

A graphic featuring a bright sunburst or starburst effect against a blue sky background. The sunburst is centered horizontally and vertically, with rays of light radiating outwards. The rays are white and yellow, creating a strong contrast with the blue background. The overall effect is reminiscent of a sunrise or sunset.

SUN PROPELLER

FOR VIOLIN AND ELECTRONICS

NINA C. YOUNG

[SCORE (WITH SCORDATURA PART)]

SUN PROPELLER
for violin and electronics
written for Emily Westell
duration: ~10 minutes

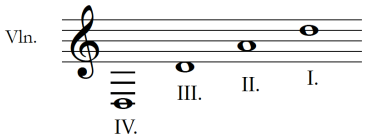
POETICS:

The title, *Sun Propeller*, refers to the propeller-like rays of light that occur when sunbeams pierce through openings in the clouds. Scientifically, these columns of light that radiate from a single point in the sky are known as crepuscular rays. The actual phrase “sun propeller” is a literal translation of the Tuvan word for these sunbeams: *Huun-Huur-Tu* (also the name of a famous Tuvan folk singing group).

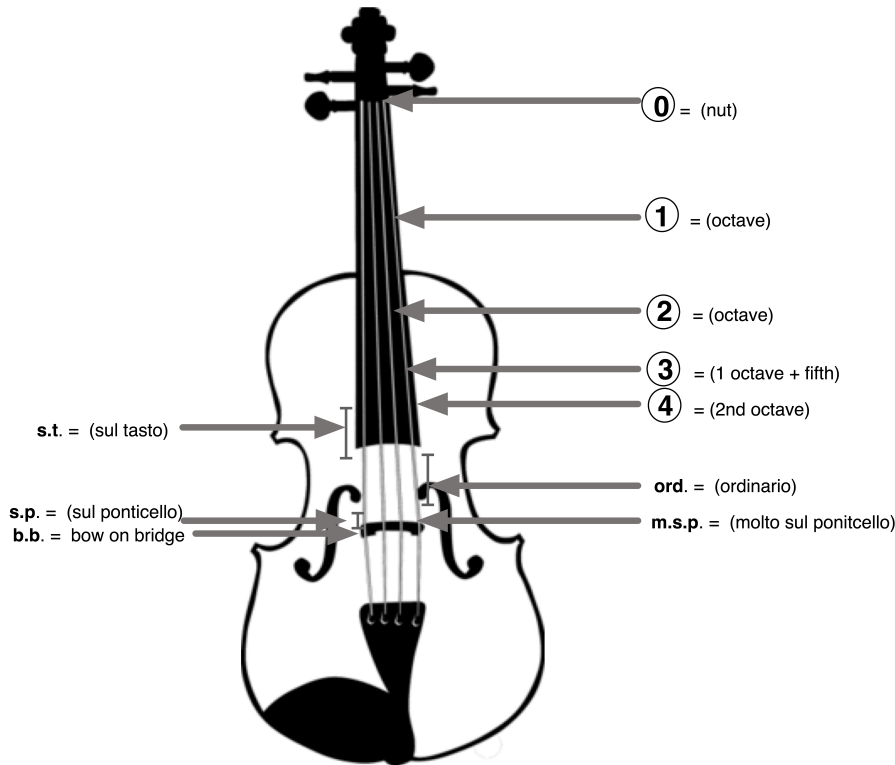
The idea for this work came while I was researching the music of Tuva, a culture in southern Siberia. Their music, particularly the practice of throat singing, is a vocal imitation of natural surroundings (the sounds of babbling brooks, wind resonating against mountains, etc.) and is used to pay respects to the spirits of nature. This type of Tuvan music is built up upon a low drone-tone with overtones floating above. The music values timbre and vertical intervals over traditional melodic and harmonic principles. While *Sun Propeller* does not attempt to imitate Tuvan music in anyway, it borrows the concept of the static drone and timbre preference in the language used to write the violin and electronics.

NOTATION:

Violin scordatura:



Bow placement key:



When bowing at points 1 to 4, the possibility of evoking subtones exists – the violinist should try and achieve this during the performance.

NOTATION LEGEND:

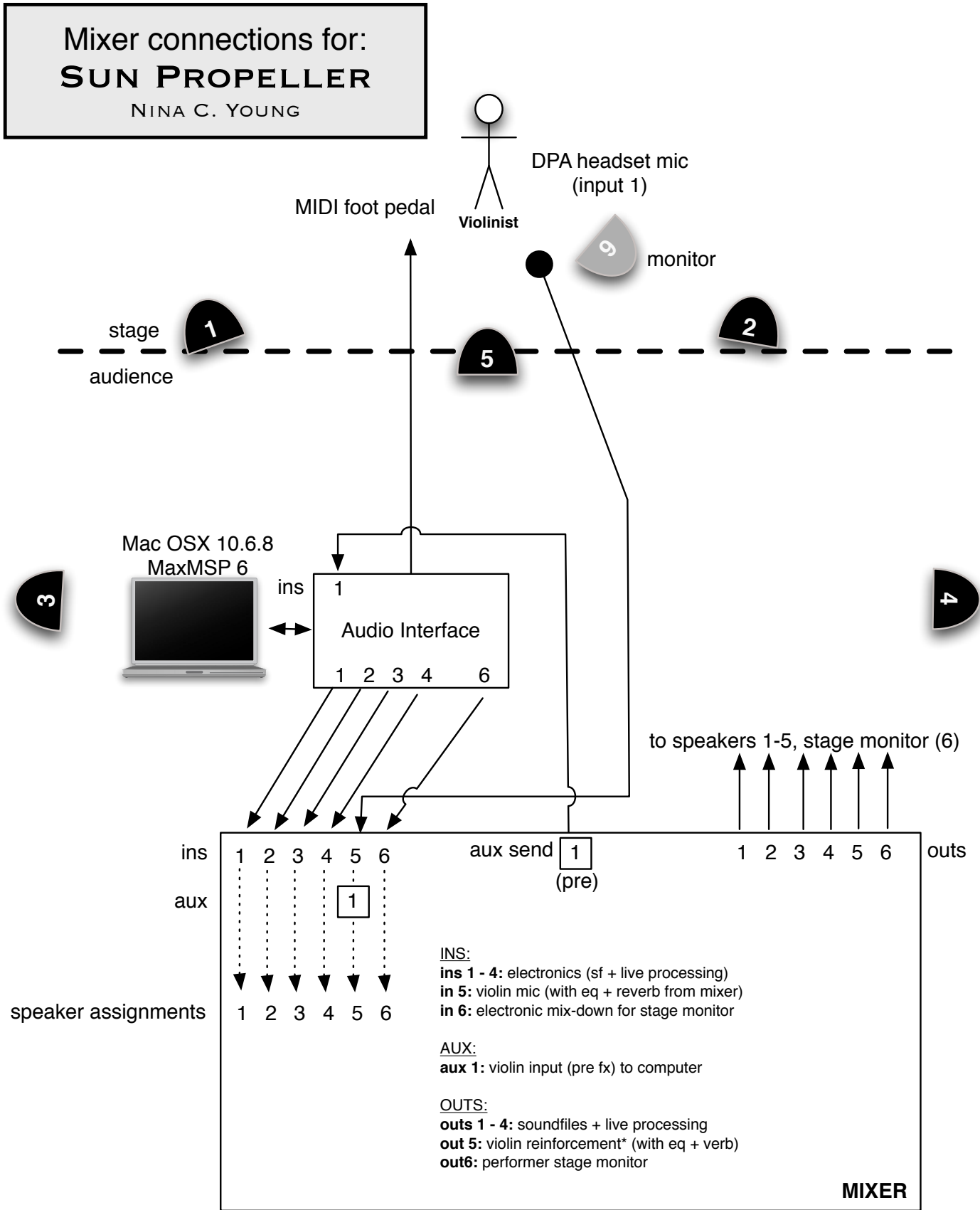
#	sharp
♯	quarter-tone sharp
♮	natural
♭	quarter-tone flat
♮	flat
♭	3/4-tone flat
◊ ◊	diamond note-heads for harmonics
×	x-note-heads represent left-hand placement along the fingerboard during scratch tone; the pitch is secondary to the scratch tone.
⏏	Fermata lunga – with specified duration in seconds
<i>non vib.</i>	non vibrato
<i>vib.</i>	vibrato
<i>m. vib.</i>	Molto vibrato
<i>ord.</i>	ord. vibrato
(fast bow)	use more bow than usual

ELECTRONICS:

The electronics consist of live processing and triggered samples. The performer triggers events with a foot pedal. The electronics consist of a drone based on the overtone spectrum of D (the drone gradually manipulates timbres throughout the piece), and timbre manipulations of the live violin sound (adjusting overtone spectra, harmonizers, ring modulation, etc.). The electronics are controlled using a MaxMSP patch. Please contact Nina C. Young at ninacyoung.composer@gmail.com for complete instructions and an updated version of the patch.

TECHNICAL REQUIREMENTS:

- 1 Macbook Pro running Max6
- 1 microphone for amplification and processing of violin. (Preferably a DPA headset microphone or similar, however, a good quality condenser microphone above the player would also work.)
- 1 midi foot pedal
- 1 midi interface (to receive foot pedal information)
- speakers:
 - 4: quadraphonic + optional center channel for live sound reinforcement
- audio interface:
 - minimum: 1 input, 4 outputs
- stage monitor (optional, output 6)



*violin sound reinforcement may not be necessary

SUN PROPELLER
FOR VIOLIN AND ELECTRONICS

NINA C. YOUNG

♩ = 54 - 62

Scordatura

Violin (at pitch)

Electronics

SF00a & SF00b: quiet pink noise soundfile trigger while you are setting up on stage, it will loop until you press 1.

