

TOMEK ARNOLD

# VILLAGE OF CONTOL

FOR OVERTONE SINGER AND  
"WORLD MUSIC" ENSEMBLE

## PERFORMANCE NOTES:

### Instrumentation:

- Male overtone singer (Khoomei)
- Chapareke Rarámuri
- Pipa
- Marimba
- Steel pans (six bass)
- Gamelan (Gong Ageng, Gong Suwukan, Gender)

### Electronic equipment:

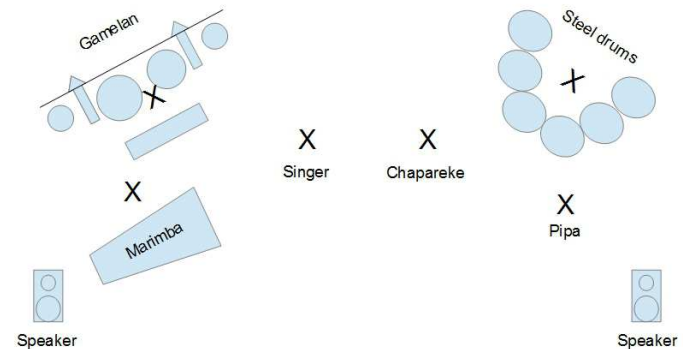
- Two dynamic mics for pipa and the singer.
- One miniature cardioid condenser mic. for chapareke.
- Mixer (digital mixer with compressor is recommended to avoid possible feedback from the chapareke input).
- 2 channels PA
- Optional pair of cardioid mics if Javanese Gamelan is used.

### Set-up:

The pitch material in the piece is generated spectrally in accordance with the fundamental note used by the overtone singer. However, the fundamental (and consequently all of the relative pitch material in the piece) can change from performance to performance depending on the tuning of the available Gamelan set. The fundamental should reflect the number 1 on the Pelog or Slendro scale of the used Gamelan. The following score reflects the tuning of the Gamelan set from Wesleyan University. A

transposed version of the score can be provided by the composer upon request to fit the specificity of the Gamelan set to be used by the performers.

The placement of ensemble is as follows:

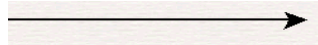


### Notation (global):

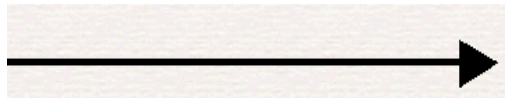
**0:25" [0:45"] 0:40" timing ad lib.**

Working with a stopwatch is necessary for performance. Sections are timed, with general timing indicated by the large markings. The time points at the end of each section (separated by the dashed bar line) are indicated by the smaller time marks within brackets. The passages occurring in reference to specific points in time are marked with the smallest font above the stave. Passages without specific timing are marked with "Timing ad lib."

indication, in which case the performer makes the decision of when to play in reference to the other ensemble parts and the general timing of the section.



Continue playing indicated sound until the end of arrow.



Continue playing indicated group of sounds until the end of the large arrow.



The points of exact synchronization are indicated by the vertical dashed arrows.



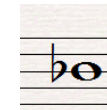
Stop the sound and muffle the resonance.

### Instrument-specific instructions:

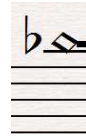
#### Overtone singer:

The part requires a male overtone singer fluent in the *Khoomei* style of singing. The three styles of overtone singing used in the piece are: *Khoomei*

(regular open voice technique with tongue down), *Isgeree* (the "whistle" style, a pure tone whistle drone executed by the tongue touching the upper part of the mouth muffling the sound), and *Xarxiraa* (produced with less vocal tension, resulting in a rough sound and extending the length of the frequency wave 2 times that results in a subtone). Throughout the piece *Khoomei* is indicated with regular shaped notes, *Isgeree* with diamond-shaped and *Xarxiraa* with square-shaped.



Khoomei



Isgeree



Xarxiraa

\*1 The line indicates the mouth movement. The bending indicates the opening and closing of player's mouth resulting in the change of harmonics. The numbers above the line refer to the numbers of partials of the overtone series, and indicate which partial should be heard at each specific moment.

\*2 Improvise the melodic lines on overtones as suggested with the line before. Use the full available spectrum of overtones and keep the improvisation low in density. The melodic lines should be moving rather slowly.

