

# AARON BROOKS ENERGY SHAPES



FOR ELECTRIC GUITAR AND ELECTRONIC SOUNDS

Program note:

**ENERGY SHAPES** is a slightly messy conglomeration of influences derived from musical styles and musical ideas that are dear to me. Heavy metal energy, modernist rigor and abstraction, and electronic noise all play a part in its multi-variant musical argument, which attempts an affective experience that is both directly visceral and intellectually subjective. Its harmonic and rhythmic structures are similarly messy. Each of its two main movements features a microtonal retuning of the open strings that brings overtone series derived frameworks into unpredictable interactions with the guitar's fretted, equal tempered construction. Rhythms are derived from the superimposition of various tempi, meters, and gestural types, creating a sort of crowded dance floor of disparate, simultaneously moving bodies that pleasantly smash against one another in not-quite-unison.

# TUNING AND ACCIDENTALS

The piece uses two microtonal retunings, given below as equal tempered pitches with cents offsets. These tunings combine a basis in just intonation with the guitar's fretted, 12 tone equal tempered construction to produce a variety of harmonic and melodic sounds. The guitarist may use the provided tuning recordings/reaper sampler patch to tune to by ear, or may use a microtonally capable tuner, such as those made by Peterson Tuners. Three types of accidentals (conventional/no accidental, quarter tone accidentals, and arrow down accidentals) are used to approximately represent the resultant sounding pitches. Tablature is provided throughout. The guitarist may wish to use two guitars to speed up the transition between movements.

Movement 1's tuning is based on the 7th and 11th harmonic partials above an equal tempered D natural fundamental. Alternate fingerings may occasionally be possible.

A musical staff in treble clef with a circled 8 below it. The staff contains six notes with the following labels below them: C-31c (with a quarter tone sharp accidental), G+51c (with a quarter tone sharp accidental), D (natural), G+51c (with a quarter tone sharp accidental), C-31c (with a quarter tone flat accidental), and D (natural).

Movement 2's tuning is based on a sequence of stacked 7th harmonic partials beginning on an equal tempered E natural fundamental. As each string is tuned to a different cents offset, the given fingerings in the tablature must be followed exactly.

A musical staff in treble clef with a circled 8 below it. The staff contains six notes with the following labels below them: E (natural), A+7c (with a quarter tone sharp accidental), D-31c (with a quarter tone flat accidental), G-24c (with a quarter tone flat accidental), C-62c (with a quarter tone flat accidental), and F-55c (with a quarter tone flat accidental).

‡ † ‡ † Ca. 1/4 sharp, 3/4 sharp, 1/4 flat, 3/4 flat.

‡ † ‡ † The given pitch is lowered slightly.

Accidentals always carry through the bar and never transer the octave.

Natural Harmonics are notated at the sounding pitch of their corresponding normally fretted note.

# ELECTRONICS AND RHYTHMIC NOTATION

The electronic part consists of two types of material. The first is a collection of 10 "sound masses," which should be assigned, one each, to the drawings in the score, with the order left to the performer's discretion, and triggered in real time, allowing for rhythmic flexibility in movements 1-1 and 2-2.

The second type of material consists of three spans of fixed media electronics which accompany movements 1-2 through 1-4, 2-1, and 2-3 through 2-4. These spans should be triggered where indicated in the score. Optional click tracks have been provided to aid in rhythmic coordination with this material.

The 10 sound masses, 3 spans of fixed audio, and 12 tuning pitches are triggered from a Reaper sampler patch, and are mapped to a 61-note MIDI keyboard as follows (click tracks are routed to outputs 3-4 and should not be audible to the audience). Audio files may be provided should the performer wish to use a different sampler.

An entirely fixed media version of the electronic part, with or without click track, may be provided should the use of a sampler prove logistically prohibitive. In this case, the performer should take care not to finish significantly before or after the electronics in movements 1-1 and 2-2.

