

Dave Soldier

String Quartet #2 opus 11

Bambaataa Variations

1. His Legs Wobble
2. X-Linked Planet
3. Nine Hundred Grandmothers
4. Mudhead from Planet XYY
5. Afrika Variations

For prepared quartet

originally for Ken Butler's "T-Square Quartet", 1992

revised for prepared string quartet, 2011

February 2, 2022 version

about 25 minutes

Dave Soldier
davesoldier.com
ds43@columbia.edu

Performance Notes for “Bambaataa Variations”

Background

This piece was in part inspired by music by Afrikaa Bambaataa and the Soul Sonic Force: Bambaataa among other things named his style of music “hip-hop” after Jeef Cowboy from Grandmaster Flash and the Furious Five, in part as it was similar to “bebop”. I have heard DJ and he would incorporate music from all styles. Some of the themes in this quartet are from Kraftwerk that he adapted for his own music, and one is from Muddy Waters.

Members of Bamabaataa’s group, the Zulu Nation, attended the premiere of the concerto version for quartet (the PubliQUARTET) and Composer’s Concordance string orchestra (conducted by Thomas Bo), and gave speeches afterwards.

The piece is also inspired by Beethoven’s Opus 74 quartet and has a bit of satire of the concert music of 1992 in New York.

And the piece was originally for a specially made quartet of amplified instruments built by the instrument maker and sculptor Ken Butler. This version was premiered at Merkin Hall in 1992. He called them the “T-Square Quartet”, and they were included built-in sound effects on the body including doorstops and metal bands that could be plucked.

This version for string quartet alone uses the classical instruments but prepared with gizmos to make the sounds that were built into Ken’s instruments. Each gizmo is cheap and found at a drug store, none damage the instruments or strings, and they fit together in a “necessaire” traveling bag.

In the right room, the piece can be played acoustically. BUT you can also play with amplification. When using pick-ups and amplifiers, use of a fuzz box for each instrument is indicated.

Complete list of gizmos required for players:

Bring **4-8 bobby pins** and **4-8 paper clips**: for all four musicians. I find bobby pins to be faster to place and remove.

1st violin first movement

2nd violin first movement

viola first movement

cello first movement

1 to 4 electric toothbrushes or vibrators:

required for 2nd violin, between the first and second movements

optional for the other three musicians, same spot

1 small hair clip: for 1st violin, second movement

1 metal tablespoon: for 2nd violin, first movement

2 small barber's combs;

2nd violin, first movement

viola, first and second movements

1 soft hairbrush or soft hair curler;

cello, first and second movements

1 guitar pick:

viola, second movement

Extended Techniques

Special techniques without preparation

A "scratch" is performed by moving the bow in the direction of the strings, *i.e.*, up and down the strings rather than perpendicular across. Emulate the sound of a dj scratching a record. You can change the range of the scratch with different pressure or playing on different strings.

A "bow whip" snaps the bow in the air to move the air and make a whipping sound.

"Stop strings" means dampen the strings with the left hand after the note is played to suddenly stop the sound.

Specific instructions for each musician:

All of these sounds are in the recording under the composer's direction by the PubliQUARTET which can be used as a guide. There are no tricks in the mixing, all sounds were made with normal instruments using these gizmos. In the 4th movement, once the players know the score, they can improvise and somewhat deviate and rephrase in the style.

Violin 1

1st movement: a paper clip or one or two bobby pins are placed around the strings behind the bridge. Pluck them with both index fingers to get a metallic buzz. Set this up before the piece begins.

1st movement: at the very end, if you have one available, use the back of an electric toothbrush (not the bristles) – or a vibrator – and move it up and down the length of the strings. This should produce a sound like a noisy like a police siren.

2nd movement: remove the paper clips / bobby pins and clip the strings with a hair clip just above the bridge to help achieve a metallic pizzicato sound: this pizzicato can use a straight thumb or a guitar pick if helpful. Remove it before the 3rd movement.

Violin 2

1st movement: the second violin doesn't make any conventional sounds. For most of the movement, it may be easier to hold the instrument on the knees like a viol or Indian or Mideastern violin. Before the piece begins, set up the instrument with two bobby pin or paper clips, one just above and one just below the bridge, holding the strings. When the clips are plucked, they should make a metallic rattling sound like a

gamelan. In *arco* sections of the 1st movement, such as measure 97 and 114, the clips are still there, so produce a rhythmic, aggressive sound on purpose.