\* 3 Gliss from B to Db using *Xarxiraa* technique, and then gradually transition from *Xarxiraa* to *Khoomei*.

\* 4 Make a cup out of your hands and wrap the microphone with them. Sing into your hands producing more volume.

\* 5 If the note is outside the singer's range, it can be sang an octave lower (like previously)

### Chapareke:

The Chapareke is an indigenous instrument of the Rarámuri people who inhabit areas of Copper Canyon in Chihuahua state of Mexico.



The body of chapareke is a stick made out of a dried stem of *Maguey* flower (*Quiote*). The strings (usually 2 or 3) are stretched from one side of the stick up to the other and can be tuned to a defined pitch. The range of the strings vary depending on the instrument. Originally Rarámuris used gut strings

but nowadays the most popular are metal guitar strings.

The Chapareke is to be held in one hand leaving the other to pluck or bow the strings. (Plucking technique is the authentic way of playing the instrument, however, the piece requires the usage of violin bow most of the time). The player's mouth is to be placed on the stick towards the top of the strings providing a resonant chamber, which results in the audibility of strings' overtone series from approximately 4<sup>th</sup> to 8<sup>th</sup> partial. The partials can be changed with the lip movement resulting in melodic lines of the overtone series.



Antonio Camilo – one of the last known Rarámuri chapareke players.

Because of the low dynamic range and subtle audibility of overtones, the instrument needs to be amplified for the piece. A miniature cardioid microphone is to be placed at the mouth spot (similar to flute miking). The microphone needs to be completely covered by the player's mouth to pick up the overtone series most effectively. The gain needs to be high (just a notch below the feedback point). The player and the sound engineer need to be cautious of feedback and distortion. Feedback will most likely occur

in the loud bowed moments (for example in min. 1:30) and distortion in the plucked section (3:15 to 3:35). The digital mixer with compressor is recommended for that reason.

\*1 The notation is similar to tabulature. The two lines represent the two strings of the chapareke that are used. The main string needs to be tuned to the fundamental pitch of the piece (Db in the case of this score) within one octave below middle C. The second string is to be used for noise extended techniques, so its tuning is irrelevant. The separate string for extended techniques is to avoid detuning of the main string as the extended techniques often require high bow pressure that might lower the string's pitch during the course of the piece. However, it is still possible to execute the piece if the available chapareke has only one string.

\*2 Scratch tone. Muffle the string on both sides of the bowed spot to disallow the defined pitch. Use your hand that holds the instrument to muffle one side of the playing spot and your fingers of the other hand to muffle the other. Apply high bow pressure (just like the overpressure technique on string instruments). The resulting sound should be the low frequency noisy scratch of an undefined pitch. The gesture should start with the slow bow movement and increase the speed towards the end.

\*3 The line indicates the mouth movement. The bending indicates the opening and closing of the player's mouth resulting in the change of harmonics. The numbers above the line refer to the numbers of partials of the overtone series, and indicate which partial should be heard at the specific moment.

\*4 Tremolo on the string with a threaded rod. Increase the speed of the tremolo together with the dynamics.

### **Pipa:**

The recommended tuning of the instrument is A D Eb A. Although it is possible to perform the piece using regular pipa tuning, the performer is advised to tune the E string half step down as it will help to execute some of the passages starting at minute 7.

\*1 The pitches for the passage are to be chosen from the scale and register as indicated by the small notes in parenthesis. The passage lasts for the amount of time indicated between the beginning and ending of the bracket. Within that time frame, the performer plays three instances of repeated 4-note figures. Each of the figures represent one freely chosen pitch repeated 4 times. The number of notes within the figure has to be exactly 4 and cannot occur more than three times. The performer chooses freely when to play the figures within the timeframe while keeping it relative to the marimba part in dialogue. The tempo of the repeated notes is relative to approximately quarter note = 160.

\*2 Same as above with the following exceptions: the amount of notes varies from 4 to 8 and should be different with every new figure. The figures in dialogue with marimba are not always separated from each other as previously but are varied and can overlap. The gap between each figure and the amount of notes should be as varied as possible. The passage continues until 3:15.

\*3 Similar to before. The number of repeated notes is varied from 4 to 8. The figure is to be executed no more and no less than 5 times. The timing is completely free within the 3:50 to 4:35 section.

\*4 Same as before except this time only four 4-note figures.