SF01 (drone), fade out of Cue00

spdrone.1 fades in

Scord.

Violin

Electr.

SF03 spdrone.1 brightness change

Scord.

Violin

Electr.

SF04

spdrone.1 comb-filter-level + filter-fundamental change

rit. -----

a tempo (♩ = 66)

Scord.

Violin

Electr.

SF06

SF07

Scord.

Violin

Electr.

Scord.

Violin

Electr.

24

tr

s.p.

ord.

tr

tr

tr

tr

tr

tr

3

3

f

25

6

3

2

1

tr

mp

12

SF12

spgran.1 bin-shift

Scord.

Violin

Electr.

26

27

3

7

1

3

0

4

trb

2

4

(fast bow)

3

Scord.

Violin

Electr.

28

29

7

1

1

2

6

s.p.

ord.

mp

mf

s.p.

13 spdrone.2 gain decrease

Scord.

Violin

Electr.

30

31

32

3

6

3

3

3

f

mf

f

mf

f

14 spdrone.2 gain increase

15 spdrone.2 gain increase

16 spdrone.2 gain increase

Scord.

Violin

Electr.

33

34

35

3

m.s.p.

0

4

0

0

1

0

3

0

1

6

s.p.

ff

p

17 spdrone.2 gain increase

18 spdrone.2 gain fade-out end SF11 + SF12

19 SF19 spdrone.2 fade-out spgran.1 (remains) spdrone.1 fade in (slow, w/new parameters)

Scord.

Violin

Electr.

36

37

38

39

40

41

42

43

6 sec.

accel.

ord.

mp

f

♩ = 112

♩ = 60 scratch tone

I.

II.

ff

I.

II.

20 SF20 spgran.2 (fade-out, slow)

Scord.

Violin

Electr.

37

38

39

40

41

42

43

6 sec.

scratch tone

ord.

II.

III.

II.

III.

21 spdrone.1 gain decrease

* x-note heads represent left-hand placement along the finger-board, the scratch tone should be more prevalent than the pitches

Sun Propeller

Scord. 44 *mf* scratch tone *ord.* 45 46 *p* flautando 47 48 49 *mp*

Violin 44 45 46 47 48 49 *p* *mp*

Electr. 44 45 46 47 48 49 *p* *mp*

The musical score consists of three staves: Scord. (Scordatura), Violin, and Electr. (Electric guitar). The Scord. staff features a series of chords, some marked with '6' and others with 'II.' or 'III.'. Dynamics include *p* (piano), *f* (forte), *mf* (mezzo-forte), and *p* (piano). The Violin staff mirrors the Scord. staff with similar chordal structures. The Electr. staff is marked with a double bar line and a 'II' symbol, indicating a specific playing technique or position. The score is divided into measures by vertical dashed lines, with measure numbers 50, 51, 52, 53, and 54 indicated at the top.

Scord. Violin Electr.

55 56 57 58

ord. s.p. s.t. 5 sec. ord. non. vib. vib.

mp n f p

23 SF23 spdrone.1 fade-out 24 spdrone.2 to spglide.1 to spgran.1

Free, *molto espr.*

8va

58 *mp*

59

60

Scord.

Violin

Electr.

Scord.

Violin

Electr.

61

62

63

f *p* *mf*

△ 25

SF25
spdrone.1 (orig)
fade-out spdrone.2 to spglide.1 to spgran.1

Scord.

Violin

Electr.

64 65 66 67

s.p. → m.s.p. → s.p. m.s.p. → ord.

I. (d) 3

II. 3

III. 3

II. 3

II. 3

III.ord. 3

III. 3

IV. 3

f *mf* *n* *f* *mp* *f*

26 sprone.1 gain decrease

68 ord. → s.p. → ord. III. *m. vib.* *p* < *mf* > 3

69 ord. → m.s.p. → ord. non. *vib.* → *m. vib.* → non. *vib.* *mp* 3 3 *n*

70 ord. → m.s.p. *m. vib.* *mp* 3 < *f* >

Scord.

Violin

Electr.

27 SF27
spdrone.1 gain increase

71 s.p. → ord. *pp* 3 0 6 6 6 6 6 6 6 3

Scord.

Violin

Electr.

~x10 m.s.p. → b.b. *mf* 9

72 ~ 4 sec.

Scord.

Violin

Electr.

28 SF28
spdrone.1 decrease

♩ = 60 b.b. → s.p. → ord. → s.p. → b.b. *p* I. II. ~ 2 sec. ~ 4 sec.

73 74 75 76

Scord.

Violin

Electr.

29 SF29

b.b. → ord. → s.p. → ord. → b.b. ord. III. IV. 78 *mp* *mf* 79 3 ~ 25 sec. 3 → b.b. ~ 6 sec.

77 78 79

Scord.

Violin

Electr.

30 spdrone.1 hairpins (over 10 seconds)
SF fade out (~30 seconds)

31 patch off