1st movement: “back of spoon” refers to using the curved back of a tablespoon in the right hand and sliding over mostly G & D strings over the neck. The low notes are short slides, the high notes are stronger and glissando upward in pitch: they should sound a bit like a tuned electronic drum

1st movement: use a small barber’s comb as a bow: hold it a steep angle so that the bristles move easily across the string near the bridge, which sounds like a saw.

1st movement: At the very end, use the back of an electric toothbrush – or a vibrator – and move it up and down the strings like the spoon before. This should produce a sound like a noisy police siren. The other three players can join if they have these in a 30 second improvisation.

5th movement: there is a point to reinsert the paper clip at measure 492: if this is too short, there can be a pause before the 5th movement, although best to go straight into it without pause.

Viola

1st movement: a paper clip or one or two bobby pins are placed around the strings behind the bridge. Pluck them with both index fingers to get a metallic buzz. Set this up before the piece begins.

1st and 2nd movements: use a small barber’s comb as a bow: hold it a steep angle so that the bristles move easily across the string near the bridge, which sounds like a saw.

1st movement: at the very end, if you have one available, use the back of an electric toothbrush – or a vibrator – and move it up and down the length of the strings. This should produce a sound like a noisy police siren.

2nd movement: uses a guitar pick, use it over the neck to get a plucky sound.

Cello

1st movement: a paper clip or one or two bobby pins are placed around the strings behind the bridge. Pluck them with both index fingers to get a metallic buzz. Set this up before the piece begins.

1st and 2nd movements: use a small soft barber’s comb as a bow: hold it a steep angle so that the bristles move easily across the string near the bridge, which sounds like a saw.

1st and 2nd movements: use a soft hairbrush or hair curler to bow strings.

1st movement: at the very end, if you have one available, use the back of an electric toothbrush – or a vibrator – and move it up and down the length of the strings. This should produce a sound like a noisy police siren.

5th movement: indicates foot tapping.

If the instruments are amplified, use fuzz boxes for distortion where indicated.

String Quartet #2: Bambatta Variations

for prepared string quartet

1. His Legs Wobble

stop strings

ff

slide back of metal spoon over strings: upper notes are upward scoops

arco stop strings

ff stop strings

arco

ff

5

Vln. I

Vln. II

Vla.

Vc.

p *ff*

8

Vln. I

Vln. II

Vla.

Vc.

11 *bobby pins*

Vln. I

"we like to rock & rock & par-ty"

Vln. II

f *bobby pins*

Vla.

Vc. *pizz.* *bobby pins* *f*

15

Vln. I

Vln. II

Vla. *bobby pins* *f*

Vc. *f*

19 *bobby pins*

Vln. I

Vln. II *comb* *bobby pins*

Vla. *comb* *arco* *ff* *f*

Vc. *f*

23

Vln. I

f

Vln. II

comb with violin 1 and then viola chords

Vla.

Vc.

25

Vln. I

Vln. II

Vla.

Vc.

28

Vln. I

Vln. II

Vla.

Vc.

f

31 *8va*

Vln. I

Vln. II

Vla.

Vc.

34

back of spoon

arco

mf

Vln. I

Vln. II

Vla.

Vc.

36

Vln. I

Vln. II

Vla.

Vc.

38

Vln. I

Vln. II

Vla.

Vc.

41

Vln. I

Vln. II

Vla.

Vc.

44

Vln. I

Vln. II

Vla.

Vc.

bobby pins

6

Bambatta Variations

scratch like a DJ (move bow sideways)
vary the range and pitches

Vln. I

48 *f* "Looking for the perfect beat"

Vln. II

Vla.

Vc.

48 *f* "Looking for the perfect beat"

Vln. I

Vln. II

mp

Vla.

stop strings
ff

Vc.

ff

Vln. I

bobby pins

Vln. II

bobby pins

Vla.

mp

Vc.

mp

60

Vln. I

Vln. II

Vla.

Vc.

63

Vln. I

Vln. II

Vla.

Vc.

pizz.

hairbrush or soft curler

f *mp* *f*

66

Vln. I

Vln. II

Vla.

Vc.

pp *ff* *pp* < *ff*

pp *ff* *pp* < *ff*

70

Vln. I

Vln. II

Vla.

Vc.

pp < ff pp < ff pp < ff pp < ff

pp < ff pp < ff pp < ff pp

Detailed description: This system covers measures 70 to 72. The Vln. I part features a melodic line with eighth notes and rests. The Vln. II part plays a steady eighth-note accompaniment. The Vla. part has a complex texture with triplets and dynamic markings of pp and ff. The Vc. part also features triplets and dynamic markings of pp and ff.

73

Vln. I

Vln. II

Vla.

