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Stream, for solo violin with variable ensemble

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Stream,
for solo violin with variable ensemble

By

Daniel Shannon Cullen

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Music

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Franck Bedrossian, Chair
Professor Ken Ueno
Professor Myra Melford

Spring 2012

Abstract

Stream, for solo violin with variable ensemble

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Daniel Shannon Cullen

Doctor of Philosophy in Music

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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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I would like to thank some of the many people who have been supportive during my graduate studies. Their support has been invaluable, for my academic and personal development.

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Matt Ingalls and the members of the sfSound ensemble: Kyle Bruckmann, John Ingle, Hadley McCarroll, Kjell Nordenson, Monica Scott and Benjamin Kreith.

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 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.

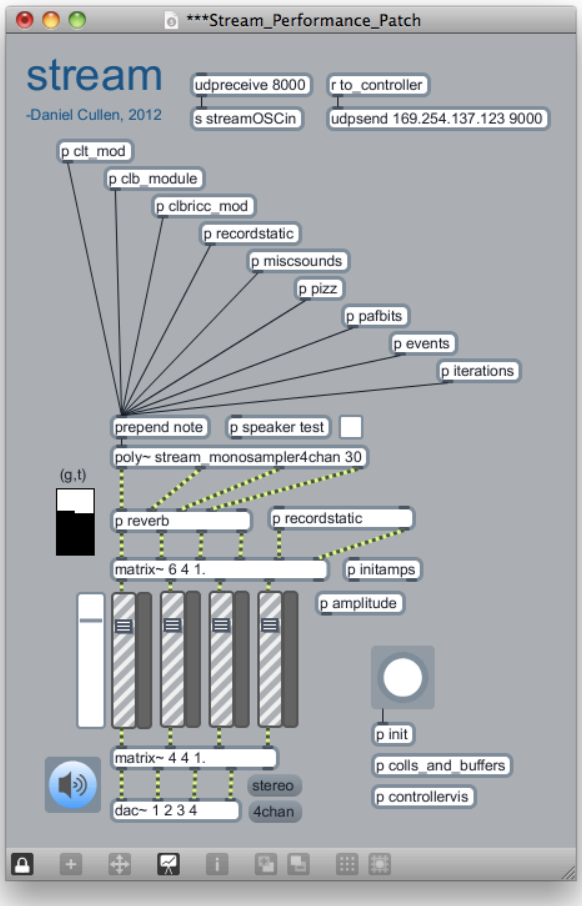
Notes on the percussion part

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

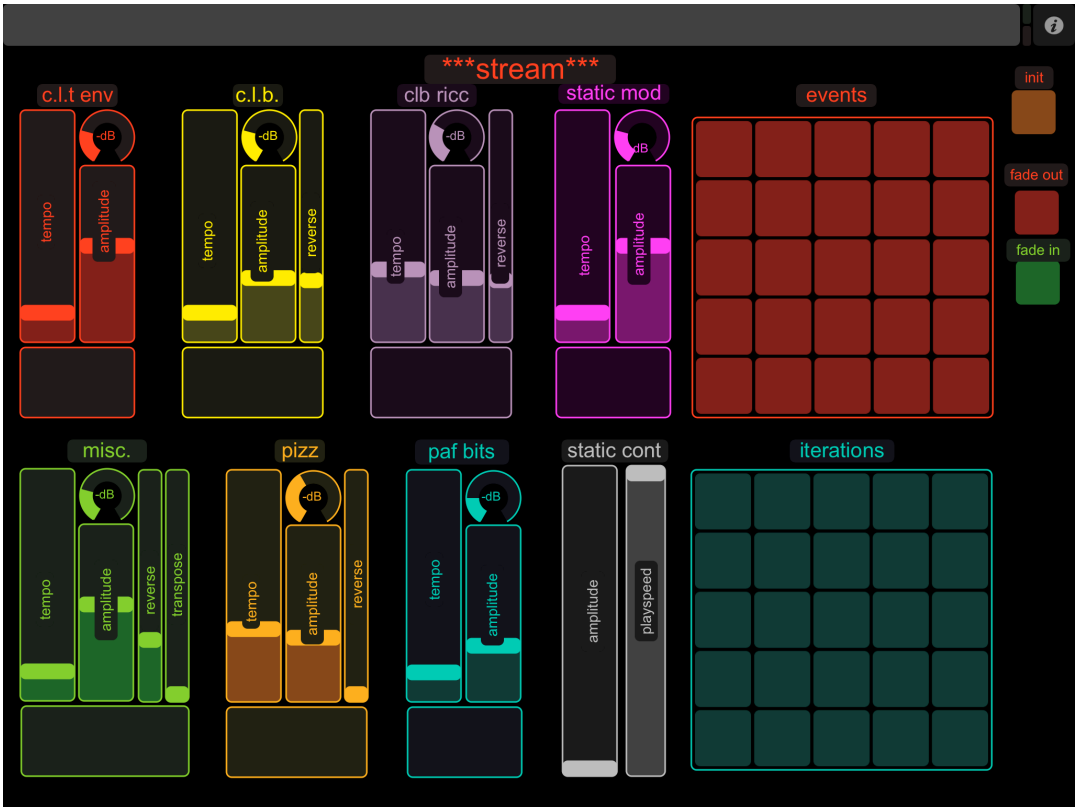
The electroacoustic part is performed through a Max/MSP patch controlled externally by an iPad using the TouchOSC application. This part works like any of the instrumental parts—the performer chooses from a variety of materials which are mapped out on the controller similar to the material being scattered 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.



Main patch window in the Max/MSP application.

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.