The image displays two staves of musical notation. The top staff features a series of notes on a treble clef staff. A dashed line labeled  $8^{VA}$  spans the first seven notes. Below the staff, a bracket labeled "10 Sound Masses (1-1 and 2-2)" covers the first seven notes. Further right, another bracket labeled "1-2 through 1-4 (begins with a long pause)" covers the eighth note. To the right of this are two more notes, with labels "2-1" and "2-3 through 2-4" positioned below them. The bottom staff is divided into two sections: "Movement 1 - Keyboard notes for tuning pitches" and "Movement 2 - Keyboard notes for tuning pitches". The first section contains notes with various accidentals (sharps, naturals, flats) and a dashed line labeled  $8^{VB}$  below it. The second section contains notes with accidentals and a dashed line labeled  $8^{VB}$  below it.

The rhythmic notation in movements 1-1 and 2-2 is designed to allow the performer significant interpretive freedom within a rhythmically amorphous language. 1-1 uses proportional notation within bracketed tempo changes to create a gestural character. 2-2 uses pulsed material within these brackets to create a constantly shifting tempo landscape. The performer should not attempt to maintain the same tempo between different brackets with the same tempo indication. For example, one "moderate" bracket should not necessarily be played at the same tempo as another "moderate" bracket. In certain cases, a gradual shift in tempo is indicated via a dashed line between two tempo indications within the same bracket. Dashed slurs indicate that notes should be played without pauses between, with the end of the slur indicating where the note should be released.

# 1-1. BURST, SQUIGGLE, BLOT

## AGGRESSIVE AND ABSTRACT

ELECTRIC GUITAR

0 0 | 0 3 6 2 5 | 6 12 | 2 7 7 7 5 18

DISTORTION ON WAH ON

WAH HEEL

FAST

WAH HEEL

TOE SLOW

MODERATE

TOE HEEL

(SCORDATURA)

C-31c  
G+51c  
D  
G+51c  
C-31c

*mf* *ff*

MOLTO ESPRESSIVO, VIBRATO AND PORTAMENTO AS DESIRED

*mp* *ff*

ELECTRONICS

Sound masses (assign one sound mass to each drawing, trigger with a MIDI controller)

2

7 7 7 6 6 | 6 6 | 12 13 12 13 12 13 | 0 8

WAH TOE

HEEL

TOE

HEEL

TOE

MODERATE

PIZZ.

ORD.

VERY FAST

*mp* *f* *mf* *ff* *mp* *f* *mp* *ff*

3

10 12 13 11 15 15 | 16 13 | 14 15 14 14 15 14 13 | 4 4 4 4 13 | 7 6 1

WAH HEEL

TOE

HEEL

TOE

HEEL

TOE

VERY FAST

VERY SLOW

PIZZ.

*mp* *f* *mf* *ff* *f* *p* *f* *mf* *p*

ELECTRONICS

4

7 6 12 18 14 19 2 1 6 7 0 3 14 16 5 6

0 0 0 0 0 0 5

HEEL - - - - -> TOE - - - - -> HEEL - - - - -> TOE - - - - -> HEEL - - - - -> TOE - - - - -> HEEL

ORD. PIZZ. SLOW (TOE) HEEL MODERATE ORD. PIZZ. ORD. PIZZ. ORD. PIZZ. FAST

*mf* *ff* *f* *mf* *ff* *mp* *ff* *mp*

5

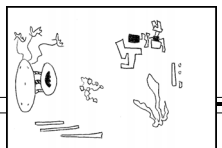
6 5 7 5 6 6 4 3 10 10 10 17 17 0 0 13 14 14 12 7 9 13 5 11 7

0 17 10 10 10 17 17 0 0 11 13 5 11 7

WAH HEEL - - - - -> TOE - - - - -> HEEL - - - - -> TOE - - - - -> HEEL - - - - -> TOE - - - - -> HEEL - - - - -> HEEL

ORD. PIZZ. ORD. PIZZ. ORD. PIZZ. ORD. PIZZ. MODERATE

*ff* *mf* *mp* *f* *mp* *ff* *mf*



6

0 14 10 13 0 6 8 7 7 7 8 5 7 5 5 3 0

0 6 8 7 7 7 8 5 7 5 5 6 0

CLEAN WAH OFF SLOW MODERATE FAST

PIZZ. ORD. PIZZ. ORD. PIZZ. ORD.