\*5 Tremolo with *Jiaosixian* technique. Twist all 4 strings in pairs and pluck continuously from *mezzo piano* to *fortissimo*. Bring the strings to normal position as fast as possible for the passage at minute 7.

\*6 The passage is generally to be executed as fast as possible. However, during the subsequent repeats the performer should vary the tempo slightly speeding up and slowing down within each repetition. The order and occurrence of the notes within the passage should be slightly varied with each repeat. No two repeats should be exactly the same. The passage can be extended or shortened and groups of notes can be interchanged and repeated at will, but the overall arc of falling and rising is to be kept within each repeat. The passage should never rhythmically align with the marimba.

\*7 The passage should not align rhythmically with the marimba. Similarly in 8:39, 8:46 and 9:10.

### **Marimba:**

Five octave concert western marimba is needed for the part. Mallets need to be carefully chosen for the section between 3:50 and 9:20 as there is no time to change them for the high register passage at min. 7 from the low register tremolo occurring before. Two-tone mallets are recommended for that section to allow the low register to be as resonant as possible while keeping clean projection and loud dynamic of the fast *fortissimo* passages from minute 7.

\*1 The pitches for the passage are to be chosen from the scale and register as indicated by the small notes in parenthesis. The passage lasts for the

amount of time indicated between the beginning and ending of the bracket.

Within that time frame, the performer plays two instances of repeated 4-note figures. Each of the figures represent one freely chosen pitch repeated 4 times. The number of notes within the figure has to be exactly 4 and cannot occur more than two times. The performer chooses freely when to play the figures within the time frame while keeping it relative to the pipa part in dialogue. The tempo of the repeated notes is relative to approximately quarter note = 160.

\*2 Same as above with the following exceptions: the amount of notes varies from 4 to 8 and should be different with every new figure. The figures in dialogue with pipa are not always separated from each other as previously but are varied and can overlap. The gap between each figure and the amount of notes should be as varied as possible. The passage continues until 3:15.

\*3 The passage is generally to be executed as fast as possible. However, during the subsequent repeats the performer should vary the tempo slightly speeding up and slowing down within each repetition. The order and occurrence of the notes within the passage should be slightly varied with each repeat. No two repeats should be exactly the same. The passage can be extended or shortened and groups of notes can be interchanged and repeated at will, but the overall arc of falling and rising is to be kept within each repeat. The passage should never rhythmically align with the pipa.

\*4 The passage should not align rhythmically with the pipa. Similarly in 8:39, 8:46 and 9:10.

### Bass steel pans:

The six bass set-up is to be used for this part. Bass steel pan mallets are recommended. The instruments are to be arranged in accordance with the performer's preference. All six bass steel pans are recommended but if not available, the part can be executed with any number of instruments starting from 3.

\* 1 When pitch is not specified, the performer can choose freely within the scale indicated by the small notes in parenthesis.

\* 2 Freely chosen pitches. The passage lasts for the exact amount of time indicated between the beginning and ending of the bracket. The number of notes as well as the overall contour of the passage needs to be executed as written.

\* 3 Single stroke tremolo.

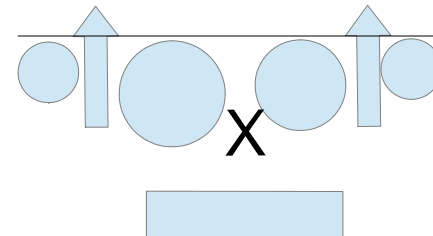
\* 4 Alternate between long (A) and short (B) notes. The length of the long notes as well as the amount of space between each note should vary constantly from approximately half a second to 2 seconds. Short notes should be muffled immediately after the note is struck. Cue the singer as you're playing as the passage is in unison with him.

### Gamelan:

The Balinese Gamelan is recommended for the realization of the piece because of the loud dynamics and Gender part requiring hard mallets. The thick metal of the Balinese instruments allows the player to achieve loud

dynamics without the danger of hurting the instrument. Moreover, the nature of Balinese Gamelan music (that often makes use of hard mallets on Genders and loud dynamics in general) makes the part culturally more appropriate than in the case of Javanese Gamelan where the music is more calm in character and the instruments are made of thinner metal. If Javanese Gamelan is the only available option, arrangements should be made with the Gamelan instructor or the person in charge of the instruments to make sure they approve of the instrument usage. Amplification can be considered if the triple *forte* dynamics turn out to be impossible to achieve acoustically.