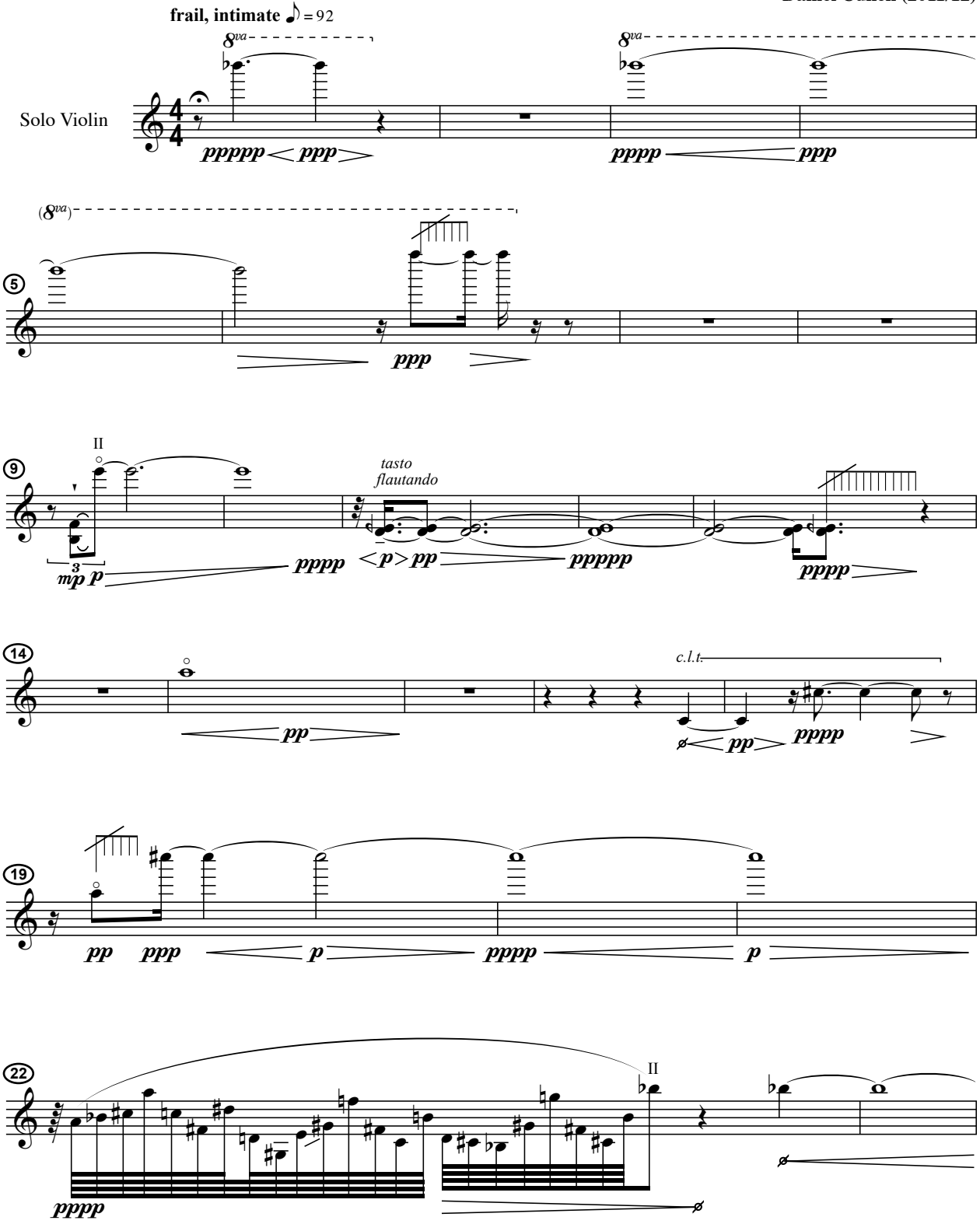


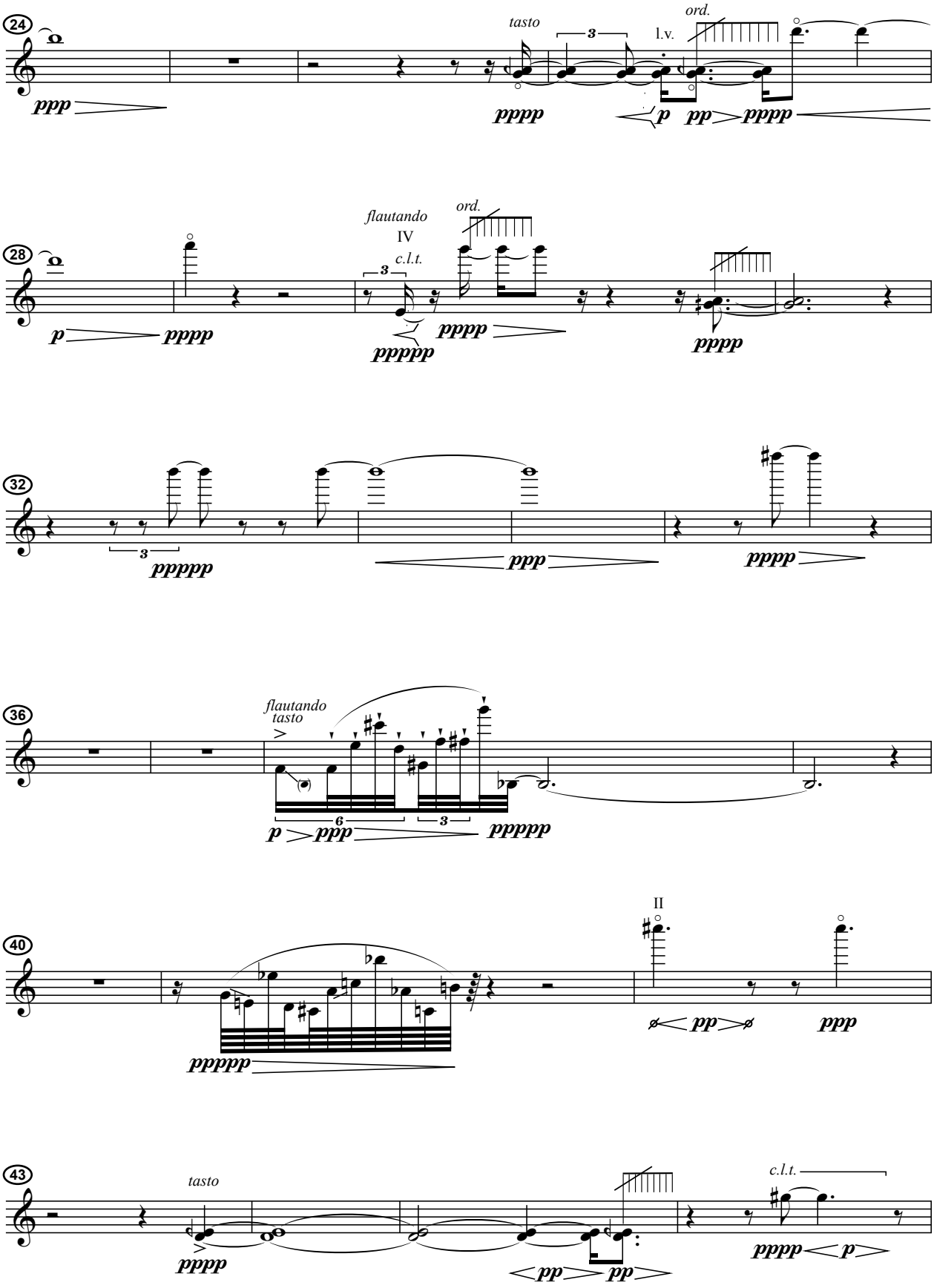
iPad controller interface in the touchOSC application.