*mp* *f* *mp* *mf* *p* *f* *mf* *f* *mp*


7

TAB 6 4 3 5 0 0 8 8 4  
4 6 5 0 9 9 15 14 0  
5 5 0 9 9 15 14 4 0 0

VERY SLOW MODERATE FAST SLOW

PIZZ. ORD. PIZZ. PIZZ.

*mf mp f mf p f mp ff*




8

TAB 13 13 13 0 6 8 8 8 8 7 14 7 7 7 8  
0 11 6 12 12 11 0 7 6 0 7 14 7 7 7 6

DISTORTION ON WAH ON (WAH HEEL) TOE HEEL CLEAN WAH OFF FAST SLOW DISTORTION ON WAH ON (TOE HEEL) TOE MODERATE

PIZZ. ORD. PIZZ. PIZZ. ORD. PIZZ. ORD.

*mf mp ff mp f ff*



9

TAB 1 0 2 2 7 7 8 6 0 0 5 4 1 11 18 19 18 18 19 16 17 16 16 17 16 0 21 21 21 21 21 21  
1 0 2 2 7 7 8 6 0 0 5 4 1 11 18 19 18 18 19 16 17 16 16 17 16 0 21 21 21 21 21 21  
7 7 7 7 0 0 0 0 13 13 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

CLEAN WAH OFF DISTORTION ON WAH ON (WAH HEEL) TOE HEEL TOE VERY SLOW VERY FAST

PIZZ. ORD. PIZZ. ORD. PIZZ. ORD. PIZZ. ORD. PIZZ. ORD. PIZZ. ORD.

*f p mf mp f fff*

Trigger electronic part for 1-2 through 1-4 here

# 1-2. MECHANISM

**♩ = 80 RITUALISTIC**

TAB

(x 4)

CLEAN, LET HARMONICS RING AS MUCH AS POSSIBLE

ORD. PIZZ. ORD. PIZZ. ORD. PIZZ.

BENDING HARMONICS

DRUMS

7

TAB

ORD. PIZZ. ORD. PIZZ. ORD. PIZZ.

5:4 5:4 4:5 4:5 4:5 4:5

3:2 3:2 4:5 4:5 7:10

DRUMS

12

TAB

ORD. PIZZ. ORD. PIZZ. ORD. PIZZ. ORD. PIZZ. ORD. PIZZ.

5:6 5:6 5:6 5:6 5:4 5:4

3:2 3:2 3:2 7:8

DRUMS



Musical score for measures 16-21. The guitar TAB shows fret numbers: 12, 12, 7, 7, 6, 13, 7, 7, 12, 12, 12, 13, 11, 8, 7, 7, 7, 7, 7. The piano staff features dynamic markings *mf*, *p*, and *mf*, with articulation marks for PIZZ. and ORD. The bass staff includes fret numbers 10, 8, 4, 8, 5, 8, 6, 5 and rhythmic patterns such as 7:10, 3:2, 3:2, 3:2, 3:5, and 5:6.

Musical score for measures 22-27. The guitar TAB shows fret numbers: 12, 12, 5, 6, 4, 12, 12, 5, 6, 13, 12. The piano staff features dynamic markings *mf*, *mp*, *p*, and *mf*, with articulation marks for PIZZ. and ORD. The bass staff includes fret numbers 5, 8, 6, 8, 8, 4, 8 and rhythmic patterns such as 3:5, 5:6, 7:8, 3:2, 5:4, and 5:4.

Musical score for measures 28-33. The guitar TAB shows fret numbers: 5, 5, 5, 5, 5, 7, 4, 0, 0, 0, 5, 7, 7, 7, 12, 12, 6, 11, 13, 5, 6, 6, 6. The piano staff features dynamic markings *mp*, *p*, and *mf*, with articulation marks for PIZZ. and ORD. The bass staff includes fret numbers 8, 8, 5, 4, 6, 8 and rhythmic patterns such as 7:8, 5:4, 5:4, 5:4, 5:4, 5:6, 5:6, and 5:6.