The Gamelan player should sit cross-legged in between two large gongs reaching for the gongs hanged on the two sides of the gong stand. The gender should be placed in front of the set-up.



The recommended scale is Slendro although the piece can also be played on Pelog. The pitches specified in the score are approximate and in accordance with the tuning of Wesleyan University's Gamelan. While the pitch will vary with different sets of Gamelan, the provided numerical notation will be the same in every case. The numbers above the notes indicate which note of the Slendro or Pelog scale is to be played.

# Village of Control

for Overtone Singer and  
"World Music" Ensemble

Tomek Arnold

Senza misura

0:20" 0:25"

Overtone Singer

Chapareke <sup>\*1</sup>  $\text{Db3}$  *Ad lib.* <sup>\*2</sup> 0:24" With violin bow *p*  $\leftarrow$  *mf*

Pipa

Marimba

Bass Steel Pans <sup>\*1</sup> <sup>\*2</sup> 0:08" 0:20" *p*

Gong Suwukan

Gamelan <sup>1</sup> ca.  $\flat$  *mp*

Detailed description: This musical score is for the first section of 'Village of Control', marked 'Senza misura'. It features six staves: Overtone Singer, Chapareke, Pipa, Marimba, Bass Steel Pans, and Gamelan. The Overtone Singer staff is empty. The Chapareke staff has a melodic line starting at 0:24" with a violin bow, marked *p* and *mf*. The Bass Steel Pans staff has a rhythmic pattern of dots starting at 0:08" and 0:20", marked *p*. The Gamelan staff has a single note at the beginning, marked *mp* and *ca. b*.

0:25" 0:30" <sup>\*3</sup> 0:35" 0:40" [0:45"] 0:53" [0:55"]

Chapa. <sup>(with violin bow)</sup> <sup>5</sup> <sup>6 7 8 7 6 5</sup> *p* <sup>5</sup> <sup>6 7 8 7 6 5</sup> 0:53" *p*  $\rightarrow$  *f*

Bs. St. Pans 0:30" 0:45" *mp*

Gam. 0:25" <sup>1</sup>  $\flat$  *mf*

Detailed description: This musical score is for the second section of 'Village of Control', starting at 0:25". It features three staves: Chapa., Bs. St. Pans, and Gamelan. The Chapa. staff has a melodic line starting at 0:30" with a violin bow, marked *p* and *f*. The Bs. St. Pans staff has a rhythmic pattern of dots starting at 0:30" and 0:45", marked *mp*. The Gamelan staff has a single note at the beginning, marked *mf* and *ca. b*.



0:55"

Chapa. 0:58" 1:03" 8 5 simile [1:23"] 1:29" [1:30"]

Pipa ca. 160 1:05" \*1 ca. 1:18"

Mar. ca. 160 mp

Bs. St. Pans 0:58" 1:23"

Gam. 1 f

1:30"

Chapa. 1:32" 4-8 sim. [2:00"]

Pipa 1:32" \*2 mp sim. (varied amounts of notes)

Mar. \*2 mp sim. (varied amounts of notes)

Bs. St. Pans 1:32" mf sim. ad lib.

Gam. 1:31" Gong Ageng 1 5 f

**2:00" rall.** ..... [2:30"]

Chapa.

Pipa (no rall.)

Mar. (no rall.)

Bs. St. Pans rall. ....

**2:30"** [3:15"]

Pipa

Mar.

**3:15"** [3:50"]

Chapa. *plucked with finger* **sub. ff** **ff** *with violin bow* **f**

Pipa **ff**

Mar.

Bs. St. Pans **mp** **f**

3:19" 3:22" *sim.* 3:26" 3:31" *sim.* 3:35" 3:43"

3:50"

(Khöömii)

3:55"

\*1

\*2

[4:34"]

[4:35"]

Ovrt. Sing.

sim. ad lib., full spectrum, low density

*f*

Chapa.

TAB

*ff*

Pipa

l. v. (♩ = ca. 160) timing ad lib. \*3

*mp* *ff*

Mar.

*f* *ff*

4:32"

Bs. St. Pans

*ff*

Gam.

*f*

4:35"

[5:19"]

[5:20"]

Ovrt. Sing.

ad lib., full spectrum, low density

*f*

Chapa.

