

# White/Waves

for Wet Ink large ensemble

by Sky Macklay

### Instrumentation:

flute  
oboe  
bass clarinet  
tenor sax

trumpet (with harmon mute and plunger)  
trombone

piano  
percussion

- sandpaper blocks
- maracas
- bass drum (w/ superball mallet)
- China cymbal
- sizzle cymbal
- bongos
- snare drum
- splash cymbal
- vibraphone
- suspended cymbal (with bow)
- 2 toms
- tam-tam

violin 1  
violin 2  
viola  
cello

electronics

### Electronics Part Details:

The electronics part consists of one MaxMSP patch played with two controllers, an iPad and a keyboard of at least two octaves. The patch allows the performer to fluidly play frequency modulated sine waves on the iPad (controlling the frequency) and it allows the performer to cue pre-made sound files with the keyboard. The stereo output of the patch should come from two speakers flanking the ensemble.

1. In the first section of the piece (from the beginning to bar 48) the electronics performer uses the iPad's XY touchpad (a simple software interface built with Lemur or TouchOSC) to intuitively control the frequency of the FM sine waves and to shape them into jagged, improvisatory, glissando contours.
2. In the second section of the piece (from bar 49 to the end) the electronics performer uses a keyboard to cue the 24 sound files (each assigned to its own key) as shown in the score.

The software and sound files necessary for performing this piece are available from the composer. Please contact her at [sky.macklay@gmail.com](mailto:sky.macklay@gmail.com).

### Program Notes:

Ocean waves are so darn peaceful and meditative with their  
“shhhhhhhhSHHHHHHHHHHhhhhhooooooooooooo,  
shhhhhhhhSHHHHHHHHHhhhhhooooooooooooo,  
shhhhhhhhSHHHHHHHHHhhhhhooooooooooooo” OVER and OVER and OVER.

*White/Waves* begins with an instrumental shhhhhhhhSHHHHHHHHHHhhhhhooooooooooooo vibe in the ensemble juxtaposed with raucous, Nirvana-squelching ruh-buh-ruh-buhs in the piano and warbly Zen-blocking WEEEoooWEooWEEEoooos in the electronics. The B-section material began with shhhhhhhhSHHHHHHHHHHhhhhhooooooooooooo field recordings from Sunset Beach, NC, but I wanted them to sound more manic and unpredictable so I sculpted the waves into filtered bursts, blips, swells, and sweeps and put them in dialogue with frenzied instrumental waves and orchestrated new versions of the sculpted white noise bursts, blips, etc.

*J = 120*

*J = 60*  
*flz.*

Flute  
suck in or "inward kiss" at the tip of the reed to create a noisy, smoochy sound

Oboe  
finger low B,  
*mp*

Bass Clarinet in B<sub>b</sub>  
*flz.*  
*pp*

Tenor Saxophone  
air only  
hr ro hr ro hr  
*p* — *mp* — *pp*

Trumpet in B<sub>b</sub>  
gentle, thud-y tongue rams  
*pp* — *p* — *pp*

Trombone  
gentle, thud-y tongue rams  
*pp* — *mp* — *pp*

Percussion  
sand paper blocks, circular motion  
*p* — *mp* — *p*

Piano  
aggressive, rhythmic, precise up and down scraping perpendicular to strings w/ pick or other tool that makes a loud, dry sound  
medium strings      high strings      med.  
*fff*  
circular scraping motion on low strings w/ felt sound board cleaning tool or other soft "squeegee-like" tool  
*ppp* — *mp* — *ppp*  
*Rsd.*

*J = 120*

*J = 60*

noisy circular bowing, flautando

Violin I  
*ppp*

noisy circular bowing, flautando

Violin II  
*ppp*

noisy circular bowing, flautando

Viola  
*ppp*

Violoncello  
bow behind the bridge  
*ppp*

Electronics









Finger the given pitches and  
noisily inhale and exhale through  
flute. Also allow some air to escape  
through the corners of your mouth.