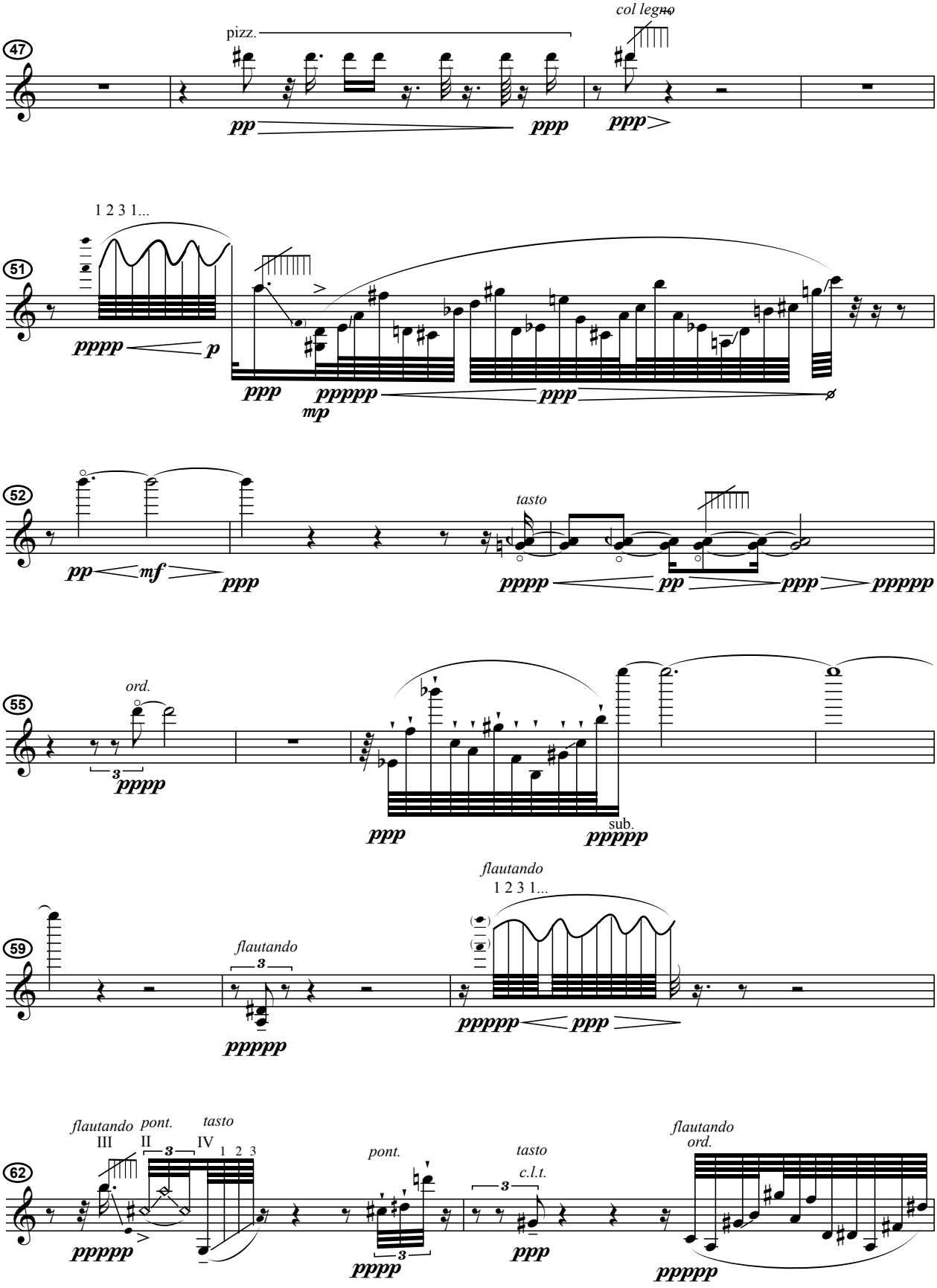
stream

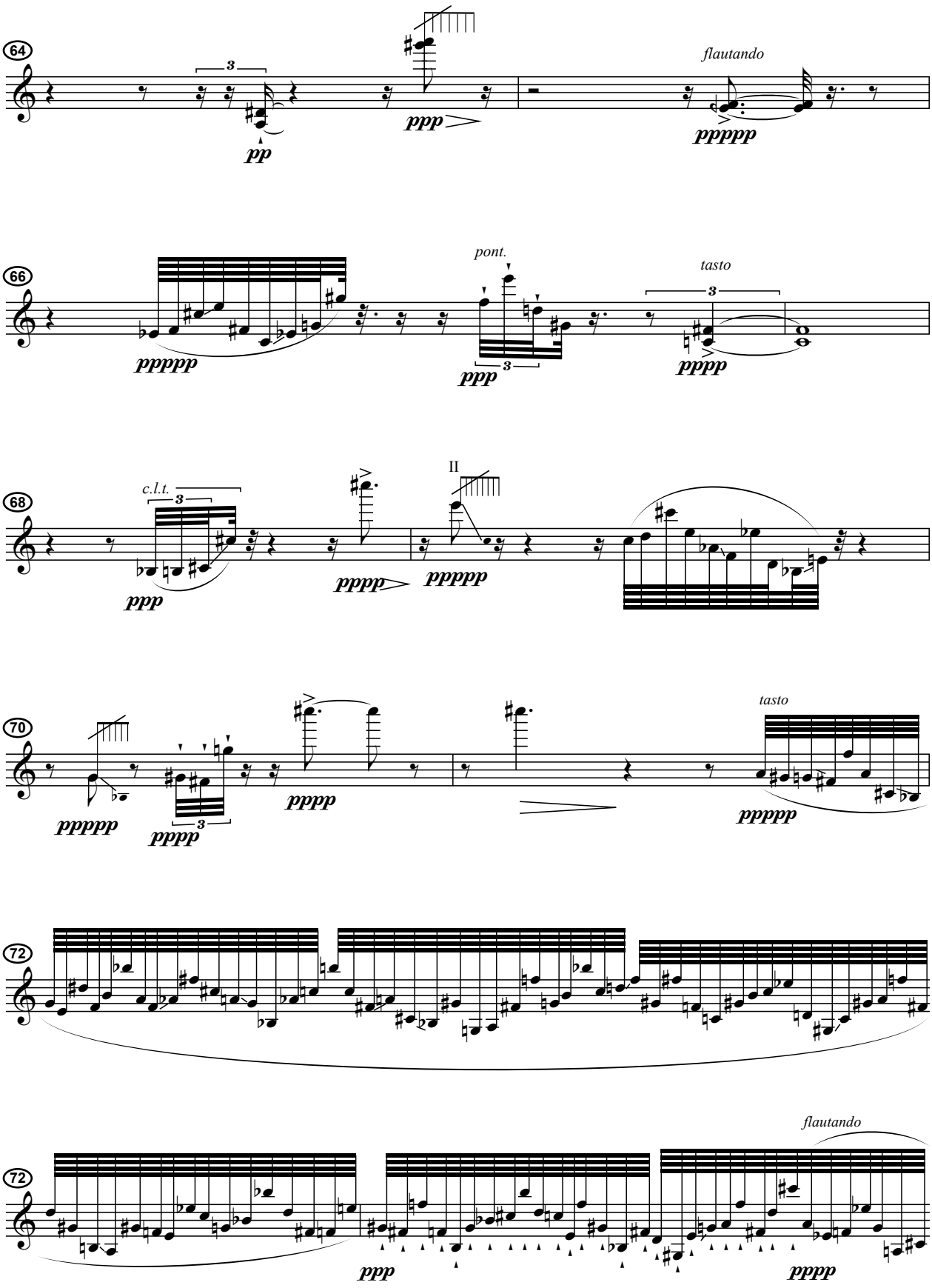
for solo violin with variable ensemble
written for sfSound