33

5 5 5 5 5 5 | 5 7 7 | 4 4 4 4 4 | 0 0 0 0 0 7 7 7 7

(DOWNSTROKE STRUMS) ORD. PIZZ. ORD. (DOWNSTROKE STRUMS) PIZZ. ORD. (DOWNSTROKE STRUMS)

*p* *f* *mp* *p* *f* *mp* *f* *p* *mf* *p*

5:6 5:4 5:6 5:4 4 5:4 7:10 4:5

38

12 5 4 | 7 7 7 7 7 | 7 7 7 7 7 | 7 7 7 7 7 | 7 7 7 7 7 | 7 7 7 7 7 | 7 12 12 | 7 7 8 11 8 | 6 5 5 4 11

6 6 6 6 6 6 | 6 6 6 6 6 | 6 6 6 6 6 | 6 6 6 6 6 | 6 6 6 6 6 | 6 6 6 6 6 | 7 7 7 7 7 | 7 7 8 11 8 | 6 5 5 4 11

ORD. PIZZ. ORD. (DOWNSTROKE STRUMS) PIZZ. ORD. PIZZ. ORD. PIZZ.

*mf* *f* *p* *ff* *mp* *p* *mf* *mp*

7:8 5:4 5:6 5:6 7:8 5:4 5:6 5:6 5:6

Drums

44

12 12 12 | 5 5 7 | 12 12 12 | 12 12 12 | 6 8 6

7 8 7 | 12 12 12 | 6 8 6

ORD. PIZZ. ORD. BENDING HARMONICS

*p* *mp* *p* *mf*

5:4 5:4 5:6 5:6 5:6 5:6 5:6 5:6 5:6

49

Musical score for measures 49-53. The score consists of three staves: guitar tablature (T, A, B), a standard musical staff with a treble clef and a key signature of one sharp (F#), and a bass staff with a bass clef. The guitar tablature shows fret numbers for each string. The standard staff features a 4/8 time signature and includes dynamic markings: *p*, *mp*, *p*, *mp*, *mf*, *p*, and *mf*. The bass staff contains rhythmic patterns with various slurs and fingerings (e.g., 3:2, 4:5, 7:10, 7:8, 5:4).

54

Musical score for measures 54-58. The score consists of three staves: guitar tablature (T, A, B), a standard musical staff with a treble clef and a key signature of one sharp (F#), and a bass staff with a bass clef. The guitar tablature shows fret numbers. The standard staff features a 4/8 time signature and includes dynamic markings: *p*, *mf*, *p*, *mf*, and *mp*. The bass staff contains rhythmic patterns with slurs and fingerings (e.g., 3:2, 3:2, 3:5, 5:6, 7:8).

59

Musical score for measures 59-63. The score consists of three staves: guitar tablature (T, A, B), a standard musical staff with a treble clef and a key signature of one sharp (F#), and a bass staff with a bass clef. The guitar tablature shows fret numbers. The standard staff features a 4/8 time signature and includes dynamic markings: *p*, *mf*, *p*, and *mf*. The bass staff contains rhythmic patterns with slurs and fingerings (e.g., 3:2, 5:6, 5:4, 5:6). The final two measures (62 and 63) are marked with a repeat sign and the instruction *(x 3)*.

# 1-3. DROP, FLOAT

$\text{♩} = 70$  RELAXED AND BLUESY

0 0 0 0 5 0 1 0 0 | 0 0 0 0 0 | 0 5 7 5 8 7 5 | 0 5 0 0 7 0 6 5 6

CLEAN, LET NOTES RING/OVERLAP AS MUCH AS POSSIBLE

14 16

*p* *f* *p* *f* *mp*

PIZZ. ORD.

SYNTH BASS LINE

8:7♭

5

6 6 6 6 7 7 7 7 3 3

6 6 6 6 7 7 7 7 5 6 0 3 3

6 6 6 6 7 7 7 7 5 6 0 3 3

PIZZ. ORD.