9

27

*poco rit.*      *a tempo*

*poco rit.*      *a tempo*

*poco rit.*      *a tempo*

*poco rit.*      *a tempo*

*in*      *out*

*f*

Musical score for Tpt. and Tbn. The score consists of two staves. The top staff is for Tpt. (Trumpet) and the bottom staff is for Tbn. (Bassoon). Both staves begin with a treble clef. The first measure starts with a whole rest followed by a measure in 3/4 time. The second measure starts with a whole rest followed by a measure in 4/4 time. Measure 11 ends with a fermata over the bassoon's note. Measure 12 begins with a whole rest followed by a measure in 3/4 time. The section ends with a repeat sign and a measure in 4/4 time. The tempo markings 'poco rit.' and 'a tempo' are placed above the measures. The bassoon's part consists of sustained notes throughout the measures.

*poco rit.*

*a tempo*

Perc.

Pno.

*poco rit.*

*a tempo*

*ff*

*p ff*

*p ff*

(scrape low strings, dry)

*ff*

	$\text{♩} = 120$	
Vln. I	<i>poco rit.</i>	<i>a tempo</i>
Vln. II	<i>poco rit.</i>	<i>a tempo</i>
Vla.	<i>poco rit.</i>	<i>a tempo</i>
Vc.	<i>poco rit.</i>	<i>a tempo</i>

*poco rit.*

*a tempo*

33

Fl. in out etc...

Remove reed. Finger the given pitches and noisily inhale and exhale through oboe. Also allow some air to escape through the corners of your mouth.

Ob.

in out in out etc... **f**

Remove mouthpiece. Finger the given pitches and noisily inhale and exhale through clarinet. Also allow some air to escape through the corners of your mouth.

B. Cl.

out in out in etc... **f**

Remove mouthpiece. Finger the given pitches and noisily inhale and exhale through sax. Also allow some air to escape through the corners of your mouth.

Ten. Sax.

in out **f**

Finger the given pitches and noisily inhale and exhale through trumpet without buzzing lips. Also allow some air to escape through the corners of your mouth.

Tpt.

Noisily inhale and exhale through trombone without buzzing lips. Also allow some air to escape through the corners of your mouth.

Tbn.

Perc.

Pno. **ff** (silently depress key) **p** **f** **p**

Vln. I

Vln. II

Vla.

Vc.

El.

37

Fl.

Ob.

B. Cl.

Ten. Sax.

in out etc.

Tpt.

in out in out etc...

f

Tbn.

in out in out etc...

f

Perc.

Pno.

6

3

(scrape low strings, dry)

(silently depress key)

fff

p

Mute (but don't depress) strings with left hand, Scratch tone

Vln. I

p < f > p

Mute (but don't depress) strings with left hand, Scratch tone

Vln. II

p < f > p

Mute (but don't depress) strings with left hand, Scratch tone

Vla.

p

Mute (but don't depress) strings with left hand, Scratch tone

Vc.

p

El.

Musical score for orchestra and piano, page 12, measures 42-45. The score includes parts for Flute, Oboe, Bassoon, Tenor Saxophone, Trumpet, Trombone, Percussion, Piano, Violin I, Violin II, Cello, and Double Bass. The tempo is  $\text{♩} = 152$ . The instrumentation is as follows:

- Flute:** Measures 42-43:  $f$ ,  $p$ ; Measure 44:  $f$ ,  $mp$ ; Measure 45:  $ff$ .
- Oboe:** Measures 42-43:  $f$ ,  $p$ ; Measure 44:  $f$ ,  $mp$ ; Measure 45:  $ff$ .
- Bassoon:** Measures 42-43:  $f$ ,  $p$ ; Measure 44:  $f$ ,  $mp$ ; Measure 45:  $ff$ .
- Tenor Saxophone:** Measures 42-43:  $f$ ,  $p$ ; Measure 44:  $f$ ,  $mp$ ; Measure 45:  $ff$ .
- Trumpet:** Measures 42-43:  $f$ ,  $p$ ; Measure 44:  $f$ ,  $mp$ ; Measure 45:  $ff$ .
- Trombone:** Measures 42-43:  $f$ ,  $p$ ; Measure 44:  $f$ ,  $mp$ ; Measure 45:  $ff$ .
- Percussion:** Measures 42-43:  $f$ ,  $p$ ; Measure 44:  $f$ ,  $mp$ ; Measure 45:  $ff$ .
- Piano:** Measures 42-43:  $fff$ ,  $mp$ ; Measure 44:  $f$ ,  $mp$ ; Measure 45:  $ff$ .
- Violin I:** Measures 42-43:  $f$ ; Measure 44:  $p$ ; Measure 45:  $ff$ .
- Violin II:** Measures 42-43:  $f$ ; Measure 44:  $p$ ; Measure 45:  $ff$ .
- Cello:** Measures 42-43:  $f$ ,  $>p$ ; Measure 44:  $f$ ,  $mp$ ; Measure 45:  $f$ .
- Double Bass:** Measures 42-43:  $f$ ,  $>p$ ; Measure 44:  $f$ ,  $mp$ ; Measure 45:  $f$ .

