

# Phonessence

for Bass Clarinet and Live Electronics

Nina Young

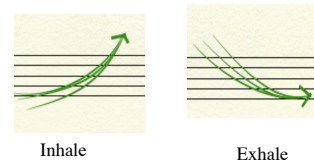
# Phonessence for Bass Clarinet and Live Electronics

Premiered by Stephen Davidson

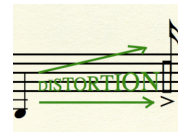
March 15, 2009 - Pollack Hall

Approximate duration 14-15 minutes

## Explanation of Notation:



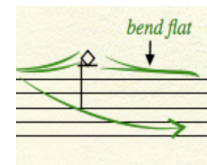
These gestures require the performer to exaggerate their breathing in performance. Look for instructions regarding vocal syllables. Exhales will be produced both naturally and into the clarinet. The duration of each gesture will be indicated above with circa duration (ca)



In all "distortion" gestures the player screams and growls into the clarinet simulating the effect of distortion. Allow multiphonics to emerge.

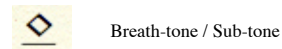


These gestures represent fluctuations in pitch. When the gesture remains horizontal, fluctuations are centered around the notated tone. When pointing downwards, the fluctuations bend the frequency down.



These gestures, found at the beginning of the piece, are "exhaled" into the clarinet. Each progressive exhale allows the center pitch to be better heard - thus the sound "emerges" from the breath. The fanned lines around the note ask the player to approach the note just from breath, then reaching a breath tone, and slowly retreating back into air. The second half of the gesture should fall flat.

### Extended Articulations



Breath-tone / Sub-tone



Slap-tongue



Key-Clicks (when using key-clicks, also play some pitch of the note)



Gestures such as they require a very fast, flourish of sounds with exaggerating noise-related artifacts. Pitches and fingerings are up to the performer.



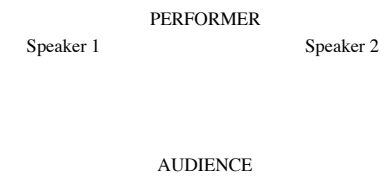
Smaller notes in paranethese above a pitch are multiphonics.

## Minimum Tech Requirements:

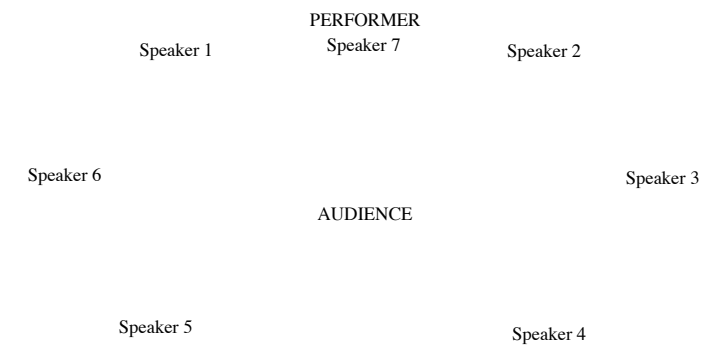
(see electronic documentation for detailed requirements)

- Computer running MacOS X 10.5
- MaxMSP 5.0.6
- Max Patch
- Stereo Speaker Arrangement (7-channel setup also possible)
- Mixing Console
- 1 microphone (preferably 1 bass clarinet pick-up microphone and 1 headset microphone to amplify breath sounds)
- MIDI pedal and MIDI interface
- Stage monitor if desired

## Stereo Speaker Arrangement



## 7 Channel Speaker Arrangement



Bass Clarinet in B-flat  
(with C-extension)

[Transposed score, electronics at concert pitch]

# Phonessence

for Stephen Davidson

Nina Young

♩ = 60

Bass Clarinet

Electronics

1 Resonators

2 Soundfile01 - spatialized breath sounds

3 Resonators

*n < pppp > n* *n < ppp > n* *n < pp > n*

B. Cl.

Electr.

(Soundfile01 continued)

4 Ring Modulation

5 Ring Modulation

*n < ppp > subp* *pp < mp > n* *pp s ppp pp spp* *p < mp > n* *n < p < mp < mf > n* *n < p spp < mp > p > pp*

continue with performer preferred vowelsound on all subsequent breathing gestures unless otherwise specified

B. Cl.

Electr.

6

7

Soundfile02 - resonance of bass clarinet pitches (see notation)  
Delay  
(Soundfile01 continued)

(end of Soundfile01)

Mutiple, downward-cascading pitch-shifting

(end of Soundfile02)

B. Cl. [ ca. ♩ ] [ ca. ♩. ] [ ca. ♩ ] "EEE" "TFF" "AH" [ ca. ♩ ]  $\text{♩} = 68$

into clarinet *f* *mf* > *pp* < *mf* *n* *fp* *mf* > *p* < *f* *subp* *fp* *mp* *fp* < > *mp* < *mf* > *mp* *f*