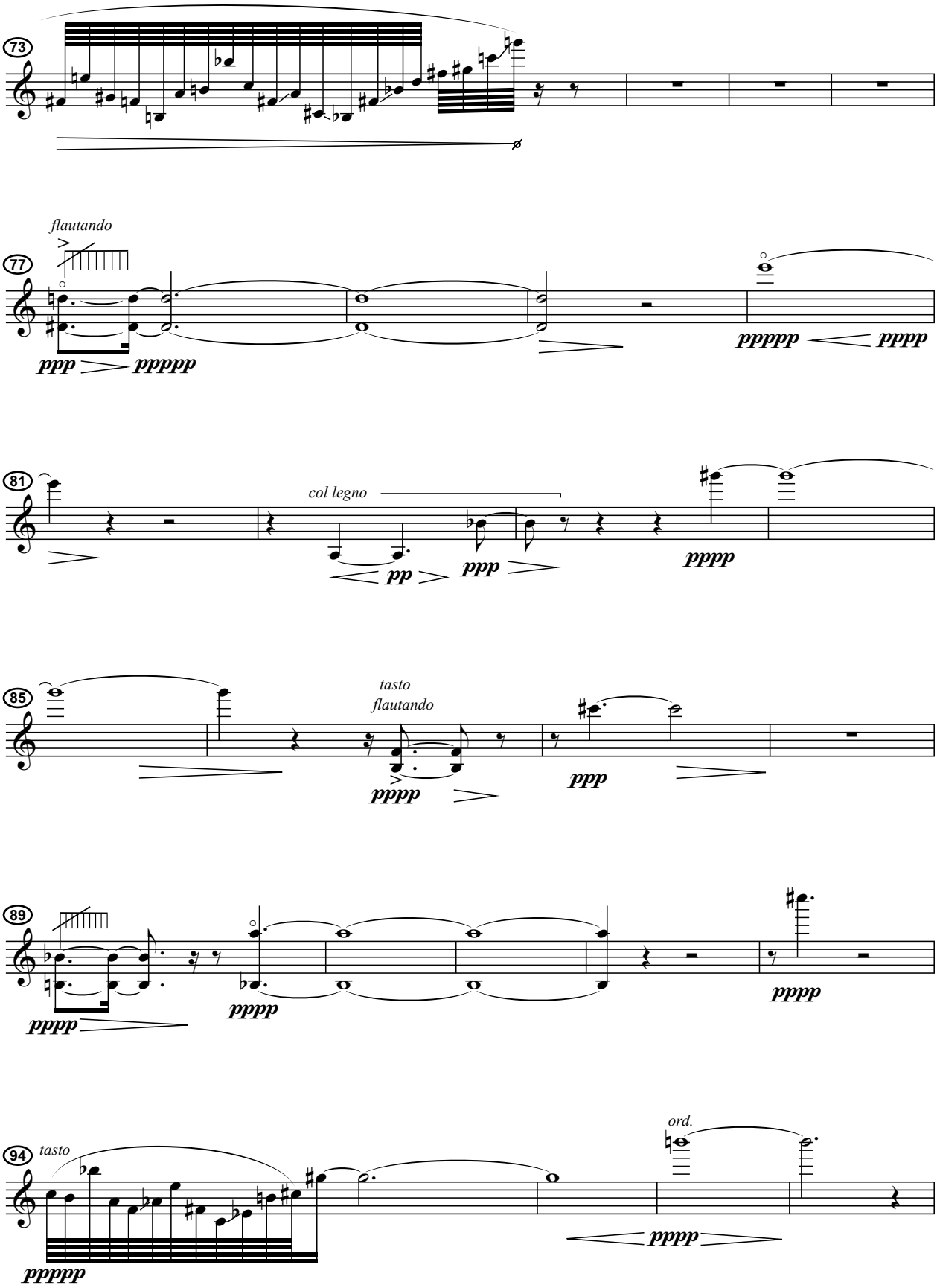
Daniel Cullen (2011/12)

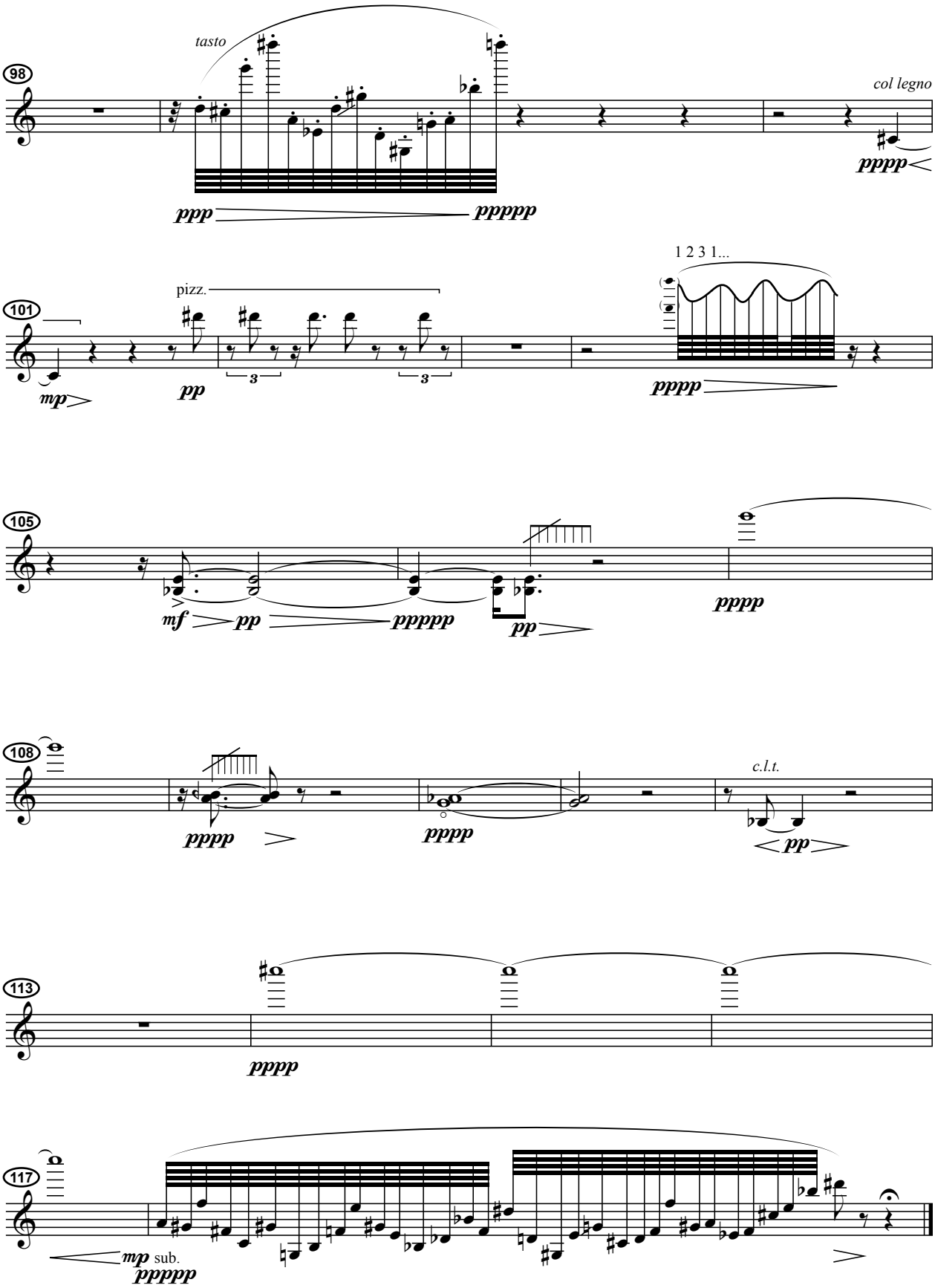



24
tasto
ord.
l.v.
ppp
pppp
p
pp
pppp
28
flautando
IV
c.l.t.
ord.
p
pppp
ppppp
pppp
pppp
32
ppppp
ppp
pppp
36
flautando
tasto
p
ppp
ppppp
40
II
ppppp
pp
ppp
43
tasto
pppp
pp
pp
c.l.t.
pppp
p