Dynamic markings include *poco rit.* (poco ritardo),  $f$  (fortissimo),  $p$  (pianissimo),  $mp$  (mezzo-pianissimo),  $ff$  (fortississimo), and  $>p$  (pianissimo).

46  $\text{♩} = 120$

Fl.

Ob.

B. Cl.

Ten. Sax.

Tpt.

Tbn.

Perc.

Pno.

Vln. I

Vln. II

Vla.

Vc.

El.

*ff*

*fff*

*ff*

*ff*

*f*

*trill*

Fl. *tongue ram*  
49 *jet whistle*

Ob. *slap tongue*

B. Cl. *plunger: + o +*

Ten. Sax. *pp < fff > pp*

Tpt. *pp < fff > pp*

Tbn. *pp < fff > pp*

Perc. *bass drum, hard mallets*  
*China cymbal*

Pno. *to "normal" playing*  
*chromatic clusters*

Vln. I *scratch tone*

Vln. II *scratch tone*

Vla. *scratch tone*

Vc. *behind the bridge*

El. *sculpted white noise sounds*

cue sample: [1]

jet whistle

Fl. fff pp ————— 6 pp ————— fff > pp

Ob. pp ————— fff ————— pp pp ————— fff ————— pp

B. Cl. 3 tr~~~~ pp ————— fff

Ten. Sax. tr~~~~ pp ————— fff <———— pp pp ————— fff > pp

Tpt. fff pp ————— 5 pp ————— fff pp ————— 6 pp ————— fff > pp

Tbn. pp ————— fff ————— pp pp ————— fff ————— pp

Perc. sizzle cymbal ff pp ————— ff n ————— fff

Pno. fff pp ————— 3 pp ————— fff pp ————— 3 pp ————— fff > pp

Vln. I pp ————— fff ————— pp pp ————— fff ————— pp

Vln. II fff ————— pp pp ————— fff ————— pp pp ————— fff ————— pp

Vla. 5 pp ————— fff ————— pp pp ————— fff ————— pp

Vc. fff pp ————— fff ————— pp pp ————— fff ————— pp

El. ————— [2] ————— [3] ————— <> ————— <>

Fl. *overblow w/  
lots of air sound*

Ob. *ff*

B. Cl. *p* *ff* *p*

Ten. Sax. *f* *ff*

Tpt. *pp* *ff* *pp*

Tbn. *pp* *ff* *pp*

Perc. *bass drum* *ffff* *f* *bongos w/ mallets*

Pno. *f*

Vln. I *mp* *f* *pp* *fff* *pp*

Vln. II *mp* *f* *pp* *fff* *pp*

Vla. *mp* *f* *M.S.P.* *pp* *fff* *pp*

Vc. *mp* *f* *M.S.P.* *pp* *fff* *pp*

El. *convolved Beyoncé sound* *sculpted white noise* *[4]* *[5]*

Fl. *p f p f* *pp* *fff* *pp* *ff>pp* *p ff>pp*

Ob. *p f p f* *pp* *fff* *p< f>p* *f>p*

B. Cl. *p f p f* *pp* *ff* *p<ff>p* *p<ff>p*

Ten. Sax. *p f p f* *pp* *ff* *p<f>p* *p<f>p*

Tpt. *p f p f* *ff* *pp* *ff>pp* *p ff>pp*

Tbn. *p<f p<f* *fff* *p<ff>p* *p<ff>p*

Perc. snare *pp* splash, bongos *pp* bass drum *f* *pp* *<f pp*

Pno. *8vb* *f* *6* *5* *5* *5* *5* *5* *8vb*

Vln. I *pp* *fff* col legno *f* *mp*

Vln. II *pp* *fff* noisy, behind bridge *p ff pp*

Vla. normal bow *sfp* noisy, behind bridge *p<ff>p*

Vc. normal bow *sfp* noisy, behind bridge *p ff pp*

El. *6* *3*

68 (tongue rams)

