

::: performance score :::

*for the 2014 Composit New Music Festival*

# Travertine Hybrid #3

*for violin + live, interactive electronics*

Louis Goldford (2014)



Version 19/08/2020



instrumentation

violin  
live electronics\*

*\*Software, installation & performance instructions are available directly from the composer: ljgoldford@gmail.com.*

setup

A complete guide for installing and running the software, including screenshots of the user interface, is provided in the download and will also be included in a future draft of this score preface. For now, the physical stage setup. The performer will need:

- 1. a laptop running Max v6.1+ to be operated by a computer assistant, with or without additional mixing support at the mix position.
- 2. a DAW / audio interface connected to the laptop (recommended: MOTU 828 mk. III)
  - > *The piece runs in either stereo or 4-channel surround;*
- 3. a condenser microphone placed appropriately for the soloist, in a cardioid polar pattern;
- 4. a mixing console, amplification, and loudspeakers.
  - > *Digital reverb and effects are all implemented in the performance patch.*

performance notes

At this time, the notation of the electronics part is limited to cue numbers without explanation of the sound. A more complete draft of this score will soon be available with a better description of the electronic accompaniment.

- ♯ quarter tone sharp

♭ quarter tone flat
- E.S.P. = *extreme sul ponticello* (half on the bridge; fundamental disappears)


S.P. = *sul ponticello* (as close to the bridge as possible, at times on the bridge)

S.T. = *sul tasto* (bow over the fingerboard; dull sound)

N. = *normale (ordinato)* (regular bow position)

1. batt.

arco



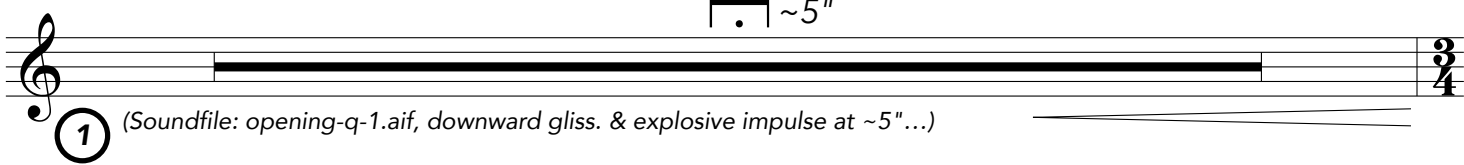
1. 4-string arpeggio behind the bridge (here with col legno battuto indicated above staff)

2. bow a single string between bridge + tailpiece

3. strike the upper sounding board with left-hand fingertip

4. single staccato bow on highest playable pitch (indicates highest pitch on current string)

[Violin]




□ ~5"

(Soundfile: opening-q-1.aif, downward gliss. & explosive impulse at ~5"...)

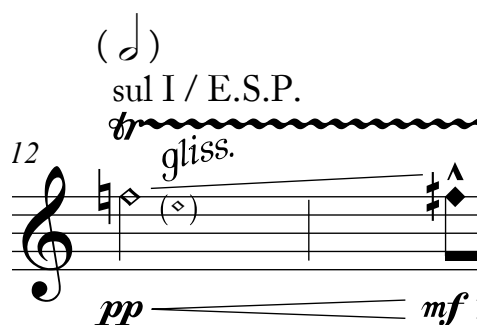
Circled number indicates a cue point for the electronics; always UNDER the staff (left).  
Italicized sans-serif type describes what is happening in the electronics (next to cue number).  
For proportional rests, duration is indicated above the staff in seconds (to the right of the fermata).

(♩.)  
sul I / E.S.P.