Vc.

pp < ff pp < ff pp < ff mf

ff pp < ff pp < ff pp < ff mf

Detailed description: This system covers measures 73 to 76. The Vln. I part continues with its melodic line. The Vln. II part maintains the eighth-note accompaniment. The Vla. part includes dynamic markings of pp, ff, and mf, along with triplets. The Vc. part features dynamic markings of ff, pp, and mf, with triplets and accents.

77

Vln. I

Vln. II

Vla.

Vc.

Detailed description: This system covers measures 77 to 80. The Vln. I part continues with its melodic line. The Vln. II part maintains the eighth-note accompaniment. The Vla. part features a melodic line with triplets and accents. The Vc. part features a melodic line with triplets and accents.

81

Vln. I

Vln. II

Vla.

Vc.

f

84

Vln. I

Vln. II

Vla.

Vc.

f bobby pins

87

Vln. I

Vln. II

Vla.

Vc.

ff

arco

mf

90

scratch like a DJ (move bow sideways)

Vln. I *ff*

Vln. II

Vla. *ff*

Vc.

94

Vln. I

Vln. II *mp* arco

Vla.

Vc.

97

Vln. I

Vln. II *f* bobby pins

Vla.

Vc.

100

Vln. I

Vln. II

Vla.

Vc.

bounce con legno & a little hair

103

Vln. I

Vln. II

Vla.

Vc.

arco

mf

ord.

ord.

mf

107

Vln. I

Vln. II

Vla.

Vc.

back of spoon

111

bobby pins
fuzz box

Vln. I *mp*

111

arco

with clip still on (whiney)

Vln. II *mf*

comb

111

Vla.

111

bobby pins
fuzz box

Vc. *mp*

115

Vln. I

115

Vln. II

115

comb

Vla.

115

Vc.

118

Vln. I

118

Vln. II

118

Vla.

118

Vc.

122

Vln. I

Vln. II

Vla.

Vc.

126

Vln. I

Vln. II

Vla.

Vc.

130

Vln. I

Vln. II

Vla.

Vc.

dolce

bobby pins

comb

bobby pins

fuzz off

stop strings

f

arco

comb

fuzz off

f

staccato until end

ff

bobby pins

ff

133

Vln. I

Vln. II

Vla.

Vc.

back of spoon

135

Vln. I

Vln. II

Vla.

Vc.

137

Vln. I

Vln. II

Vla.

Vc.

staccatto until end

ff

139

Vln. I

Vln. II

Vla.

Vc.

ff

142

Vln. I

Vln. II

Vla.

Vc.

sva

bobby pins
fuzz box

arco

f

145

Vln. I

Vln. II

Vla.

Vc.

148

Vln. I

Vln. II

Vla.

Vc.

151

Vln. I

Vln. II

Vla.

Vc.

arco

// bobby pins
fuzz box

mf *ff* *mp* *pp*

bobby pins

bobby pins
fuzz box

mf *ff* *mp* *pp*

bobby pins
fuzz box

mf *ff* *mp* *pp*

mf *ff* *mp*

155

Vln. I

Vln. II

Vla.

Vc.

use back of electric toothbrush
to make siren, 30 sec

use back of electric toothbrush
to make siren, 30 sec

use back of electric toothbrush
to make siren, 30 sec

use back of electric toothbrush
to make siren, 30 sec

remove paper clips

fuzz off
remove paper clips

fuzz off

pp

2. X-Linked Planet

A ♩=120 pizz. hair clip mute, near the bridge: metallic sound can use guitar pick or fingers /thumb

Vln. I *mf*

Vln. II 158

Vla. 158

Vc. 158

B

Vln. I

Vln. II 162

Vla. 162 pizz. use guitar pick, near top of string *mf*

Vc. 162

C

Vln. I

Vln. II 166

Vla. 166 comb

Vc. 166 arco *mp*

thud on hair clip

173

Vln. I

Vln. II

Vla. guitar pick *mf*

Vc. hair brush

178

Vln. I

Vln. II

Vla.

Vc.

thud on hair clip

182

Vln. I

Vln. II

Vla. comb

Vc. arco

189

Vln. I

Vln. II

Vla.

Vc.

mf

guitar pick

hair brush

194

Vln. I

Vln. II

Vla.

Vc.

comb

arco

mf

201

Vln. I

Vln. II

Vla.

Vc.

guitar pick

hair brush

f

thud on hair clip

207

Vln. I

Vln. II

Vla.

Vc.

211

Vln. I

Vln. II

Vla.

Vc.

pizz.

mf

mf

mf

hair brush

f

214

Vln. I

Vln. II

Vla.

Vc.

