Title
Stream, for solo violin with variable ensemble

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Stream,
for solo violin with variable ensemble

By
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Doctor of Philosophy
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Committee in charge:
Professor Franck Bedrossian, Chair
Professor Ken Ueno
Professor Myra Melford

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Abstract

Stream, for solo violin with variable ensemble

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Daniel Shannon Cullen

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Professor Franck Bedrossian, Chair

Stream is a composition for solo violin with variable ensemble. The score consists of a fixed part for solo violin along with a collection of one-page parts for the variable ensemble. This includes parts for flute, oboe, saxophone, clarinet, percussion, piano, violin/viola, cello, contrabass and a multi-channel electronic part, to be performed using a program designed for performance in Max/MSP.

This piece addresses an assortment of compositional practices, thereby blurring the lines between them. Elements of the notation vary in specificity, creating an ambiguity of constrained improvisation and detailed instruction. Similarly, the relationship between soloist and accompaniment suggests a simultaneously fixed composition, improvisation and open-form work. The variability of the ensemble is an extension of this modular, open-form practice.

Stream was written for the sfSound ensemble and premiered on August 28, 2011 at ODC Theater, San Francisco, using a subset of six instrumental parts. The sfSound ensemble is comprised of musicians who specialize in both improvised music and meticulously notated scores. It was written with their abilities in mind, but also with the ability to be approachable to ensembles of non-improvisers.
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Stream

for solo violin with variable ensemble

(2011-12)

Instrumentation

solo violin

flute (any range)
    oboe
saxophone (any range)
clarinet (bass preferred)
percussion (see notes for instrumentation)
    piano
    violin/viola
    cello
contrabass
electronics
Notes on the work

Stream is a work for solo violin accompanied by a variable ensemble. The violinist performs from a fixed score while musicians in the ensemble follow this score, performing from their part to provide accompaniment. Each part is notated in a non-linear format on one page and contains a variety of material which can be chosen by the performer in consideration of the violin part and the sound of the ensemble. The score-fragments are notated with both specific and non-specific elements implying a very constrained style of improvisation.

The ensemble can be formed using all of the instruments or a selection among them. The one consideration is to make use of a variety of timbres and ranges. A likely subset would be the Pierrot ensemble including percussion. The electronic part may be used on its own since it can provide sufficient polyphony and timbral variety. When other instruments are used, there should be at least 4 to maintain a sense of separation of the ensemble from the soloist. Staging should support the ambiguity of interaction among the musicians.

Realizing the score

As a general rule, any fragment can be considered as an example of a gesture and its content, which may be extended or reordered. Note-values represent general notions of short, medium and slow durations. Fermatas reinforce this idea, allowing a short rest to last an irregular amount of time, or a long note to be extended into stasis. Number of notes, repeats and order of events are also only illustrative, suggesting that the musician can improvise with this material in mind. Similarly, pitched elements may be transposed, but may suggest register.

The prevalence of quiet dynamic values is meant to imply restraint in tone quality in addition to quiet sound production. Wind players should use breathy tone and alternate fingerings to produce a weaker sound. Strings should use light bow pressure and slow bow speed to create a gritty, and unstable sound. Within this low dynamic level, there may be an inner fluctuation of dynamic texture.

A fragment can be chosen to create differentiation and non-alignment of material with the violin. In choosing material, the musician might consider material as textural contrast. For example a long, high note in the violin could be contrasted with a series of shorter notes or a sustained sound in another register. Material should be separate or elided, but should not punctuate the material in the violin. Any fragment can be repeated and returned to. If possible, fragments may be overlapped.

Pitch is to be determined by the performer but it may help to think of the character of sound as taking precedence over pitch. In general, the musicians should consider the nature of this improvisation as being highly restrained in expression, non-dramatic and developmentally incidental.

The density of the accompaniment should fluctuate throughout the piece. Considering its low dynamic, the activity of the accompaniment should never overwhelm the ambience. Silence is welcome.