(with violin bow)

*f*

Pipa

l. v. simile \*4

*mp* *ff*

Mar.

*f* *ff*

5:17"

Gam.

timing ad lib. Gender

*p* *sim. ad lib.*

5:20"

(Xarxiraa) \*3 (Khöömii)

[6:04"] [6:05"]

Ovrt. Sing. *gliss.* *ad lib., full spectrum, medium density*

Chapa. *f* *p* *f* *ff*

Pipa *ff*

Mar. *ff* *mp* *f* *ff*

Bs. St. Pans *f*

Gam. (Gender) 3 2 *ff*

6:05"

[7:00"]

Ovrt. Sing. *gliss.* *ad lib., full spectrum, high density*

Chapa. *f* *mp* *ff*

Pipa *mp* *ff*

Mar. *mp* *f* *ff*

Bs. St. Pans *mp* *ff*

with threaded rod \*4

Jiaosixian \*5

**7:00"**

Pipa *ff* (repeat with variations)<sup>\*6</sup>

Mar. *ff* (repeat with variations)<sup>\*3</sup>

Gam. *ff*

[7:19"] [7:20"]

**7:20"** Cupped hands<sup>\*4</sup>  
follow the steel pans player

Ovrt. Sing. *ff* sim. keep following the steel pans player. [8:00"] 8:02" *gliss.* [8:04"]

Pipa *f* 7:30" 7:50" sim. *ff*

Mar. *f* 7:30" 7:50" sim.

Bs. St. Pans *f* cue the singer<sup>\*4</sup> 7:30" sim. ad lib. keep cueing the singer 8:03" *mf* *ff*

Gam. 7:50" *ff*

8:04"

Overt. Sing. *ad lib., full spectrum, varied density* [8:28"] [8:29"]

Cupped hands

Chapa. *ff* with violin bow *f* overpressure *ff*

Pipa *ff* *f*

Mar. *f* *f*

Bs. St. Pans

Gam. (Suwukan) *ff* 8:05" (all of the available gongs) *fff* (Gender) *ff*

8:29"

Overt. Sing. (regular, without the "cup") *mf* [8:39"] *mp* [8:41"] Low density [8:46"] [8:50"]

Pipa *mf* *mp*

Mar. *mf* *mp*

Gam. *mf* *mp* *p*

8:50"

Ovrt. Sing. **(Low density)** 9:05" <sup>s</sup> [9:20"]

Chapa. 9:05" <sup>s</sup> *p*

Pipa 9:10" *mp* *pp*

Mar. 9:10" *mp* *pp*

9:20"

Ovrt. Sing. **(Isgeree)** 9:38" timing ad lib. [9:50"]

Chapa. 9:38" timing ad lib. *p*

Bs. St. Pans *p*

Gam. *p*

Con la misura ♩=120

9:50"

[9:56"]

Ovrt. Sing.

Chapa.

Pipa

Mar.

Bs. St. Pans

Senza misura

9:56"

Con la misura ♩=120

[10:06"]

[10:12"]

Ovrt. Sing.

Chapa.

Pipa

Mar.

Bs. St. Pans



Senza misura  
rit.  
[10:14"]

Con la misura ♩=120

10:12"

[10:34"]

Continue dialog as in previous sections slowing the events down gradually

Ovrt. Sing. *p* 10:30" *pp*

Chapa. *p* 10:30" *pp*

Pipa *ppp* *mp*

Mar. *ppp* *mp*

Bs. St. Pans *mp* *mp*

10:36"

[10:42"]

Ovrt. Sing.

Chapa.

Pipa

Mar.

10:42"

Overt. Sing.

Chapa.  
T  
A  
B

Pipa

Mar.

Bs. St. Pans

Gam.

*8va*

*p*

*1*

*p*

Detailed description: This is a musical score for a 6-part ensemble. The parts are Overt. Sing. (bass clef), Chapa. (bass clef with T, A, B markings), Pipa (treble clef), Mar. (treble clef), Bs. St. Pans (bass clef), and Gam. (bass clef). The score is divided into four measures. The first measure shows the Pipa and Mar. playing a rhythmic pattern of eighth notes. The second measure continues this pattern. The third measure features a '8va' marking above the Mar. staff. The fourth measure shows the Bs. St. Pans and Gam. parts with a dynamic marking of *p* and a fingering '1'.