Fl.  $\text{ff}$

Ob. inward kisses  $\text{ff}$

B. Cl.  $\text{ff}$

Ten. Sax.  $\text{ff}$

Tpt. tongue rams  $\text{ff}$

Tbn. tongue rams  $\text{ff}$

Perc. bass drum w/ superball mallet  $f$

Pno. sizzle  $\text{pp}$

China  $f$

Vln. I pizz.  $f$

Vln. II pizz.  $f$

Vla. pizz.  $f$

Vc. pizz.  $f$

El. [7] Beyoncé

[8] sculpted white noise

73

Fl. *f* *p* — *mf* > *p*

Ob. *p* — *f* — *mp*

B. Cl. *fff* *p* — *f* — *mp*

Ten. Sax. *ppp* — *mf* — *f*

Tpt. *plunger:* *f* *mp* — *mf* — *mp* *ppp* — *f* — *pp*

Tbn. *mp* — *mf* — *mp* *ppp* — *f* — *pp*

Perc. *splash* *fff* *f* *bass drum w/ super ball mallet* *hard mallets*

Pno. *hit any low strings w/ hand* *fff* *pp* — *mp*

Vln. I *pizz.* *f* *ff* *sul pont. hard pizz.*

Vln. II *pizz.* *f* *ff* *sul pont. hard pizz.*

Vla. *pizz.* *f* *ff* *arco M.S.P.* *pp* — *mf*

Vc. *pizz.* *f* *ff* *arco M.S.P.* *ppp* — *mf*

El. *9* *10* *11*

inhale and exhale  
noisily over mouthpiece

20

noisily over mouthpiece

Fl. 80 in out etc... *f* *ff*

Away from instrument, inhale and exhale with noisy, shallow breaths. Create pitch contour with soft palate and mouth cavity.

Ob. in out etc... *f* *ff*

Away from instrument, inhale and exhale with noisy, shallow breaths. Create pitch contour with soft palate and mouth cavity.

B. Cl. in out etc... *pp* *f* *ff*

Away from instrument, inhale and exhale with noisy, shallow breaths. Create pitch contour with soft palate and mouth cavity.

Ten. Sax. in out etc... *f* *ff*

inhale and exhale noisily into instrument

Tpt. in out etc... *f* *ff*

harmon mute

Tbn. in out etc... *f* *ff*

vibes

Perc. *pp* *mp* *pp* *f*

Pno. *pp*

Vln. I (arco) *mp* *f* *p*

Vln. II (arco) *f* *p*

Vla. *pp* normal bow *mf* *f*

Vc. *pp* normal bow *mf* *f*

El. [12]

Fl. 85 - *pp* *f*

Ob. - *pp* *f*

B. Cl. *p* *p*

Ten. Sax. - *p* *f*

Tpt. - *pp* *f*

Tbn. *p* *pp*

Perc. - *#8*

Pno. *mp* *L.H.* *ff*

Vln. I - *f*

Vln. II - *f*

Vla. *p* *pp*

Vc. - *pp*

El. - [13]

Fl. (tongue ram) *p < f*

Ob. *p < f*

B. Cl. *f* *p < f* *p < f*

Ten. Sax. *p < f* *p < f*

Tpt. *pp* *p < f* *p < f*

Tbn. *f* *p < f* *p < f*

Perc. *bongos* *p < f* *vibes* *mf*

Pno.

Vln. I *mp* *pp*

Vln. II *mp* *pp*

Vla. *ff* *mp* *extreme overpressure* *ff*

Vc. *ff* *mp* *extreme overpressure* *ff*

El. [14] Beyoncé sculpted white noise

96

poco accel.

Fl. *p* *f*

Ob. *f*

B. Cl. *pp* *f* *p*

Ten. Sax. *pp* *f*

Tpt. *f*

Tbn. *pp* *f* *p*

Perc.

Pno. *f*

Vln. I *p* *f*

Vln. II *p* *f*

Vla. *p* *f* *p*

Vc. *pp* *f* *p*

El.