47
pizz.
pp
ppp
col legno
ppp
51
1 2 3 1...
pppp
p
ppp
mp
ppppp
ppp
52
pp
mf
ppp
tasto
pppp
pp
ppp
ppppp
55
ord.
3
pppp
ppp
sub.
ppppp
59
flautando
3
ppppp
flautando
1 2 3 1...
ppppp
ppp
62
flautando
III
pont.
II
3
tasto
IV
1 2 3
ppppp
pont.
3
pppp
tasto
c.l.t.
3
ppp
flautando
ord.
ppppp


64
flautando
pp
ppp
ppppp
66
pont.
tasto
ppppp
ppp
pppp
68
c.l.t.
II
ppp
pppp
ppppp
70
tasto
ppppp
pppp
ppppp
72
72
flautando
ppp
pppp


73
77
flautando
ppp
ppppp
ppppp
pppp
81
col legno
pp
ppp
pppp
85
tasto
flautando
pppp
ppp
89
pppp
pppp
pppp
94
tasto
ppppp
ord.
pppp


98
tasto
col legno
ppp
ppppp
pppp
101
pizz.
1 2 3 1...
mp
pp
pppp
105
mf
pp
ppppp
pp
pppp
108
pppp
pppp
c.l.t.
pp
113
pppp
117
mp sub.
ppppp

Stream

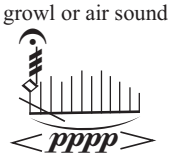
for solo violin & variable ensemble
for sfSound

flute

Daniel Cullen
(2011/12)

multiphonic

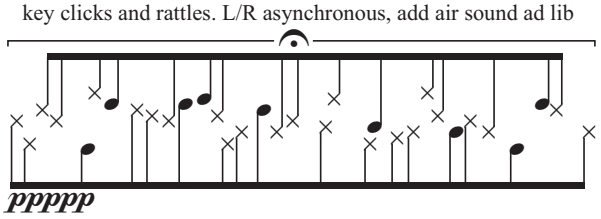
growl or air sound



residual tone

sustained jet whistle

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

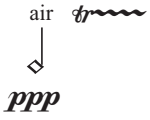


whistle tones
ad lib.

whistle tones
ad lib.

key slaps.

air

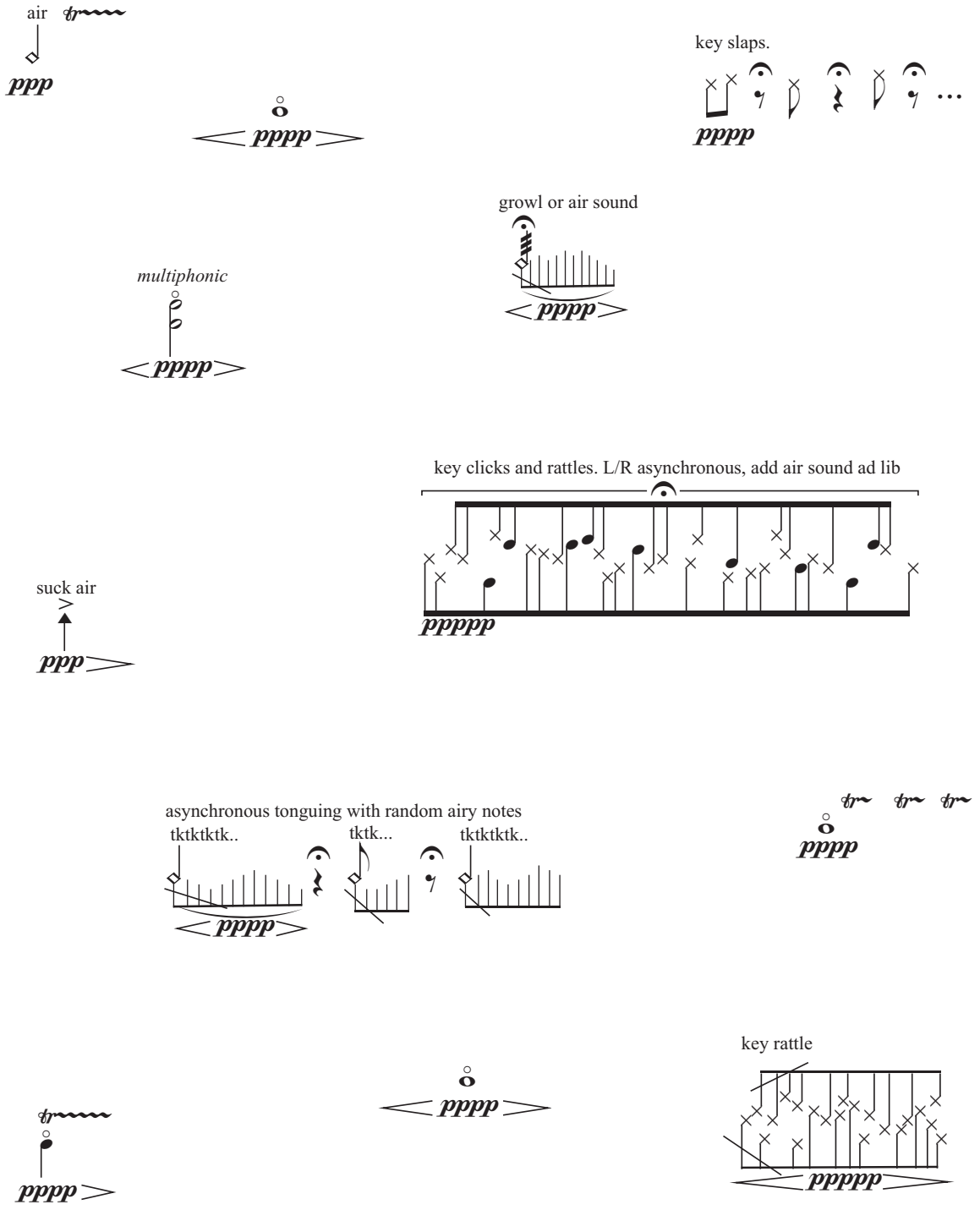


Stream

for solo violin & variable ensemble
for sfSound

Daniel Cullen
(2011/12)