217
Vln. I
remove hair clip
fuzz off

217
Vln. II

217
Vla.

217
Vc.

Detailed description: This page of a musical score contains four staves for measures 217 through 220. The first staff, Vln. I, features a melodic line with eighth-note patterns and a fermata at the end of measure 219. The second staff, Vln. II, plays a complex, rhythmic accompaniment with many beamed notes. The third staff, Vla., has a melodic line with eighth notes and a fermata. The fourth staff, Vc., provides a simple bass line with quarter notes and rests. Performance instructions 'remove hair clip' and 'fuzz off' are placed above and below the Vln. I staff respectively. The key signature has two sharps (F# and C#) and the time signature changes from 6/4 to 4/4 at the end of measure 219.

3/2 Nine hundred grandmothers

Bambatta Variations

220 $\text{♩} = 66$

Vln. I

Vln. II *arco*

Vla.

Vc.

224 *arco*

Vln. I *f*

Vln. II *p* *arco*

Vla. *f*

Vc. *arco*

226

Vln. I

Vln. II

Vla.

Vc.

228

Vln. I

Vln. II

Vla.

Vc.

arco

ff

6

6

6

230

Vln. I

Vln. II

Vla.

Vc.

6

6

3

232

Vln. I

Vln. II

Vla.

Vc.

p ff

235

Vln. I

Vln. II

Vla.

Vc.

pp *mf* *pp* *f*

very wide vibrato

238

Vln. I

Vln. II

Vla.

Vc.

arco

ff

240

Vln. I

Vln. II

Vla.

Vc.

6 6

to D

pp *f*

243 *bow air whips*

Vln. I *ff*

Vln. II

Vla. *ff*

Vc.

246

Vln. I

Vln. II

Vla. *arco* *ff*

Vc.

248

Vln. I

Vln. II *p*

Vla. *p*

Vc.

250

Vln. I

Vln. II

Vla.

Vc.

252

Vln. I

Vln. II

Vla.

Vc.

bow air whips

arco

ff

f

p arco

f

255

Vln. I

Vln. II

Vla.

Vc.

257

Vln. I

Vln. II

Vla.

Vc.

3

ff

ff

3

3

Detailed description: This page contains the musical score for measures 257 through 260 of the 'Bambatta Variations'. The score is arranged in four staves: Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The key signature is two sharps (F# and C#), and the time signature is 6/8. Measure 257 begins with a treble clef for Vln. I and Vln. II, and a bass clef for Vla. and Vc. Vln. I and Vc. play a triplet of eighth notes (F#, G#, A) with an accent (>) and a slur. Vln. II plays a series of eighth notes. Vla. plays a triplet of eighth notes (F#, G#, A) with an accent (>) and a slur. Vln. I and Vln. II play chords in the final two measures (259 and 260) with accents (>) and a forte (ff) dynamic. The piece concludes with a double bar line and repeat sign.

4. Mudhead from Planet XYY

261 $\text{♩} = 62$ pizz. slide left fingers between notes where possible

Vln. I *f*

Vln. II

Vla. *f* pizz.

Vc.

265

Vln. I

Vln. II

Vla.

Vc.

268

Vln. I

Vln. II

Vla.

Vc. *mf* pizz. slide left fingers between notes where possible

270

Vln. I

Vln. II *pizz.*
p

Vla.

Vc.

273

Vln. I

Vln. II

Vla.

Vc. *mp*
mp

277

Vln. I *p* *mf*
no sliding

Vln. II *mf* *mf*
slide left fingers between notes where possible

Vla.

Vc.

slide left fingers between notes where possible

281

Vln. I

281

Vln. II

281

Vla.

281

Vc.

284

Vln. I

284

Vln. II

284

Vla.

284

Vc.

287

Vln. I

287

Vln. II

287

Vla.

287

Vc.

290

Vln. I

Vln. II

Vla.

Vc.

no sliding

p

293

Vln. I

Vln. II

Vla.

Vc.

mp

mp

mf

mf

296

Vln. I

Vln. II

Vla.

Vc.

p

f

p

mf

f

f

slide left fingers between notes where possible

299

Vln. I

Vln. II

Vla.

Vc.

f

mp

mp

f

301

Vln. I

Vln. II

Vla.

Vc.

mp

mf

mp

f

f

mp

mp

f

p

mp

305

attacca

Vln. I

Vln. II

Vla.