*a tempo*

Fl. *p* *p* *f*

Ob. *p* *p* *f*

B. Cl. *pp* *f*

Ten. Sax. *p* *pp* *f*

Tpt. *p* *p*

Tbn. *pp* *f*

Perc.

Pno. *=p* *f*

Vln. I *p* *p* *f*

Vln. II *p* *p* *f*

Vla. *p* *p* *f*

Vc. *pp* *f*

El. [15] *sfz* [16]

**poco accel.** 109 *a tempo*

Fl. Ob. B. Cl. Ten. Sax. Tpt. Tbn. Perc. Pno. Vln. I Vln. II Vla. Vc. El.

25

*senza sord.*

**poco accel.** *a tempo*

Vln. I Vln. II Vla. Vc. El.

17

119

Fl. *mp*

Ob.

B. Cl. *p* *f* *p*

Ten. Sax.

Tpt.

Tbn. *sing* *play* *p* *f* *p*

Perc. *bowed*  
*vibes* *suspended*  
*cymbal* *vibes* *etc.* *ff*

Pno. *PPP* *tr.* *8vb* *2ed.*

Vln. I *ff* *extreme over pressure*

Vln. II *ff* *extreme over pressure*

Vla. *ff* *extreme over pressure*

Vc. *ff* *extreme over pressure*

El. 18

jet whistle

Fl.

Ob.

B. Cl.

Ten. Sax.

Tpt.

Tbn.

Perc.

Pno.

Vln. I

Vln. II

Vla.

Vc.

El.

131

27

pp → fff → pp

pp < fff > 3 pp

pp → fff → pp

pp < fff > pp

pp → fff → pp

3 bass drum >

sub. pp

ppp

fff

chromatic clusters

6

p

ff

pp → fff → mp

scratch tone

pp → fff → pp

scratches

pp → fff → pp

scratches

pp → fff → pp

behind the bridge

M.S.P.

p → mp

f

M.S.P.

p → mp

f

M.S.P.

p → mp

f

M.S.P.

p

f

19

sfz

3

141

Fl. *p* *ppp*

Ob. *ppp*

B. Cl.

Ten. Sax. *ppp*

Tpt. *ppp*

Tbn. *p* gentle tongue rams

Perc.

Pno.

Vln. I → normal bow

Vln. II → normal bow

Vla. → normal bow

Vc. → normal bow

El. [20]

154

Fl. *ff* *mp*

Ob. *ff* *p* *ff* *p*

B. Cl. *ff*

Ten. Sax. *ff* *p* *ff* *p*

Tpt. *ff* *p* sing play *#* *f* *p*

Tbn. *ff* sing *3* play *p* *3* *f* *p*

Perc. splash tam-tam toms *ff* *pp* *ff*

Pno. *ff*

Vln. I *ff* *p* *ff* *pp*

Vln. II *ff* *p* *ff* *pp*

Vla. *ff* *p* *ff* *pp*

Vc. *ff* *p* *ff* *pp*

[21] El. [22]

165

Fl.

Ob.

B. Cl.

Ten. Sax.

Tpt.

Tbn.

Perc.

Pno.

Vln. I

Vln. II

Vla.

Vc.

El.

*p*

*pp*

*pp*

*sing play* *#* *pp*

*sing play* *#* *pp*

*overpressure:*

*p*

*overpressure:*

*p*

*overpressure:*

*p*

*overpressure:*

*p*

183

jet whistles

Fl.

Ob.

B. Cl.

Ten. Sax.

Tpt.

Tbn.

Perc.

Pno.

Vln. I

Vln. II

Vla.

Vc.

El.

*ff*

*p* *ff*

*p* *ff*

*p* *ff*

*p* *ff*

*p* *ff*

*tom*

*fff*

*p* *f* *p* *f* *p* *f* *p* *f*

*pp* *fff*

M.S.P. → M.S.T. normal bow

*f* *ppp* *ff*

[23]

191

Fl.

Ob.

B. Cl.

Ten. Sax.

Tpt.

Tbn.

Perc.

Pno.

Vln. I

Vln. II

Vla.

Vc.

El.

ff *p* *fff*

*ff* *fff*

*fff*

*ff* *sfp* *ff*

bass sizz. snare , splash ,

*ff*

*ff*

normal pressure

extreme overpressure

pizz. arco

*ff*

pizz. arco

*ff*

arco

*ff*

*sfz*

[24]