oboe

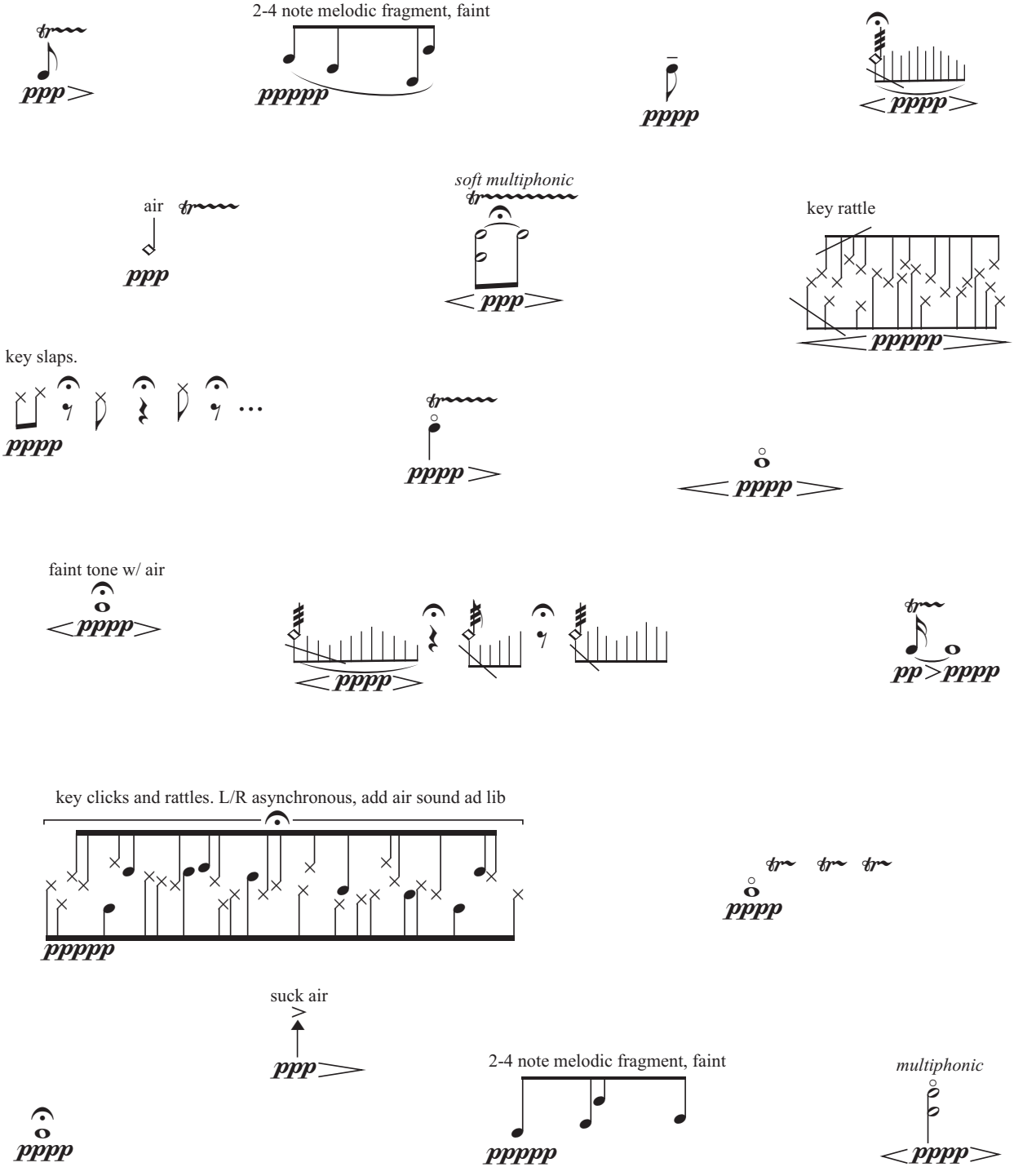


Stream

for solo violin & variable ensemble
for sfSound

saxophone

Daniel Cullen
(2011/12)

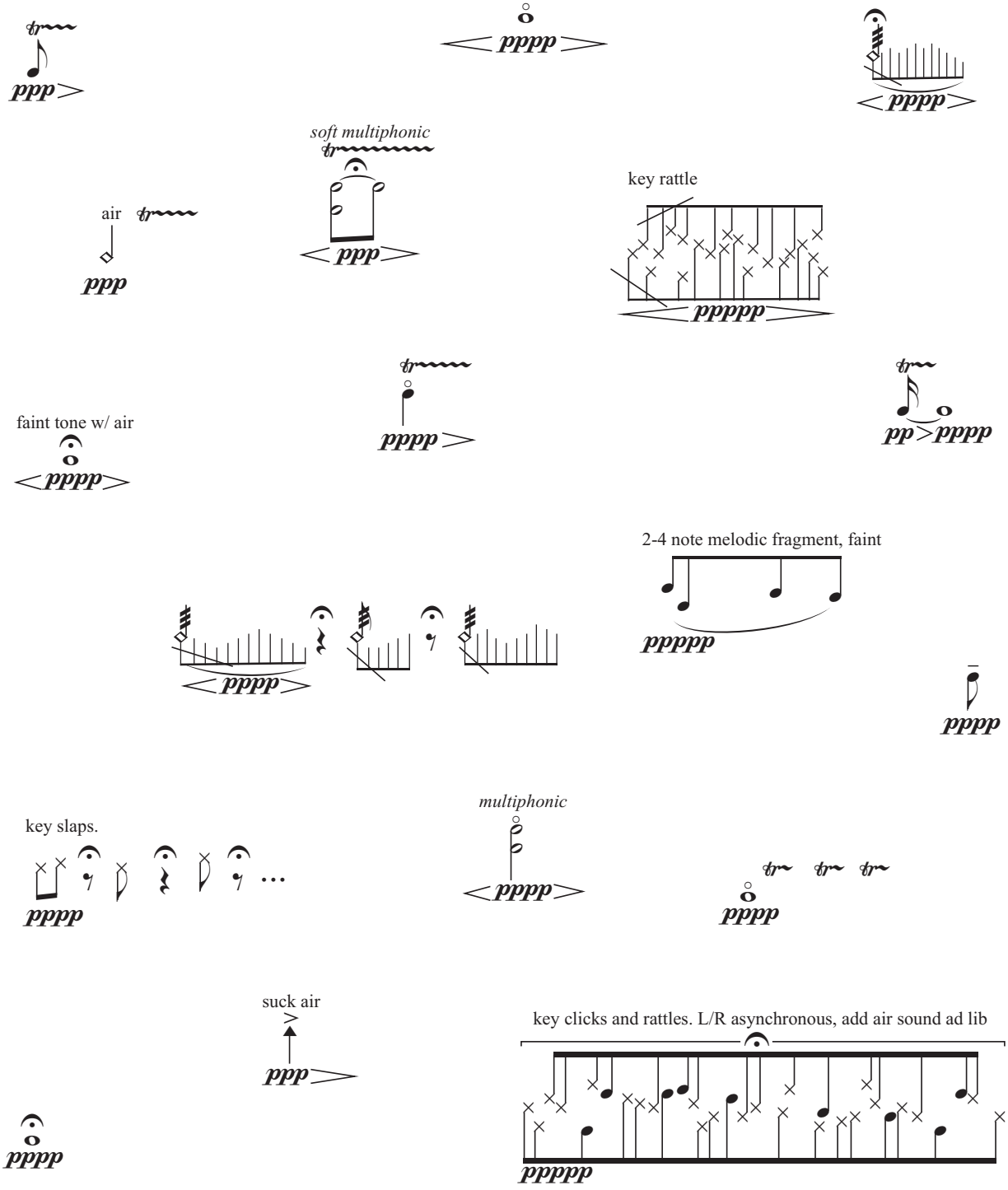


Stream

for solo violin & variable ensemble
for sfSound

clarinet (bass)