Vc.

pp

mp

pp

pp

pp

pp

mp

pp

mp

5. Afrika Variations

307 arco = 80

Vln. I *f* *ff* *mf* *f*

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

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

Vc. *f* *ff* *mf* *f*

315

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

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

Vla. *ff* *p < f* *p < f*

Vc. *p* *ff*

324

Vln. I *f* *mf* *ff* *p*

Vln. II *mp* *mf* *ff* *p*

Vla. *mp* *mf* *ff* *p* *fp*

Vc. *mf* *mf* *ff* *f* *fp* *f*

①

332

Vln. I *f* *mp* *sfz*

Vln. II *f* *mp* *sfz*

Vla. *f* *mp* *sfz*

Vc. *fp* *mp* *sfz* *f*

339

Vln. I *mp* *p* *fff* *mp*

Vln. II *p* *ff* *mp*

Vla. *mp* *p* *fff* *mp*

Vc. *mp* *p* *fff* *mp*

347

Vln. I *mf* *ff* *mf*

Vln. II *mf* *ff* *mf*

Vla. *mf* *ff* *mf*

Vc. *mf* *ff* *mf* *pizz. with "slap"*

② *pulse doesn't change* *mf*

354

Vln. I *f* *mf* *f* *mf* *f* *mp*

Vln. II *f* *mf* *mf* *f* *mp*

Vla. *ff* *f*

Vc. *f*

358

Vln. I spooky flautando *mf*

Vln. II spooky flautando *mp*

Vla. *solo*

Vc. brush thumb pizz. *mf*

364

Vln. I

Vln. II

Vla.

Vc.

Bambatta Variations

3

♩ = 80 with tip, some wood, percussive

371

Vln. I *ff* *p*

Vln. II *ff* *p* with tip, some wood, percussive

Vla. *p* with tip, some wood, percussive

Vc. *p* arco with tip, some wood, percussive
tap shoes on floor

377

Vln. I

Vln. II *sfz* *mf* 2nd time quieter (p)

Vla.

Vc.

383

Vln. I *mf* 2nd time quieter (p)

Vln. II

Vla. *mf* 2nd time quieter (p)

Vc. *mf*

388

Vln. I

Vln. II

Vla.

Vc.

"ping" on bow tip

394

4 = 75 a little slower muted sound

Vln. I

Vln. II

Vla.

Vc.

"ping" on bow tip

pp

p

p

p

p

p

p

p

p

404

ord.

Vln. I

Vln. II

Vla.

Vc.

mp

pp

pp

mp

pp

mp

pp

5

411

Vln. I *fff* *p* *fp* *f*

Vln. II *fff* *p* *fp*

Vla. *fff* *p* *fp* *f*

Vc. *fff* *p* *fp* *f*

419

Vln. I *mp* *f*

Vln. II *f*

Vla. *mp* *f*

Vc. *mp* *f*

424

Vln. I *mf*

Vln. II *mf*

Vla. *fp* *mf*

Vc. *fp* *mf*

433 (6) *dolce*

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

Vln. II *dolce* *mp*

Vla. *dolce* *mp*

Vc. *dolce* *mp*

441

Vln. I *f*

Vln. II *f*

Vla. *f*

Vc. *f*

446

Vln. I *sfz* *mf* *f*

Vln. II *sfz* *mf* *f*

Vla. *sfz* *mf* *f*

Vc. *sfz* *mf*

453

Vln. I

Vln. II

Vla.

Vc.

459

Vln. I

Vln. II

Vla.

Vc.

theme

fp *mf* *p*

468

Vln. I

Vln. II

Vla.

Vc.

f

476

Vln. I

Vln. II

Vla.

Vc.

482

Vln. I

Vln. II

Vla.

Vc.

insert bobby pins
on strings behind bridge

fuzz

fuzz

487

Vln. I

Vln. II

Vla.

Vc.

ff

492

Vln. I *ff* fuzz box

Vln. II fuzz box bobby pins

Vla. 3

Vc. 3 *ff*

496

Vln. I

Vln. II 3

Vla. 3

Vc. 3

500

Vln. I

Vln. II 3

Vla. 3

Vc. 3

503

Vln. I

Vln. II

Vla.

Vc.

506

Vln. I

Vln. II

Vla.

Vc.

arco

sfz

ff

sfz

sfz

509

Vln. I

Vln. II

Vla.

Vc.

sfz

sfz

sfz

sfz

play 7 times

512

Vln. I *sfz* *sfz* *sfz*

Vln. II *sfz* *sfz* *sfz*

Vla. *sfz* *sfz* *sfz*

Vc. *sfz* *sfz* *sfz*

518

Vln. I fuzz off *p* bow over fingerboard

Vln. II fuzz off *p* bow over fingerboard

Vla. fuzz off *p* bow over fingerboard

Vc. fuzz off *p* bow over fingerboard

$\text{♩} = 96$

524

Vln. I

Vln. II

Vla.

Vc.