Loretta K. Notareschi

Bordonquartet

For String Quartet and Live Electronics

DMCM-09

DISEGNI MUSIC

Bordonquartet

For String Quartet and Live Electronics

Performance Instructions

Bordonquartet is for improvising string quartet and laptopist. The laptopist uses a virtual instrument called the Drone Machine, a Max patch that may be played using Max or Max Runtime (available free from Cycling74). For more instructions on using the Drone Machine, see the next page. The laptopist also uses an amplified telephone pick-up played over the body of the computer. A telephone pick-up is an inexpensive coil microphone, such as Radio Shack's Model 44-533. Both the output of the laptop and the telephone pick-up should be run into the house mixer/speakers.

Each system lasts the approximate length listed below it. Players need not line up their movement from one box to the next precisely but should stay within one box of each other. The laptopist may find it useful to use the clock within the Drone Machine to keep track of time and cue the different systems.

About the Piece

Bordonquartet was commissioned by The Walden School for the 2014 Faculty Commissioning Project, where the Spektral Quartet will be in residence. It is the third in a series of pieces using the Drone Machine plus acoustic instruments—*Bordone,* for violin and laptop, and *Bordoncello,* for cello and laptop, precede it. "Bordone" means "drone" in Italian.

About the Composer

Loretta K. Notareschi explores the passionate, irreverent, and transcendent in her many compositions for chamber ensemble, large ensemble, and chorus. Born in Canton, Ohio and raised in Stillwater, Oklahoma, she has received awards from the IronWorks Percussion Duo, the American Composers Forum, Ensemble Eleven, and the GALA Choruses. Her music has been performed across the U.S., in Europe, and in South America and is published by Disegni Music (ASCAP), Friedrich Hofmeister of Leipzig, and Bachovich.

Notareschi is an associate professor of music at Regis University and a faculty member of The Walden School. She is also a member of ASCAP and the American Composers Forum. She holds a Masters and PhD in composition from the University of California at Berkeley, a Bachelor of Music in composition from the University of Southern California, and the General Diploma from the Zoltàn Kodàly Pedagogical Institute of Music in Kecskemèt, Hungary, where she was a Fulbright Scholar. Her primary teachers in composition have been Morten Lauridsen, Erica Muhl, Rick Lesemann, Cindy Cox, and Jorge Liderman.

How to Use the Drone Machine

To run the Drone Machine, you need Max or Max Runtime (free). These may be downloaded from Cycling74: http://cycling74.com. You also need sound files supplied by the composer. Save the patch and all the sound files to the same search path (same folder on your computer).

1. When you open the patch, it should open in presentation mode with a graphical surface that looks like a synthesizer. If not, switch to presentation mode by pressing the easel icon at the bottom of the screen.
2. On the upper right of the patch in presentation mode is the On/Off button for the sound. Turn this on; it should turn red.
3. Turn up the master volume by dragging the fader with the mouse. (And make sure the volume on your computer is turned up.)
4. If you would like to keep track of how much time is going by, click the box next to the word “clock.”
5. Click the on/off boxes by the drones across the top to start playing the sound files. Turn up the volume faders to hear the drones.
6. To turn on the white noise, turn up its volume fader.
7. To hear the electronic noise samples, click the on/off box. Turn up the volume fader to hear it.
8. To play the synth sounds, turn up the volume on the triangle and sawtooth waves. Then click on the keyboard to play different notes.
9. To filter the drones and white noise, click and drag on the filter graphs.
10. To add a stutter (granular synthesis) effect, click and drag up and down in the number boxes for “Grain size” and “Playback speed.”
11. To alter the playback speed on the drones, click and drag up or down on the number box for playback speed.
12. After turning off the patch, hit the master clear button at the top to return to zero/neutral on all the sliders, filters, etc.

To make playing the Drone Machine easier, plug in a MIDI controller with individual knobs or faders. The Akai MPK Mini works well. The “ctlin” objects 1 through 3 are set to the volume sliders of the first three drones across the top of the Drone Machine; 4 is set to the volume slider of the White Noise; 5-8 are for the filter graphs below these drones.

For the Spektral Quartet

Bordonquartet (2014)

For String Quartet and Live Electronics (Max Patch: Drone Machine and Telephone Pick-up)

Loretta K. Notareschi

	Quiet	*Crescendo and decrescendo independently*	
Violin I	Wait	Wait	Wait
Violin II	Wait	Wait	Wait
Viola	Wait	Wait	Play long, low notes in C Mixolydian
Violoncello	Wait	Play long, low C's	Play long, low notes in C Mixolydian
Drone Machine/ Telephone Pick-up	Fade in: C Drone Paulstretch	Begin to filter C Drone PS for upper partials; add regular C Drone	Add G Drone PS; continue filtering

~1'

Poco a poco crescendo

Vln. I		Play some long and some shorter notes dissonant to C Mixolydian in low register	Add noise to timbre while making some notes shorter and higher
Vln. II	Play long, low notes in C Mixolydian	Add some shorter, dissonant notes	Add noise to timbre while making some notes shorter and higher
Vla.	Continue	Continue	Add noise to timbre while making some notes shorter and higher
Vc.	Continue	Continue	Add noise to timbre while making some notes shorter and higher
DM/TP	Add White Noise, filter pitched drones for upper and lower partials	Add subtle Telephone Pick-up sounds	Increase intensity of TP sounds

~1'

Quite loud

Vln. I	Make mostly short, fast notes in higher and higher registers; include noisy over-bowing and sul ponticello notes	Add high harmonics; increase noise content; begin to glissando between some notes	Continue
Vln. II	Make mostly short, fast notes in higher and higher registers; include noisy over-bowing and sul ponticello notes	Continue	Continue but decrease density of events
Vla.	Make mostly short, fast notes in higher and higher registers; include noisy over-bowing and sul ponticello notes	Continue	Continue but decrease density of events
Vc.	Make mostly short, fast notes in higher and higher registers; include noisy over-bowing and sul ponticello notes	Skip quickly between lower and higher notes at a fast tempo; include high harmonics	Continue and add some slap and ord. pizz. notes
DM/TP	Begin to make shorter sounds over longer drones using synth	Add stutter~ effect to continuing drones; continue playing short notes using synth	Begin to detune low drones downward while playing short notes on synth

~1.5'

Poco a poco diminuendo

Vln. I	Continue but decrease density of events	Continue decreasing density	Continue decreasing density
Vln. II	Play random ord. and slap pizz. notes in high and low registers	Continue but decrease density of events	Continue decreasing density
Vla.	Play random ord. and slap pizz. notes in high and low registers	Continue but decrease density of events	Continue decreasing density
Vc.	Gradually leave out arco notes and play only ord. and slap pizz.	Continue	Play long low glissandi with partial over-bowing and partial sul pont.
DM/TP	Increase TP sounds and White Noise	Continue and gradually decrease short synth notes	Increase stutter~ effect and play long subaural synth tones to create pulsing rhythms

~1'

Medium quiet, poco a poco diminuendo *Quiet*

Vln. I	Play random high pizz. notes sporadically	Gradually stop	Rest
Vln. II	Continue	Gradually stop	Rest
Vla.	Add low, long glissandi with partial over-bowing and partial sul pont.	Stop pizz. and continue glissandi while decreasing density of events	Gradually stop
Vc.	Continue	Continue but decrease density of events	Gradually stop
DM/TP	Decrease number of drones; maintain white noise and TP prominence	Allow white noise to drown out other sounds except TP	Fade White Noise and end with TP coming in and out

~1'