Daniel Cullen
(2011/12)

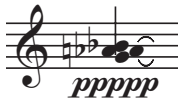


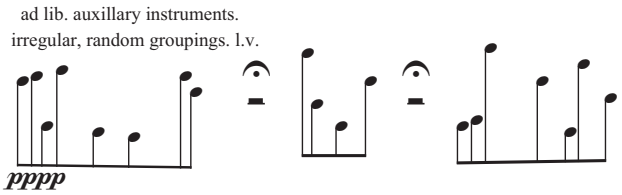
Stream

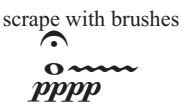
for solo violin & variable ensemble
for sfSound

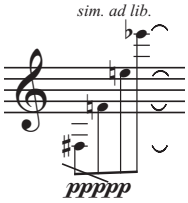
Daniel Cullen
(2011/12)

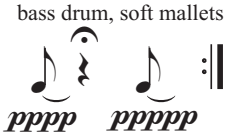
percussion

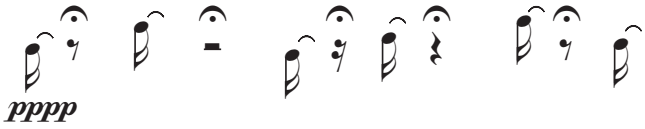


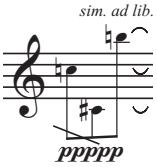


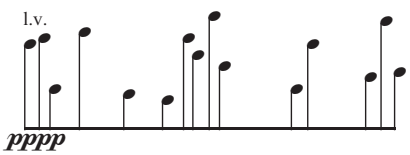










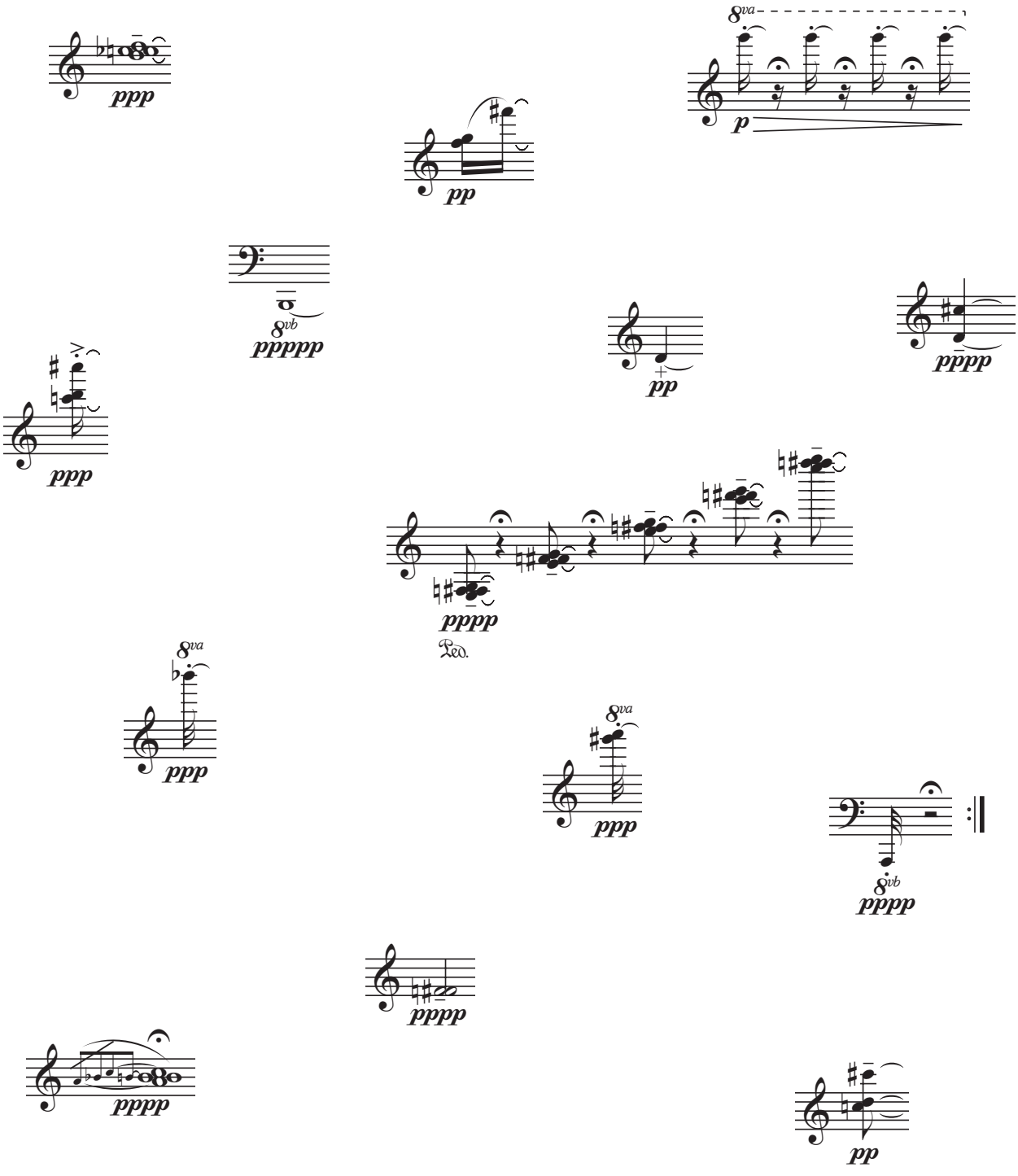


Stream

for solo violin & variable ensemble
for sfSound

piano

Daniel Cullen
(2011/12)

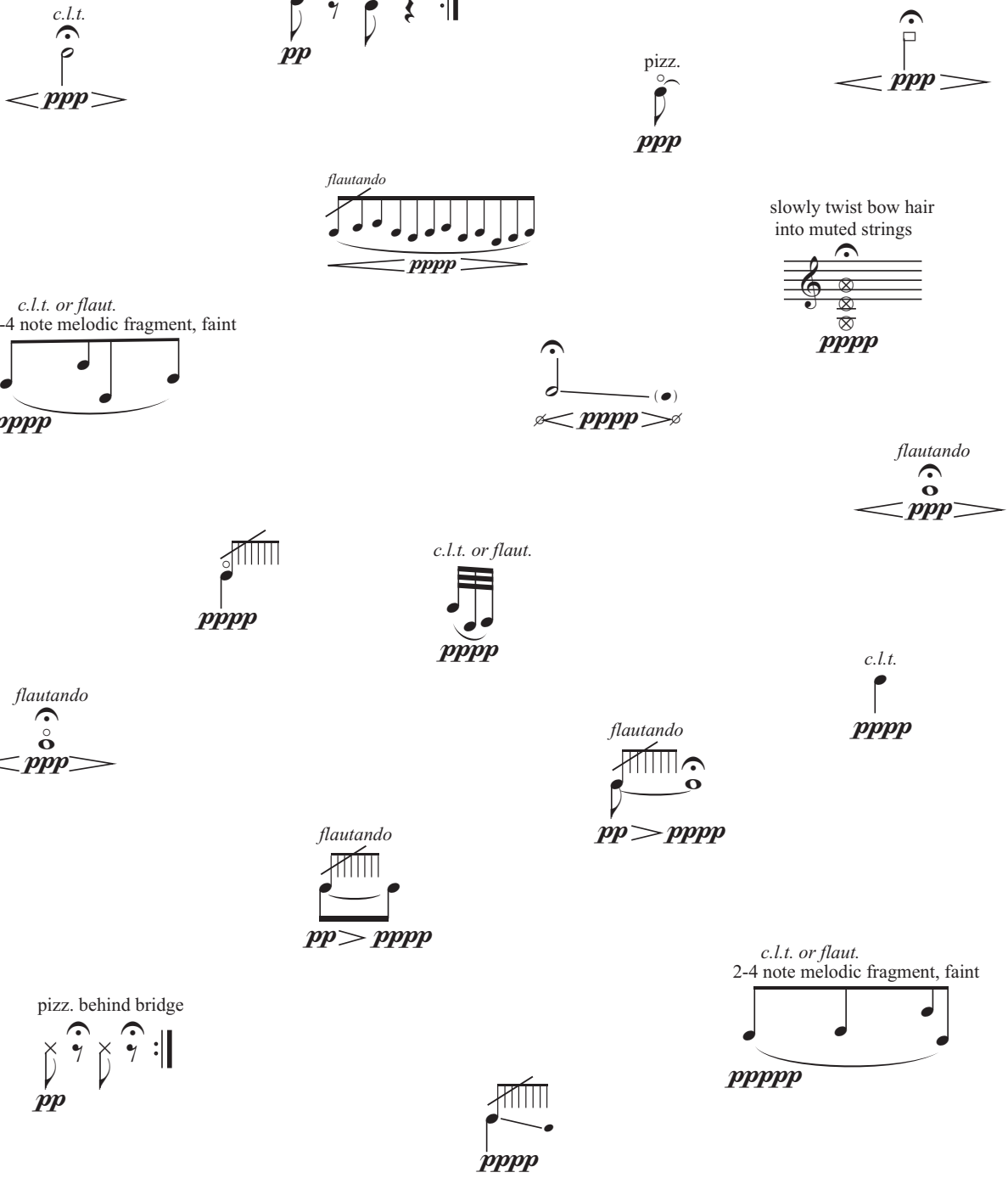


Stream

for solo violin & variable ensemble
for sfSound

violin/viola

Daniel Cullen
(2011/12)



Stream

for solo violin & variable ensemble
for sfSound

cello

Daniel Cullen
(2011/12)

flautando
pppp

pizz.
ppp

c.l.t.
pppp

pizz. behind bridge
pp

flautando
pp > *pppp*

c.l.t. or flaut.
2-4 note melodic fragment, faint
ppppp

bow bridge
ppp

flautando
pppp

flautando
ppp

slowly twist bow hair
into muted strings
pppp

pppp

pizz.
pp

c.l.t. or flaut.
pppp

bow tailpiece
ppp

flautando
pp > *pppp*

bow bridge
ppp

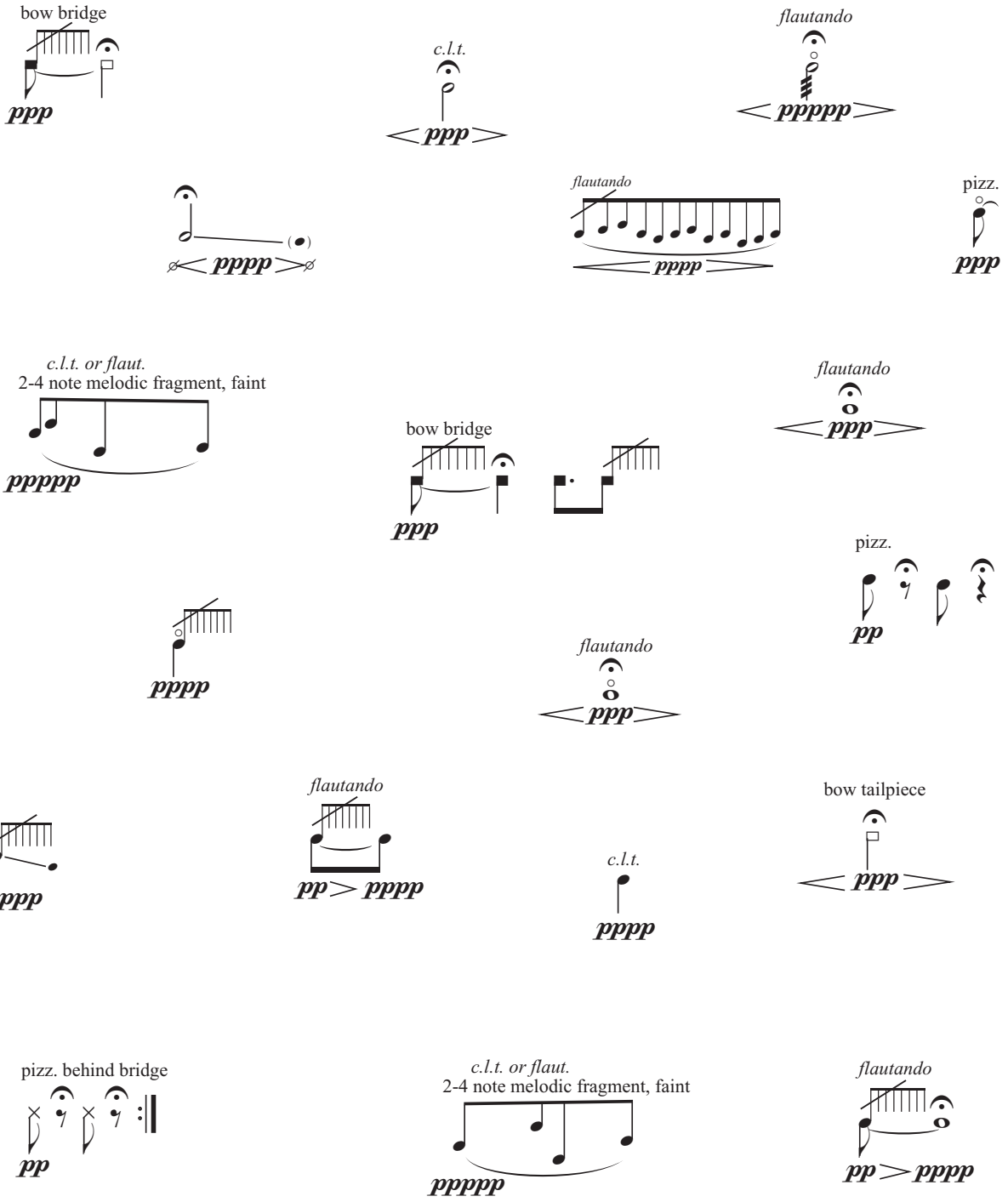
c.l.t. or flaut.
2-4 note melodic fragment, faint
ppppp

flautando
ppp

pppp

Stream

for solo violin & variable ensemble
for sfSound

contrabass

Daniel Cullen
(2011/12)