8 9 10 11 12 13 14

Electr. Soundfile03 - spectral drone *g<sup>b</sup>* Resonators (continued through Event15) Above gesture delayed by 1 second and transposed up a Major 3rd. Above gesture delayed by 2 seconds and transposed up a Major 6th. Delayed-pitch-shift channel turned off Above gesture delayed by 1 second and transposed up a Perfect 4th. Above gesture delayed by 2 seconds and transposed up a Major 6th. Above gesture delayed by 2.5 seconds and transposed up a Minor 7th. Delayed pitch-shift channel turned off

B. Cl. *microtonal glissando (sharper) ----- (+1/4) ----- (sharper)---*  $\text{♩} = 80$  [ ca. ♩. ] *mp* *f* *p* *f* *mp* *f* *mp* *pp* < > *n* *fp* *mp* *ff* > *mp* *mf* *mp* *mf* *mp* *f*

15 16 17 18

Electr. (Soundfile03 continued) Resonators and Resonators delayed by 6.8 seconds. Gesture transposed up a Perfect 5th as notated above. Gesture delayed by 5 seconds and transposed down a Major 3rd. Perfect 5th transposition turned off. (all other previous parameters remain active) Perfect 5th transposition turned off. Multiple delays applied to blur the sound. (all other previous parameters remain active) Emphasize breath and key clicks

B. Cl. *ff* > *mp* > *pp* *f* *mp* *f* *mp* *f* *mp* *mf* *mp* *mf* *p*

19 20 21 22 23

Electr. Multiple delays off (all other previous parameters remain active) Gesture transposed down an octave and up a tritone as notated above with small delay. Soundfile04 - high bass clarinet gesture made of turns Quiet delays and pitch-shifting to add "chaos" Some delays turned off Quiet transposition down an Octave. Quiet transposition up a Major 3rd (end of Soundfile04) Soundfile05 - spatialized D# pings. Ring Modulation turned on.

B. Cl. *mp* *p* *mf subp* *mp* *mf > p* *f* *pp* *mp* *mf* *subp* *f* *pp* *n* *mp* *n*

Electr. (Soundfile03 continued) (Soundfile05 continued) (Ring modulation continued) (Transposed-delayed gestures continued)

24 25 26 27

Ring modulation continued, but with resolution at the concert C#. Gesture delayed by 1.5 seconds and transposed down an octave. (end of Soundfile03)

All previous parameters off. Resonators and Delayed Resonators (resonators fade out) Resonators nearly inaudible

Soundfile06 airy, growling gestures, pitches notated above. Resonators off 2 large Delays 1.3 and 2.3 sec

B. Cl. *mp* *mf > p* *mf* *p* *mp* *subp* *fp < f* *mf* *mp* *n*

Electr. (Soundfile06 continued) Delays and Ring Modulation begin to fade out

28 29 30 31 32

(end of Soundfile06) Delays and Ring Modulation off. Gesture transposed up a Perfect 4th.

Gesture transposed up a Perfect 5th. Resonators, all other processing off

Soundfile07 airy, growling gesture

B. Cl. *pp* *mp* *n* *p* *p* *mf* *n* *mp* *f* *pp* *mp* *n*

Electr. (Soundfile 07 fading out) Resonators Soundfile08 - reinforce multiphonic Delayed Pitchshift at octave and fifth

33 34 35 36 37 38 39 40

Microtonal clusters resolving semitone sharp at Event35. (Same processing as Event9) (end of Soundfile08)

Soundfile09 - notated above All previous processing off

Pitch-shift up a Perfect 5th as notated. (end of Soundfile09) Pitch-shift slowly faded out

Soundfile10 - long sound file with drones, breath sounds, and distortion. Lasts until just before Event 42. Resonators All other processing off.

B. Cl. *fp* *n* *mp* *n* *f* (thin sound, but with great effort) *fp* *ord.* *mf* *f > mp < mf* *p* *mf* *mf* *3* *mf* *3*

[ ca. ♩ ] [ ca. ♩ ] *thin moan*

Electr. (Soundfile10 continued) (Resonators continued) Resonators off. Soundfile11 - thin, distorted sounds (end of Soundfile10) (end of Soundfile11)

41

B. Cl. *mf* *3* *p* *mp* *mp* *f* *n* *mp* *(bend flat)* *f* *n* *f* *p* *fff* *DISTORTION*

Electr. *growl* *distorted scream* *distorted scream* *p* *mp* *p* *f*

(repeat as necessary until soundfile begins "distorted scream")

Pitch Shift up a Major 3rd. Pitch Shift up a Perfect 5th and an Octave (fading in) (Pitch Shifting fades out) Soundfile12 - performed part must line up with soundfile (end of Soundfile12)

42 43 44

♩ = 60

B. Cl. *Aggressive, with energy* *♩ = 60* *accel poco a poco* *♩ = 70* *accel poco a poco* *♩ = 80* *sim.*

Electr. 45

Begins with no processing. Soft delayed and transposed version of the gesture emerge. (Soft delayed and transposed version of the gesture emerge spatialized.)

