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.

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.

Accidentals always carry through the bar and never transfer 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 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

Distortion on
Wah on

Heel
Toe

Wah
Heel

Fast
Moderate
Slow

Wah
Heel

Effect pedal

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

**Electronics**

- **Electric guitar**: Scordatura
- **Distortion on**: Wah on
- **Wah Heel Toe**
- **Moderate**
- **Very Fast**
- **Very Slow**
- **mélange**
- **pp**
- **f f**
- **mf**
- **ff**
- **mp**
- **f**
- **pizz.**
- **ord.**

**Sound masses**: assign one sound mass to each drawing, trigger with a MIDI controller.
1-2. MECHANISM

\[ \text{\textbf{Ritualistic}} \]

\[ \text{Clean, let harmonics ring as much as possible} \]

\[ \text{PIZZ. ORD. PIZZ. ORD. PIZZ.} \]

\[ \text{(x 4)} \]

\[ \text{Ord.} \]

\[ \text{Bending Harmonics} \]

\[ \text{5:6} \]

\[ \text{4:5} \]

\[ \text{3:2} \]

\[ \text{3:5} \]

\[ \text{7:10} \]

\[ \text{Drums} \]
1-3. Drop, Float

- 70 Relaxed and Bluesy

Clean, let notes ring/overlap as much as possible.
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

Clean, let notes ring/overlap as much as possible within each measure.

Electric Guitar

Synth Pad
2-2. TRIANGLE, ZIG ZAG, DASH

Aggressive and abstract

ff molto espressivo, vibrato and portamento as desired

mf

Distortion on

Ord. Fast

Moderate Pizz.

Ord. Fast

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

Fast

Very Fast

Slow

Moderate

Very Slow

Very Fast

mf mp

ff
Trigger electronic part for 2-3 through 2-4 here.
2-3. Interlude #2

\[ \text{\textbf{Drums and Sound Mass}} \]

\[ \text{\textbf{Electronics}} \]

\[ \text{\textbf{Synth Bass Line and Sound Mass}} \]
2-4. Open

\( \text{\textbf{Electric Guitar}} \)

\( \text{\textbf{Electronics}} \)

\( \text{\textbf{Drums}} \)

\( \text{\textbf{Synth Bass}} \)

\( \text{\textbf{Deux (closed cresc./dim.)}} \)

\( \text{\textbf{Deux (open cresc./dim.)}} \)

\( \text{\textbf{mf}} \)

\( \text{\textbf{p}} \)

\( \text{\textbf{mf}} \)

\( \text{\textbf{p}} \)

\( \text{\textbf{mf}} \)

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