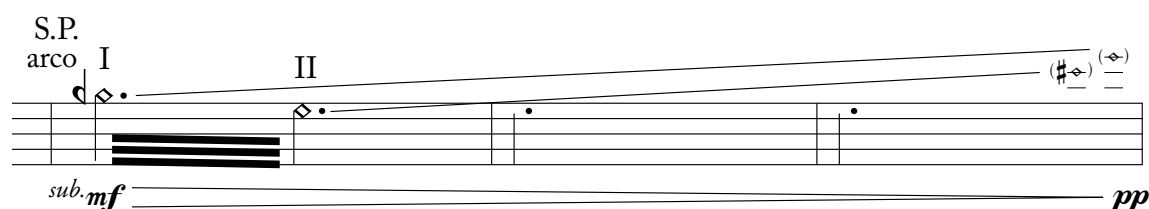


1. Rapid trill between two nodes on the indicated string for the indicated duration.

2. Begin the crescendo or phrase from *niente*.



Trill between a node + fully-stopped note over indicated duration and on indicated string. Glissando both nodes. Blackened diamond noteheads indicate duration (quarter, eighth, or sixteenth notes) but remain harmonics nonetheless.



Bowed tremolo between nodes on different strings. Glissando towards both of target nodes.



Heavy bow articulation at the frog. Phrase may begin with a scratch tone.



Gradually change bow pressure until scratch tone (white noise) replaces pure tone at the line's thickest point.



S.P. Gradually change bow positions.

## program note

In the winter of 2011 I visited the *Getty Center* in L.A. There, I recorded myself striking the surface of travertine limestone spread throughout the *Getty* campus, which produces an amazing hollow ringing sound. The following year I used analyses of this audio as the compositional basis for a series of pieces for solo string instruments. The two prior works in the series are for viola and cello solo respectively, while *Travertine Hybrid #3* marks the first in this series for violin and is also the first to include accompaniment via electronics. Previously I cross-synthesized the partials of viola samples with partials of the travertine samples and produced hybrid spectra. The electronic accompaniment here includes such cross-synthesis, but also includes resonant filter techniques and generative score material. For example, a Markov chain was constructed in order to generate much of the pitch material for the notated part.

Louis Goldford

June 2014

New York City

Premiere performance given by Marco Fusi  
at the 2014 *Composit New Music Festival*

5 June 2014

Auditorium Varrone

Rieti, Italy

## contact information



Louis Goldford // composer  
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[soundcloud.com/louisgoldford](https://soundcloud.com/louisgoldford)



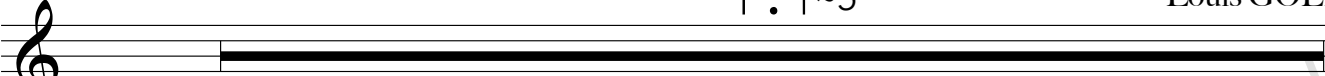
[vimeo.com/louisgoldford](https://vimeo.com/louisgoldford)

# Travertine Hybrid #3

for violin + live electronics<sup>†</sup>

⌚ Before starting the piece, press "INIT"  
and be sure "ready to go" appears on screen.

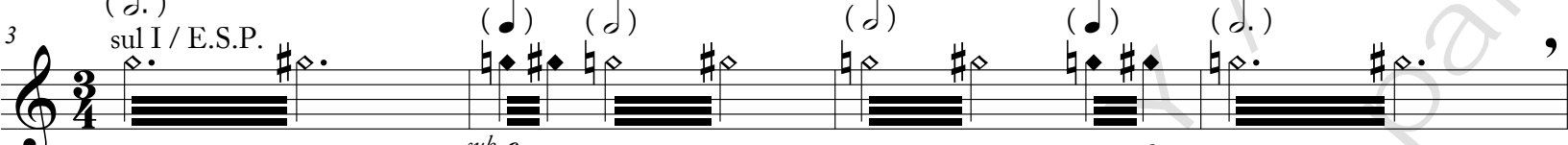
Louis GOLDFORD (2014)

[Violin]  ~5" 3/4

① (Soundfile: opening-q-1.aif, downward gliss. & explosive impulse at ~5"...)

(Soloist: wait a few seconds, at your discretion, following decay.)