*ff* *p* *mf* *mf* *f* *p* *ff*

8:7♭

10

0 1 0 0 5 0 3 6 0 5 5 7 5 6 6 3 6 5 6 0 5 4 5 6 5 7 7 7 7

0 5 6 6 6 6 5 6 6 5 6 0 5 4 5 6 5 7 7 7 7

0 5 6 6 6 6 5 6 6 5 6 0 5 4 5 6 5 7 7 7 7

8:7♭

*mp* *f* *p* *mf* *f* *mp* *mf* *mp* *f*

10 16

10 16

16

0 0 0 3 0 0 | 6 6 5 7 7 | 8 6 9 8 6 5 | 0 0 0 8 0 1 0 | 7 7

0 5 5 5 | 6 6 6 5 7 6 | 0 0 0 0 | 0 7 5 0 | 7 7 7 5 3

*p* *f* *mp* *f* *p* *mf* *f*

6-5 6-5 6-5 6-5 6-5

21

3 5 3 0 | 3 3 | 6 6 5 7 6 | 0 0 0 3 | 0 7 5 0 | 7 7 7 5 3

5 5 5 | 6 6 6 5 7 6 | 0 0 0 0 | 0 7 5 0 | 7 7 7 5 3

*mf* *ff* *f* *mp* *f*

6-5 6-5 6-5 6-5 6-5

26

0 0 3 0 2 0 | 7 7 | 6 5 7 5 6 0 | 0 3 5 6 3 | 5 6 6

0 3 5 6 3 | 5 6 6

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

(CHANGED)

6-5 6-5 6-5 6-5 6-5

31

Musical score for measures 31-34. The score includes guitar tablature at the top and piano notation below. The piano notation features a treble clef with a sub-octave 8 and a bass clef. The key signature has two flats, and the time signature is 16/16. Dynamics include *ff*, *f*, *p*, and *f*. Performance instructions include *PIZZ.* and *ORD.*. Fingerings and articulations are indicated with numbers and slurs.

35

Musical score for measures 35-38. The score includes guitar tablature at the top and piano notation below. The piano notation features a treble clef with a sub-octave 8 and a bass clef. The key signature has two flats, and the time signature is 16/16. Dynamics include *f*, *mp*, *f*, *mp*, *f*, and *p*. Performance instructions include *ORD.*. Fingerings and articulations are indicated with numbers and slurs.

39

Musical score for measures 39-42. The score includes guitar tablature at the top and piano notation below. The piano notation features a treble clef with a sub-octave 8 and a bass clef. The key signature has two flats, and the time signature is 16/16. Dynamics include *f*, *mp*, *f*, *mp*, and *ff*. Performance instructions include *ORD.*. Fingerings and articulations are indicated with numbers and slurs.

## 1-4. INTERLUDE #1

### GRANULAR SOUNDS

CA. 1 MINUTE



Switch guitars for movement 2 if using multiple guitars.  
Tune if using a single guitar with a silent tuning method.

Tune for movement 2  
if using a single guitar without a silent  
tuning method, then trigger 2-1.

# 2-1. CALMING BEAM

♩ = 84 MELLOW

Electric guitar fretboard notation for measures 1-5. The strings are labeled T, A, B. Fingering numbers (0-12) are shown above the strings. Measure 1: T=0, A=0, B=0. Measure 2: T=15, A=15, B=0. Measure 3: T=12, A=7, B=7. Measure 4: T=9, A=9, B=0. Measure 5: T=0, A=8, B=7.

ELECTRIC GUITAR: (SCORDATURA) F-55c, C-62c, G-24c, D-31c, A+7c, E. Includes musical notation with dynamics *mf* and *p*.  
ELECTRONICS: Synth pad accompaniment with sustained chords.

6 SYNTH PAD  
Electric guitar fretboard notation for measures 6-10. Measure 6: T=6, A=6, B=0. Measure 7: T=2, A=2, B=1. Measure 8: T=0, A=13, B=15. Measure 9: T=12, A=12, B=7. Measure 10: T=7, A=7, B=7.  
Electric guitar musical notation with dynamics *mf* and *p*.  
ELECTRONICS: Synth pad accompaniment.

10  
Electric guitar fretboard notation for measures 11-15. Measure 11: T=9, A=10, B=9. Measure 12: T=8, A=7, B=8. Measure 13: T=6, A=5, B=6. Measure 14: T=0, A=6, B=6. Measure 15: T=1, A=0, B=2.  
Electric guitar musical notation with dynamics *mp*, *p*, and *mf*.  
ELECTRONICS: Synth pad accompaniment.