The piece may begin and end with the violin, but the fermatas at the beginning and end are meant to suggest that the accompaniment may start before and/or end slightly after the violin’s final gesture.
Notes on the percussion part

The suggested specific instruments are a bass drum and vibraphone. Other "auxiliary" instruments should be selected by the percussionist. Some fragments from the part indicate a quick, irregular gesture across several instruments. These could include bells, chimes, brake drums, bowls, cowbells, temple blocks, chimes, cymbals, and drums as well as the vibraphone. For most instruments, consider choosing mallets for a soft attack.

Notes on the electronics

The electroacoustic part is performed through a Max/MSP patch controlled externally by an iPad using the TouchOSC application. This part works like any of the instrumental parts—the performer chooses from a variety of materials which are mapped out on the controller similar to the material being scattered on an instrumental part. The material is organized in three types. Continuous modules are switched on and off and have some adjustable parameters while single sound events and iterations are triggered by the arrays of buttons.

Using multiple channels of audio is ideal and if electronics are the only accompaniment, a surround system is best. The patch is programmed in 4 channels, but adjustments can be made for more speakers.
Initial values are given for the modules on the left side of the controller. These parameters can be changed, but are set to more characteristic values. The sound of the events and iterations are roughly organized by duration horizontally and pitch vertically.

iPad controller interface in the touchOSC application.
stream
for solo violin with variable ensemble
written for sfSound

Daniel Cullen (2011/12)

Solo Violin

frail, intimate \( \frac{1}{4} \) = 92

for solo violin with variable ensemble
written for sfSound

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Stream

for solo violin & variable ensemble

for sfSound

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(2011/12)

flute

multiphonic

residual tone

growl or air sound

sustained jet whistle

key clicks and rattles. L/R asynchronous, add air sound ad lib

whistle tones
ad lib.

whistle tones
ad lib.

key slaps.

air
Stream
for solo violin & variable ensemble
for sfSound
Daniel Cullen
(2011/12)

- Multiphonic
- Suck air
- Key slaps
- Growl or air sound
- Key clicks and rattles. L/R asynchronous, add air sound ad lib
- Asynchronous tonguing with random airy notes
- Key rattle
Stream

for solo violin & variable ensemble

for sfSound

Daniel Cullen

(2011/12)

saxophone

2-4 note melodic fragment, faint

air

soft multiphonic

key rattle

key slaps.

faint tone w/ air

key clicks and rattles. L/R asynchronous, add air sound ad lib

suck air

2-4 note melodic fragment, faint

multiphonic
Stream

for solo violin & variable ensemble
for sfSound

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clarinet (bass)

˙˙o
Ø
multiphonic

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wo
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∞
air

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ppppp
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J
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‰U
±
suck air

 key clicks and rattles. L/R asynchronous, add air sound ad lib

key rattle

key slaps.

ppppp

faint tone w/ air

ppppp

2-4 note melodic fragment, faint

ppppp

ppppp

ppppp

multiphonic

ppppp

ppppp

ppppp
Stream
for solo violin & variable ensemble
for sfSound

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(2011/12)

percussion

ad lib. auxiliary instruments.
irregular, random groupings. l.v.

scrape with brushes

bass drum, soft mallets

arco non l.v.

l.v.
Stream
for solo violin & variable ensemble
for sfSound
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(2011/12)
Stream

for solo violin & variable ensemble

for sfSound

Daniel Cullen
(2011/12)
Stream

for solo violin & variable ensemble

Daniel Cullen
(2011/12)

slowly twist bow hair into muted strings

cello

pizz. behind bridge

flautando

2-4 note melodic fragment, faint

bow tailpiece

2-4 note melodic fragment, faint

pizz. behind bridge

pizz. behind bridge
Stream

for solo violin & variable ensemble

Daniel Cullen
(2011/12)