Pensive, somewhat freely<sup>††</sup> [♩ = ca. 76]

3  *mp* *sub. f* *mp* *f* *mp*

*sul I / E.S.P.*

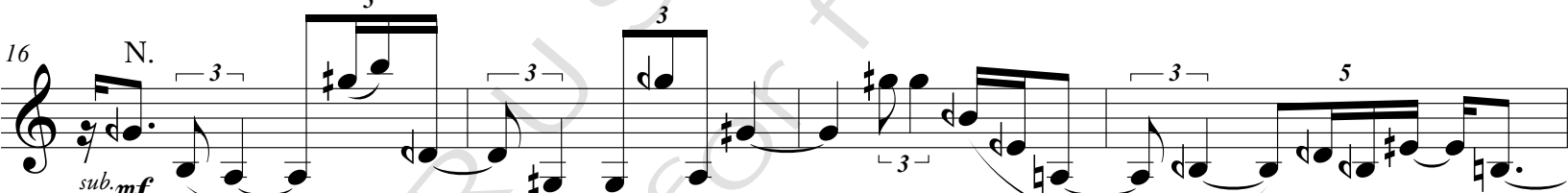
7  *mf sub.*

*N.*

12  *pp* *mf* *pp* *mf* *mp* *f*


*sul I / E.S.P.*

*gliss.*

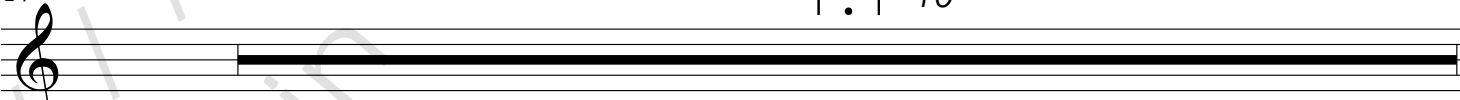
16  *sub. mf*

*N.*

② (Phase shift ON. Interpolating to preset #17. Soloist plays through interpolation.)

20  *pp*

③ (Soundfile: opening-q-3.aif. Flourishing, delayed, birdlike harmonic trills.)

24  ~10"

(Soloist: wait for the delayed harmonic trills to clear, (V.S.) leaving only the resonant partials fading in & out...)

<sup>†</sup> Electronics are available as patches compatible with Max/MSP v.6+ available from the composer at [ljgoldford@gmail.com](mailto:ljgoldford@gmail.com).

<sup>††</sup> Tempo is flexible. Nothing relies on a steady pulse, so the player is free to vary the time and phrasing at their discretion.

26 *sul II / S.P.* *p* *sub.mf* *N.* *(II / S.P.)* *sub.p* *sub.mf* *N.*

29

31 *(II / S.P.)* *sub.p*

33 *N.* *sub.mf* *(Morphing resonant partials toward vln-C#.txt, appx. 56". Ends around rehearsal #8...)*

35

37 *S.P.* *(II / S.P.)* *N.* *sub.p* *sub.mf cresc.*

40 *f* *(Soundfile: opening-q-4.aif. Screaming scratch tones.)*

42 *~7"* *(Begin 4" fade of scratch tones.)*

44 *(Soloist: begin while delays are still fading out.)* *(N.)* *(f) poco a poco cresc.*



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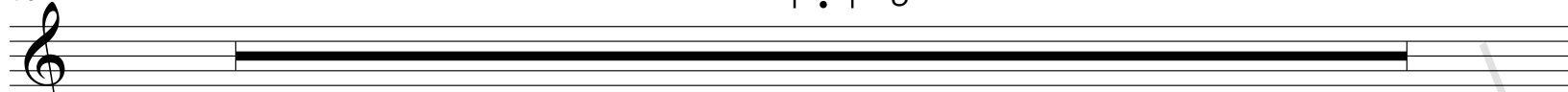
1966

1970

1974

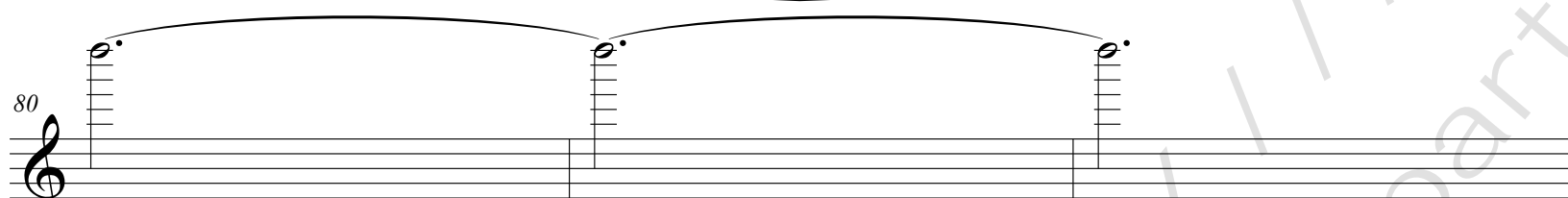
78

[ ] ~8"