23

10 8 7 8 6 6 6 0 2 1

*mf* *p*

26

0 15 0 15 12 7 9 0

*mf* *mp* *p*

29

0 8 8 7 6 6 0 2

*mf* *p*

# 2-2. TRIANGLE, ZIG ZAG, DASH

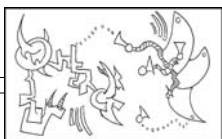
## AGGRESSIVE AND ABSTRACT

1

TAB: A 15 16 0 12 8; B 0 0 15 16 14 14 14 10 10 10 11 7 7 14 6 8 9 10 0 9 8 10 5 0 0

MUSICAL: DISTORTION ON, PIZZ., ORD., FAST, MODERATE, PIZZ., ORD., PIZZ., ORD., FAST

DYNAMICS: *ff* MOLTO ESPRESSIVO, VIBRATO AND PORTAMENTO AS DESIRED, *mf*

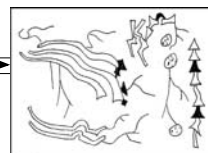


2

TAB: A 8 9 10 8 9 8 7 9 0 7 8 7 7 9 7 7 11 8 8 8 0 0 6 6 10 1 2 1 2 2 2 2 7; B 8 9 10 8 9 8 7 9 0 13 7 8 7 7 9 7 7 11 8 8 8 0 0 10 6 10 1 2 1 2 2 2 2 7

MUSICAL: VERY FAST, PIZZ., ORD., PIZZ., ORD., SLOW, FAST

DYNAMICS: *ff*, *mf*

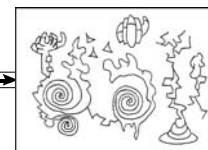


3

TAB: A 14 16 0 0 0 7 6 0 7 12 7 7 9 8 0 8 8 8 8 13; B 14 16 0 0 0 10 7 12 6 8 6 1 8 13 8 8 8 8 13

MUSICAL: FAST, PIZZ., ORD., MODERATE, PIZZ., ORD., VERY SLOW, VERY FAST

DYNAMICS: *ff*, *mp*, *mf*, *ff*



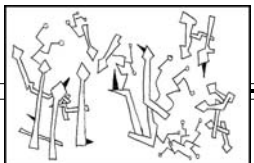
4

8 9 10 0 4 0 0 5 6 0 6 7 6 5 5

8 9 10 0 4 0 0 5 6 0 7 7 11

VERY SLOW VERY FAST FAST VERY FAST MODERATE VERY SLOW

*ff* PIZZ. ORD. *mf*



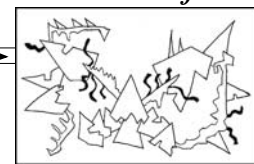
5

2 1 0 2 1 2 2 6 15 11 13 11 13 12 7

2 1 0 2 1 2 2 6 11 11 11 11 0 16 15 14 19 11 13 11 6 7 6 0 0 0 0 9 8 10 10 8 0 9 4 0 0

FAST VERY FAST MODERATE VERY FAST SLOW FAST MODERATE

*ff* PIZZ. ORD. *mf* *f* *mf*



6

8 7 0 6 7 2 15 15 16 15 15 15 15 15 8 7

8 7 8 7 10 6 7 0 6 7 0 1 2 1 2 3 0 16 16 15 20 20 20 20 20 20 15 7 12 6 7 6 8

VERY FAST FAST VERY FAST VERY SLOW FAST VERY FAST MODERATE

*ff* *mf* *ff*

Trigger electronic part for 2-3 through 2-4 here

# 2-3. INTERLUDE #2

♩ = 70 RESOLUTE

ELECTRONICS

5  
4 DRUMS AND SOUND MASS

5  
4 SYNTH BASS LINE AND SOUND MASS

6

5  
4 DRUMS AND SOUND MASS

5  
4 SYNTH BASS LINE AND SOUND MASS

10

5  
4 DRUMS AND SOUND MASS

5  
4 SYNTH BASS LINE AND SOUND MASS

# 2-4. OPEN

♩ = 60 PLAINITIVE, BUILDING

**ELECTRIC GUITAR**

**ELECTRONICS**

DRONE (TIMBREL CRESC./DIM.)

DRUMS

SYNTH BASS

MEASURE 5:

MEASURE 9:

MEASURE 12:

