

# 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 (8) time signature. It shows six notes on a five-line staff. From left to right: a natural C (open string), a G with a quarter sharp accidental (G+51c), a natural D (open string), a G with a quarter sharp accidental (G+51c), a C with a quarter flat accidental (C-31c), and a natural D (open string). Below the staff, there are tablature-like symbols: a natural C, a G with a quarter sharp accidental, a natural D, a G with a quarter sharp accidental, a C with a quarter flat accidental, and a natural D.

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 (8) time signature. It shows six notes on a five-line staff. From left to right: a natural E (open string), an A with a quarter sharp accidental (A+7c), a D with a quarter flat accidental (D-31c), a G with a quarter sharp accidental (G-24c), a C with a quarter flat accidental (C-62c), and an F with a quarter flat accidental (F-55c). Below the staff, there are tablature-like symbols: a natural E, an A with a quarter sharp accidental, a D with a quarter flat accidental, a G with a quarter sharp accidental, a C with a quarter flat accidental, and an F with a quarter 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<sup>VA</sup>' spans the first part of the staff. Below the staff, a bracket labeled '10 Sound Masses (1-1 and 2-2)' covers the first ten notes. Further right, another bracket labeled '1-2 through 1-4 (begins with a long pause)' covers the next four notes. 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 has notes on a treble clef staff, with a dashed line labeled '8<sup>VB</sup>' below it. The second section has notes on a bass clef staff, also with a dashed line labeled '8<sup>VB</sup>' 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 3 6 2 5 6 12 2 7 7 7 5 18

0 5 6 12 2 7 6 18

WAH ON  
WAH HEEL  
TOE  
HEEL  
MODERATE  
TOE  
HEEL

FAST  
SLOW

(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

6 5 6 0 8

WAH TOE  
HEEL  
TOE  
HEEL  
TOE

MODERATE  
VERY FAST

PIZZ. ORD. PIZZ. ORD.

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

3

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

16 13 10 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*

4

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

0 0 0 0 0 0 5

WAH TOE SLOW (TOE) HEEL HEEL TOE HEEL TOE HEEL

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

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

5

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

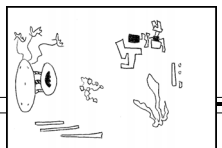
0 17 10 10 10 17 17 0 0 11 7

WAH HEEL HEEL TOE HEEL TOE HEEL TOE HEEL

VERY FAST MODERATE MODERATE

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

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



6

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

0 6 8 7 7 7 8 5 7 5 6

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 6 0 9 9 15 14 0  
A 5 5 0 9 9 15 14 0  
B 5 5 0 9 9 15 14 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 8  
0 11 6 12 12 0 7 6 7 7 7 6  
A 0 11 6 12 12 0 7 6 7 7 7 6  
B 0 11 6 12 12 0 7 6 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. PIZZ. PIZZ. PIZZ. ORD.

*mf mp ff mp f mp ff*



9

TAB 2 2 7 0 0 5 4 1 11 18 19 18 19 16 17 16 16 17 16 0 21 21 21 21 21  
1 0 7 7 8 6 0 0 5 4 1 13 18 19 18 19 13 6 0 0 0 0 0 0 0  
A 1 0 7 7 8 6 0 0 5 4 1 13 18 19 18 19 13 6 0 0 0 0 0 0 0  
B 1 0 7 7 8 6 0 0 5 4 1 13 18 19 18 19 13 6 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. PIZZ. ORD. PIZZ. PIZZ. ORD. PIZZ. PIZZ. ORD.

*f p mf mp f fff*

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

# 1-2. MECHANISM

$\text{♩} = 80$  RITUALISTIC

TAB

(x 4)

CLEAN, LET HARMONICS RING AS MUCH AS POSSIBLE

6/8

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

*p* 5:6 *mf* 5:6

(x 4)

BENDING HARMONICS 5:6

DRUMS

7

7 7 7 12 12 12 7 8 8 7 7 7 7 11 13 12 12 12 7 7 7 7 7 13 11

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

4/8 5/8 10/8 6/8

*p* *mf* *mp*

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

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

12

12 12 12 12 12 11 7 7 7 6 6 12 12 12 12 8 7 7 7 7 12 12 7 7 7 13 11 12 12 12 6

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

6/8 12/8 8/8 10/8

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

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

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



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 markings PIZZ. and ORD. Rhythmic patterns include 4:5, 5:4, and 5:4. The bass staff includes fret numbers 10, 8, 4, 8, 5, 8, 6, 5 and rhythmic patterns 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 markings PIZZ. and ORD. Rhythmic patterns include 3:5, 5:6, 7:8, 3:2, and 5:4. The bass staff includes fret numbers 5, 8, 6, 8, 4, 8, 8 and rhythmic patterns 3:5, 5:6, 7:8, 3:2, 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 markings PIZZ. and ORD. Rhythmic patterns include 7:8, 5:4, 5:4, 5:4, 5:4, 5:6, 5:6, and 5:6. The bass staff includes fret numbers 8, 8, 8, 8, 6, 8, 8 and rhythmic patterns 5:4, 5:4, 5:4, 5:4, 5:6, 5:6, and 5:6.



49

12 12 12 7 7 7 7 7 7 12 12 12 12 12 7 7 11 13 12 12 12

8 6 6 8 13 5 4 7 8 8 7 7 7 7 11 13 12 12 7

5:4 p mp p mp mf 5:6 p 5:4 mf

3:2 4:5 4:5 7:10 7:8 5:4 5:4

54

7 7 7 7 13 11 12 12 12 12 7 7 6 6 12 0 0 0 0

6 12 12 11 11 11 7 7 6 6 12 0 0 0 0

5:4 p 5:4 mf 5:6 mf 5:6 mf 7:8

3:2 3:5 5:6 7:8

59

6 7 3 (x 3) (x 3)

6 7 3 3 5

3:2 5:6 5:4 5:6

# 1-3. DROP, FLOAT

♩ = 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*

3

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 7

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

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

21

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

*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 6/8 time signature and a bass clef. Dynamics include *ff*, *f*, *p*, and *f*. Performance instructions include *PIZZ.* and *ORD.*. Fingerings and articulations are indicated with numbers and slurs. Measure numbers 10, 14, and 16 are marked at the end of each system.

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 6/8 time signature and a bass clef. Dynamics include *f*, *mp*, *f*, *mp*, *f*, and *p*. Performance instructions include *ORD.*. Fingerings and articulations are indicated with numbers and slurs. Measure numbers 10, 14, and 16 are marked at the end of each system.

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 6/8 time signature and a bass clef. Dynamics include *f*, *mp*, *f*, *mp*, and *ff*. Performance instructions include *ORD.*. Fingerings and articulations are indicated with numbers and slurs. Measure numbers 10, 14, and 16 are marked at the end of each system.

## 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**

CLEAN, LET NOTES RING/OVERLAP AS MUCH AS POSSIBLE WITHIN EACH MEASURE

(SCORDATURA)  
 F-55c  
 C-62c  
 G-24c  
 D-31c  
 A+7c  
 E

**ELECTRONICS**

**SYNTH PAD**

The score is divided into three systems, each containing guitar, electronics, and synth pad parts. The guitar part uses a scordatura of F-55c, C-62c, G-24c, D-31c, A+7c, and E. Dynamics range from *mf* to *p*. The electronics part provides harmonic support with sustained chords. The synth pad part adds texture with sustained notes and chords.



14

14 15 16 15 0 12 12 7 7 7 9 9 9 0

15 0 14 15 12 12 7 7 7 0 0 9 8 9 0

0 0 12 7 7 7 0 0 9 8 9 0

*f* *mp*

5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4

4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

5 4 4 4 5 4 4 4 5 4 4 4 5 4 4 4

4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

17

9 8 7 0 8 5 7 6 0 6 2 1 2 1 2 1 0 2

8 8 5 7 0 6 4 6 6 0 2 1 2 1 2 1 0 2

0 6 4 6 6 0 2 1 2 1 2 1 0 2

*mf* *f*

4 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4

4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

4 4 4 4 5 4 4 4 4 4 4 4 4 4 4 4 4 4

4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

20

0 17 15 0 12 12 12 7 7 7 10 9 0

0 15 12 12 12 7 7 7 7 7 9 0 0

0 15 12 12 12 7 7 7 7 7 9 0 0

*mp* *mf* *p*

5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4

4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

23

10 8 7 8 6 6 6 2 0 2 1

*mf* *p*

26

0 15 0 15 12 7 9 9 0

*mf* *mp* *p*

29

8 0 8 7 6 6 0 2 2

*mf* *p*

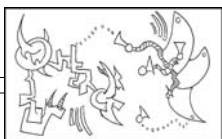
# 2-2. TRIANGLE, ZIG ZAG, DASH

## 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

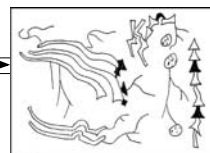
MUSICAL: DISTORTION ON, PIZZ., ORD., FAST, MODERATE, PIZZ., ORD., FAST, *ff* MOLTO ESPRESSIVO, VIBRATO AND PORTAMENTO AS DESIRED, *mf*



2

TAB: A 8 9 10 8 9 8 7 9 0 13 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

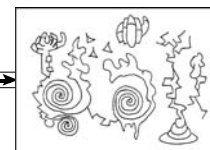
MUSICAL: VERY FAST, PIZZ., ORD., PIZZ., ORD., SLOW, FAST, *ff*, *mf*



3

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

MUSICAL: FAST, MODERATE, PIZZ., ORD., PIZZ., ORD., VERY SLOW, VERY FAST, *ff*, *mp*, *mf*, *ff*



4

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

VERY SLOW VERY FAST FAST VERY FAST MODERATE VERY SLOW

*ff* *mf*

PIZZ. ORD.

5

2 1 0 2 1 2 2 6 11 11 11 11 0 16 15 14 19 11 13 11 13 12 6 7 6 0 0 0 0 0 9 8 10 10 7 8 0 9 0 4 0

FAST VERY FAST MODERATE VERY FAST SLOW FAST MODERATE

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

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

6

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

VERY FAST FAST VERY FAST VERY SLOW FAST VERY FAST MODERATE

*ff* *mf* *ff*

PIZZ. ORD. PIZZ. ORD.

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

10

# 2-4. OPEN

♩ = 60 PLAINITIVE, BUILDING

The score is divided into three systems, each with a measure number (5, 9, and 13) at the beginning. Each system contains three staves: an electric guitar staff with tablature and a treble clef staff with a standard musical notation. The first system includes a 'DRONE (TIMBREL CRESC./DIM.)' track with a series of upward-pointing chevrons and a 'SYNTH BASS' track with a bass clef staff. The second system includes a 'DRUMS' track with a series of downward-pointing chevrons. The third system includes a 'DRONE (TIMBREL CRESC./DIM.)' track with a series of downward-pointing chevrons. The electric guitar parts feature various fret numbers (5, 12, 0) and dynamic markings such as *p*, *mf*, and *p*. The synth bass and drums tracks feature a consistent rhythmic pattern of eighth notes with a 7:9 ratio.

13

0 0 12 12 12 5 5 12

mf

7:9

mf

16

**CATHARTIC**

0 0 12 12 12 5 0 0 0 0 0 0

DISTORTION ON PICK SCRAPE

ff

7:9

20

0 0 0 0 0 0 0 0 0 0 0 0

mf

7:9