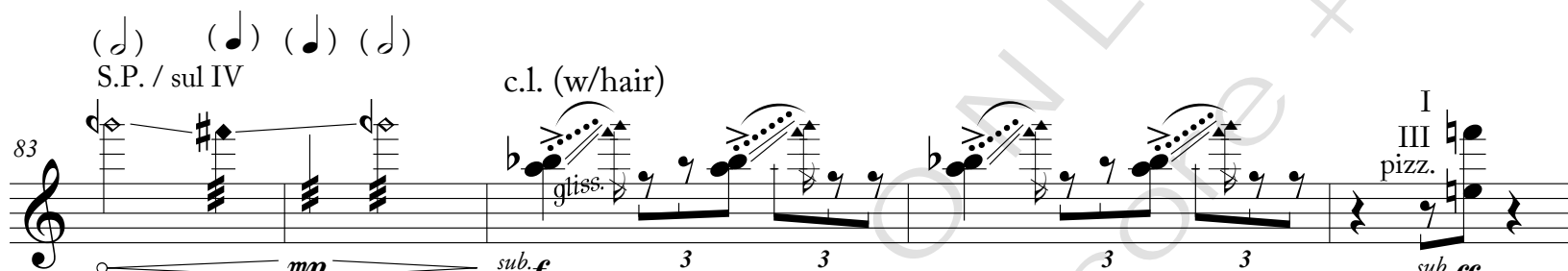
(15) (Soundfile: trem-3-again-ready.aif. Bass-EQ'd tremolos leading to explosive hit at 8". Soloist: begin after this final attack.)

N. —————> E.S.P. —————> N.



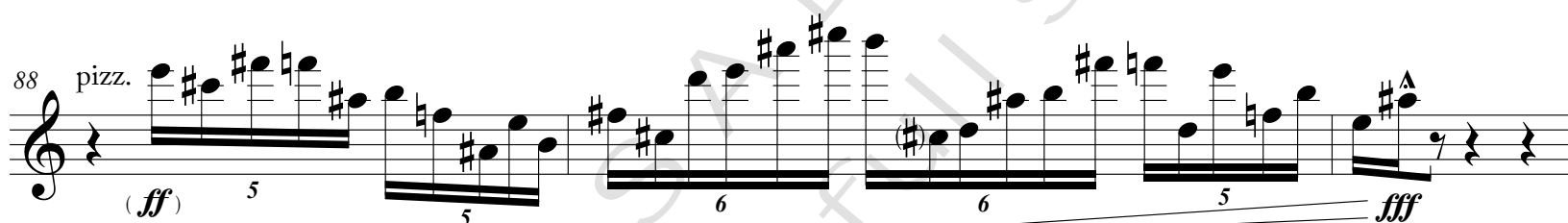
(16) (Phase-shift OFF. Fade out.)