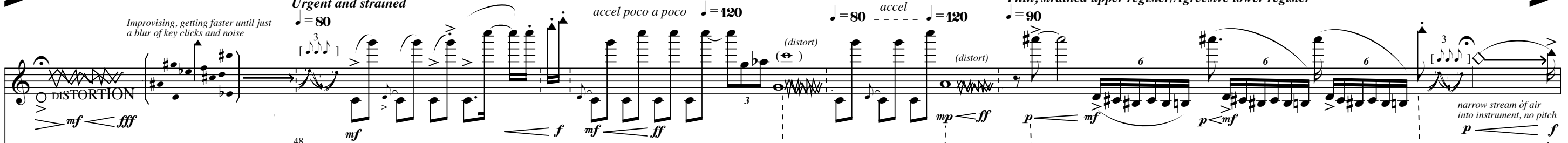
*accel poco a poco* - - - - - ♩ = 90      *accel poco a poco* ♩ = 100      *accel poco a poco* - - - - - ♩ = 130

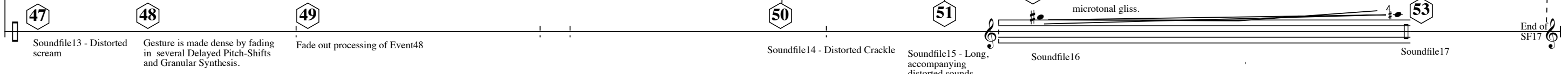
B. Cl. 

Electr. 


(processed, spatialized gesture continues to grow) Processing off.

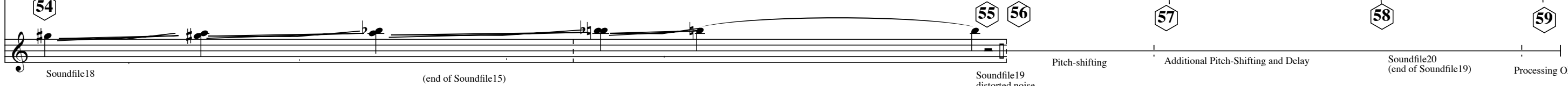
*Improvising, getting faster until just a blur of key clicks and noise*      **Urgent and strained** ♩ = 80      *accel poco a poco* ♩ = 120      ♩ = 80 *accel* ♩ = 120      **Thin, strained upper register/Aggressive lower register** ♩ = 90

B. Cl. 

Electr. 

*accel* - - - - - ♩ = 120      *fast, improvised blur of noise and artifacts*

B. Cl. 

Electr. 

*Unsure and questioning*

♩ = 70

B. Cl. *f* *mp* *mf* *ff* *fff* *fast, improvised blur of noise and artifacts* *distorted*

Electr. (dry sound, no processing)

X5

60 61

Fade in Pitch-Shifts  
Soundfile21 fades in slowly - background wash

Ring Modulation (and previous processing)

*In a questioning, conversational manner...but the words are not quite coming out*

♩ = 180

B. Cl. *p* *mf* *p* *pp* *mf* *mp* *f* *mp* *fpp* *mf*

Electr.

62

(Soundfile21 continued)  
All processing off  
Reverb should slowly be applied, with larger reverb tail being added through the end of the piece.

B. Cl. *p* *mf* *fp* *f* *p* *fp* *mp*

(Soundfile21 continued)

*Begin to exaggerate all air and breathing, as though panting.  
Slowly begin to play more nervously and angrily.*

B. Cl. *mf* *fpp* *mp* *ff* *p* *p* *f* *ff* *mp* *f* *p* *f* *pp* *ff* *fp* *ff* *p* *f* *mp* *fp* *mf* *p*

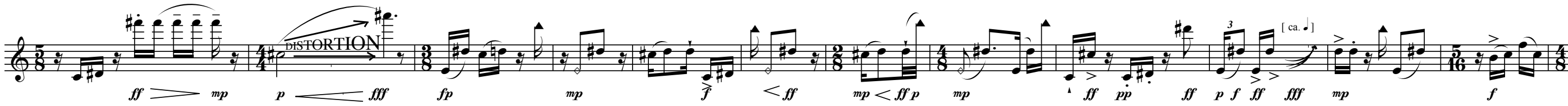
(Soundfile21 continued)

B. Cl. *p* *mf* *pp* *mp* *fp* *ff* *fpp* *fff* *f* *p* *ff* *pp* *f*

(Soundfile21 continued)



*Begin a slow degradation of exactitude, stumbling over phrases.  
Introduce noise artifacts and heavy breathing until the double bar.*

B. Cl. 

*ff mp p fff fp mp f < ff mp < ff p mp ff pp ff p f ff fff mp f*

(Soundfile21 continued)

B. Cl. 

*ff p f f pp ff fp < ff f mp f p fp < f p mf p < ff pp mp*

(Soundfile21 continued)

B. Cl. 

*mf > fp < f fff p < ff pf ff p < ff pp fp f ff < mp > p p < fff*

Electr.

(Soundfile21 continued)

63

Fade out Soundfile21  
Fade in Soundfile22

*Unable to Speak - Muffled tone, with reed too far into mouth*

[ ca. 10 seconds ]

*♩ = 60*

B. Cl. 

*p*

*Improvise 5 simple gestures using these three pitches  
with 2-3 seconds of rest between each gesture*

Electr.

(Soundfile22 continued)

Soundfile21 finishes