: Overtone Layer 1-4, semitone transposition.

ABOUT THE MUSIC

About this piece the composer writes: *Gossamer* for freely improvising solo instrument, vibraphone (or electronic piano), electric guitar, piano, bass, and drums was composed in 2011 for Dave Ballou. It is a fourth iteration through the design of *Innocent Proteins*, which was composed between 2001-2003.

Interconnections with other compositions

The composition, and its related works, *Innocent Proteins*, *Protean Profile*, and *Folded Gossamer*, are part of a larger set of pieces made from an original set of three pieces, entitled *Triptych*, which presents an expanded design based on the musical expression of beginning, continuation, and ending and can either be performed independently or together with the other pieces. *Gossamer*, presents one of (at the time of its composition) four paths through the second piece in *Triptych* and thus expresses musical continuation as an underlying metaphor. This metaphor is also expressed in the musical rethinking and redevelopment of several previous works composed for Daniel Koppelman and Ruth Neville over the past several decades (*Spiral* (1986), *Free Shadows* (1994), and *Available Instruments* (1998)). In addition to its connections to *Triptych*, and *Folded Gossamer*, this piece is composed from elements taken from the composer's work for symphony orchestra entitled *Many Rivers* (2010). *Gossamer* is similar to *Folded Gossamer* just as *Protean Profile* is related to *Innocent Proteins* in that it is a reconsideration of the work with an added element connected to the improvisatory aspect of the original *Innocent Proteins*. In *Gossamer*, the music of *Folded Gossamer* is rescored for the timbres of jazz ensembles with the central addition of a free improvisation layer brought to the piece by the trumpet player. This was the result of thinking about my colleague Dave Ballou, for whom the piece was made, and his approach to spontaneous musical creation. Bringing those two elements together seemed a fitting addition to this collection of works based on musical continuation.

The Musical Design

Unlike *Innocent Proteins* and *Protean Profile*, which are composed of repeating phrases following classic rhetorical models that control repetition and presentation of new ideas, The composed parts of *Gossamer* (and its related piece *Folded Gossamer*) are made as a set of through-composed continuous variations providing a musical space, field, or context for the discursive improvisation by the solo instrument.

The Computer Processing

If used in a performance, the software tracks the pitches played by the trumpet (using Miller Puckette's sigmund~ Max/MSP external object) and creates synthesized harmonic and non-harmonic partial arpeggiation layers that are mixed in a quadrasonic speaker array around the audience with the slightly-amplified trumpet performance. The balance should add a layer of sound without obscuring the other instruments, which can be slightly amplified and mixed into the quad speakers.

A member of the ensemble acts as leader to pacing across commas (which are to be used as guideposts more than pauses in the flow)

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The musical score consists of six staves. The first staff is for Improv. Instr. (Improv. Instr.). The second and third staves are for Vib. OR Elec. Pno. (Vib. OR Elec. Pno.). The fourth staff is for Elec. Guit. (Elec. Guit.). The fifth and sixth staves are for Piano (Piano). The seventh staff is for Bass (Bass). The eighth staff is for Drums/perc. (Drums/perc.).

Measure 4: Improv. Instr. has a melodic line with a sharp sign. Vib. OR Elec. Pno. has a melodic line. Elec. Guit. has a melodic line with dynamics *p*, *pp*, *p*, and *pp*. Piano has a melodic line. Bass has a melodic line with dynamic *f*. Drums/perc. has a rhythmic pattern.

Measure 5: Improv. Instr. has a melodic line. Vib. OR Elec. Pno. has a melodic line. Elec. Guit. has a melodic line. Piano has a melodic line. Bass has a melodic line. Drums/perc. has a rhythmic pattern.

Measure 6: Improv. Instr. has a melodic line. Vib. OR Elec. Pno. has a melodic line. Elec. Guit. has a melodic line. Piano has a melodic line with dynamics *p* and *pp*. Bass has a melodic line with dynamic *mp*. Drums/perc. has a rhythmic pattern.

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Improv. Instr.

Vibr OR

Elec. Pno.

Elec. Guit.

Piano

Bass

Drums/ perc.

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8

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Impro. Instr.

Vibr OR

Elec. Pno.

Elec. Guit.

Piano

Bass

Drums/ perc.

10

11

12

Improvised instrumental score for measures 13, 14, and 15. The score is arranged in a system with eight staves. The instruments are: Improv. Instr. (top), Vib. (Vibraphone), OR (ORchestral), Elec. Pno. (Electric Piano), Elec. Guit. (Electric Guitar), Piano (Acoustic Piano), Bass (Double Bass), and Drums/perc. (Drums and Percussion). The key signature is one flat (B-flat major/D minor). The time signature is 4/4. The score includes various musical notations such as notes, rests, and dynamic markings. The dynamic markings are *mf* (mezzo-forte) and *pp* (pianissimo) for the Vib. and Elec. Pno. parts, and *mp* (mezzo-piano) for the Piano part. The Improv. Instr. part features a complex melodic line with many accidentals. The Vib. part has a melodic line with some slurs. The OR part has a melodic line with some slurs. The Elec. Pno. part has a melodic line with some slurs. The Elec. Guit. part has a melodic line with some slurs. The Piano part has a melodic line with some slurs. The Bass part has a melodic line with some slurs. The Drums/perc. part has a complex rhythmic pattern with many accidentals.

13

14

15

Improvisation score for multiple instruments. The score is divided into measures 16, 17, and 18. The instruments listed on the left are: Improv. Instr., Vibr. OR Elec. Pno., Elec. Guit., Piano, Bass, and Drums/perc.

The score consists of seven staves. The top staff is for 'Improv. Instr.' and contains a melodic line with various accidentals. The second staff is for 'Vibr.' or 'Elec. Pno.' and contains a rhythmic pattern of eighth notes. The third staff is for 'Elec. Guit.' and contains a melodic line with many accidentals. The fourth staff is for 'Piano' and contains a melodic line with dynamic markings *pp*, *mf*, and *pp*. The fifth staff is for 'Bass' and contains a melodic line with accidentals. The sixth staff is for 'Drums/perc.' and contains a complex rhythmic pattern with many accidentals. The score is divided into measures 16, 17, and 18 by vertical bar lines.

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17

18

The image shows a musical score for seven instruments: Improv. Instr., Vibr., Elec. Pno., Elec. Guit., Piano, Bass, and Drums/perc. The score is divided into three measures, numbered 19, 20, and 21. Measure 19 (page 19) features a steady eighth-note pattern in the Improv. Instr., Vibr., Elec. Pno., and Drums/perc. parts. Measure 20 (page 20) shows a melodic line in the Improv. Instr. and a descending eighth-note pattern in the Vibr., Elec. Pno., and Drums/perc. parts. Measure 21 (page 21) features a melodic line in the Improv. Instr. and a descending eighth-note pattern in the Vibr., Elec. Pno., and Drums/perc. parts. A dynamic marking of *p* is present in the Piano part of measure 21. A chord symbol **D** is placed above the Improv. Instr. staff in measure 21. A fermata is placed over the final note of the Improv. Instr. staff in measure 21. A dashed line is present in the Improv. Instr. staff of measure 21, indicating a continuation of the melodic line.

Improvisation section for multiple instruments. The score includes staves for Improvisation Instrument, Vibraphone (Vibr.), OR Electric Piano (Elec. Pno.), OR Electric Guitar (Elec. Guit.), Piano, Bass, and Drums/percussion. The music is written in treble and bass clefs across four systems. The piano part includes a *pp* dynamic marking.

22

23

24

Improvisation score for multiple instruments. The score is divided into systems for Improv. Instr., Vibr. OR Elec. Pno., Elec. Guit., Piano, Bass, and Drums/perc. Each system contains a main staff and a dashed-line staff. The music is written in treble and bass clefs with various notes, rests, and articulation marks.

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The musical score consists of eight staves. The top staff is for 'Improv. Instr.' and the bottom staff is for 'Drums/ perc.'. Between them are staves for 'Vibr', 'OR', 'Elec. Pno.', 'Elec. Guit.', and 'Piano'. The 'Vibr', 'OR', and 'Elec. Pno.' staves are connected by a brace on the left. The 'Piano' staff is also connected by a brace. The 'Bass' staff is positioned between the 'Piano' and 'Drums/ perc.' staves. The score is divided into three measures: measure 28, measure 29, and measure 30. Measure 28 starts with a key signature change to E major, indicated by a boxed 'E' and a prime symbol. Measure 29 features a piano (*p*) dynamic marking. Measure 30 features a pianissimo (*pp*) dynamic marking. The notation includes various rhythmic patterns, slurs, and articulation marks across all instruments.

28

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Improvisation score for multiple instruments. The score is divided into three measures, numbered 31, 32, and 33. The instruments listed on the left are: Improv. Instr., Vibr. OR Elec. Pno., Elec. Guit., Piano, Bass, and Drums/perc.

The score consists of seven staves. The top staff is for 'Improv. Instr.' and contains a melodic line with various accidentals. The second staff is for 'Vibr. OR Elec. Pno.' and contains a melodic line with slurs. The third staff is for 'Elec. Guit.' and contains a melodic line with slurs. The fourth staff is for 'Piano' and contains a melodic line with slurs and a dynamic marking of *p*. The fifth staff is for 'Bass' and is empty. The sixth staff is for 'Drums/perc.' and contains a rhythmic pattern. The score is divided into three measures, numbered 31, 32, and 33.

31

32

33

Improvisation section for various instruments. The score includes staves for Improv. Instr., Vibraphone (Vibr.), OR (Optional), Electric Piano (Elec. Pno.), Electric Guitar (Elec. Guit.), Piano, Bass, and Drums/percussion (Drums/ perc.).

The Improv. Instr. staff features a melodic line with a dynamic marking of **F** (Fortissimo) at the beginning of the second measure. The Vibraphone and OR staves show a similar melodic pattern. The Electric Piano staff has a melodic line with a dynamic marking of *mp* (mezzo-piano). The Electric Guitar staff has a melodic line. The Piano staff has a melodic line with a dynamic marking of *mp*. The Bass and Drums/perc. staves are empty.

34

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36