ff



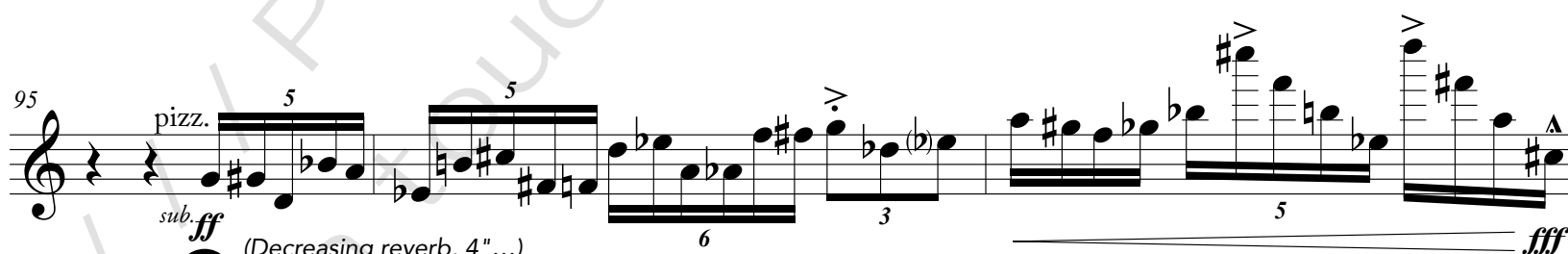
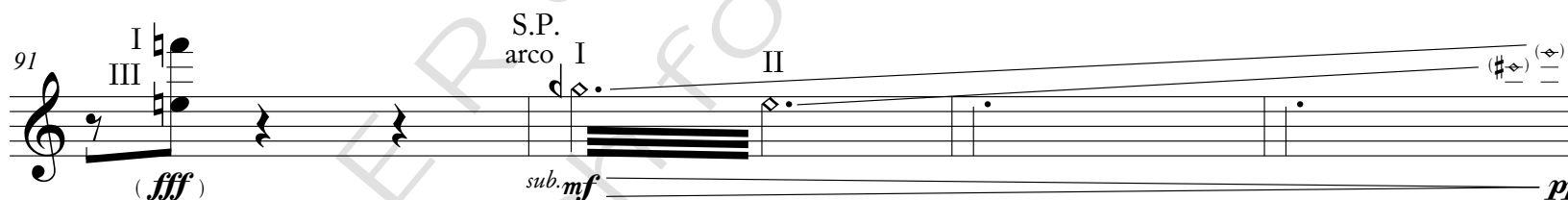
(17) (Slight amplification, 3" + increase live reverb.)

(18) (ein.LiveRez + Phase-shift ON.)



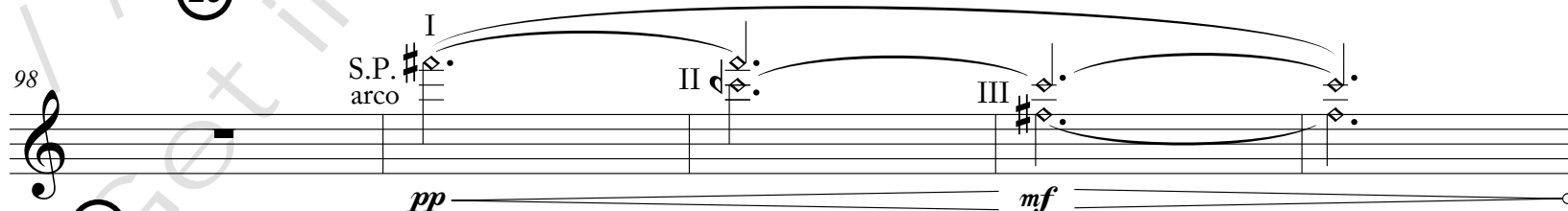
(Morphing toward rock-20.txt, ~30s near rehearsal #22. Phase-shift OFF.)

(19)



(20)

(Decreasing reverb, 4"...) ff



(21) (Slight amplification, 5". Phase-shift ON.)

103 pizz. *sub. ff* (Phase-shift OFF.)

107 N. arco IV (Phase-shift ON, preset #8.) *fff* *sub. ff* 5 5 6 6 *fff*

111 *sub. N. IV* (Phase-shift to preset #9.) S.P. (arco) 5 5 6

114 (Phase-shift OFF, increase reverb, morph partials back to rock-20.txt.) *fff* N. IV III I

116 S.P. N. *sub.* (Phase-shift to preset #10 + slight amplification.) *fp* *f* 5

122 *mp* *mf* *f* *mf* *sub. ff* 3

127 *sub. mf cresc.* (Phase-shift OFF, reverb down.) 5 5 6 5 *f* (Phase-shift ON, preset #11.) 5

130 (Incr. reverb tail, phase shift OFF.) *fff* 5 *poco ff* (DAC off.) (31)

30 *fff* June 2014 New York City  
(Soundfile: ending-q-6.aif. Ends w/low, delayed burst. Wait for decay.)





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