II–V–I

Larry Polansky

for solo or two electric guitars
for Brian McLaren and Carter Scholz

for two electric guitars

Guitar I

(II)	(V)	(I)	
D	F↓	E	(1st string)
C↓	B	B♭↓	
G#↓	G	G	
D	C#↓	C	
A	A	B♭↓	
D	G	C	(6th string)

Guitar II

(II)	(V)	(I)	
E♭	E♭↑	E	(1st string)
B♭↓	B	B	
F#↓	F↓	F#↓	
D	D	D	
A	G	G	
D	D	E	(6th string)

solo electric guitar

Version A

(II)	(V)	(I)	
$E{\downarrow}_{11}$	$D\flat{\downarrow}_7$	Eb_3	(1st string)
$A\flat{\downarrow}_7$	Bb_3	C_5	
F_3	G_5	$G\flat{\downarrow}_7$	
D_5	$C\flat{\uparrow}_{13}$	$D{\downarrow}_{11}$	
$G\flat{\uparrow}_{13}$	$A{\downarrow}_{11}$	$F\flat{\uparrow}_{13}$	
$B\flat_1$	$E\flat_1$	$A\flat_1$	(6th string)

Version B

(II)	(V)	(I)	
$D{\downarrow}_7$	E_3	$F\#_5$	(1st string)
$C\#{\downarrow}_3$	$C\#_5$	$B\flat{\uparrow}_{13}$	
$G\#_5$	$F{\uparrow}_{13}$	$A\flat{\downarrow}_{11}$	
$B\flat{\downarrow}_{11}$	$E\flat{\downarrow}_{11}$	$C{\downarrow}_7$	
$G\#_5$	$G{\downarrow}_7$	A_3	
E_1	A_1	D_1	(6th string)

(In version A, the three fundamentals are B♭, E♭, and A♭. In version B, the three fundamentals are E, A, D. Subscripts indicate which harmonic the note is.)

Performance Notes

Play only open strings, 2nd, 3rd and 4th harmonics, and notes stopped at the 7th and 12th frets. Improvise while gradually and audibly retuning the guitar from one "section" to another. Each section has a new fundamental and tuning. The new tunings, when reached, are places of rest: let them sit for a while.

In general, retune the higher strings first, the VI strings, last. Don't tune an individual string completely before tuning other strings: gradually retune several of them to the new pitches, alternating between strings.

Try for a smooth, reverberant cloud of moving intonation. If discrete digital delays are used, timings should match the pulse of the guitar rhythms so as not to confuse the places where rhythmic patterns are prominent. If other, asynchronous delays are used in the transitional sections, they should be switched off by foot pedal for the "cadential" rhythmic sections.

Rhythm

Use one steady, fast pulse (tempo) for the entire piece. Choose three different rhythms to be played at the arrival of each new tuning. At other times, during the transitions from one tuning to another, improvise freely within and emanating from that rhythm and meter (always keeping the pulse constant). The rhythms do not have to be unison; in the first performance, Nick and I played different hemiola patterns for each tuning.
For example:

II (beginning): 10/8 meter (3+3+2+2 in one guitar, 5/4 in the other)
V (G): 8/8 (3+2+3, 4/4)
I (C): 6/8 (3+3, 3/4)

A simple melodic sequence (different for each guitar) might be combined with the rhythmic patterns. For example, for the 5/4 pattern (on D) [Figure 1]:

Figure 1

Either part in the above example might be played as 3rd or 4th harmonics, stopped strings at the 7th or 12th fret, open strings, or as some combination of all of these. Optionally, sections might be timbrally distinguished. For example: all harmonics in the first section, tapping in the second, chords in the third.

Tuning

II–V–I is a gradual modulation between three harmonic series, built on three fundamental pitches. Tunings should be as close as possible to the natural intonations of these harmonic series (D, G, C). The guitarists may either learn these intervals by ear (easily done), perform the piece with the aid of electronic tuning devices, or some combination of both.

Perfect fifths (3rd harmonic), major and minor seconds (9th and 17th harmonics), and major sevenths (15th harmonic) are extremely close to their equal (fretted) neighbors. Major thirds (5th harmonic) are a little flat (14¢) of tempered tuning (fretted). Minor sevenths (7th harmonic), "tritones" (11th harmonic), and "minor sixths" (13th harmonic) are more distant from equal.

These pitches should be tuned as follows (with cents deviations indicated from the nominal tempered pitches):

II: D fundamental
  C↓(7th harmonic): 31¢ (cents) flat
  G↓ (11th harmonic): 49¢ flat (about 1/4-tone)
  B♭↑(13th harmonic): 43¢ sharp (about 1/4-tone)
V: G fundamental
  F↓(7th harmonic): 31¢ flat
  C♯↓ (11th harmonic): 49¢ flat (about 1/4-tone)
  E♭↑(13th harmonic): 43¢ sharp (about 1/4-tone)
I: C fundamental
  B♭↓(7th harmonic): 31¢ flat
  F♯↓ (11th harmonic): 49¢ flat (about 1/4-tone)

The 11th and 13th harmonics may be heard as a "neutral" tritone/fourth and a minor/major sixth, respectively.

Written for the premiere performance, N.Y.C., 1997, with Nick Didkovsky.

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(Woodstock Gamelan, contiued from page 8)

We have accumulated a few tritone intervals to represent the spice of the final gongs. 36/25, 64/45, 45/32, 7/5 and 15/11, and the final section has one more, a 15/11 tritone (about 537 cents) between the 22/15 and the upper 1/1. Table 18 summarizes the relationships of these gong tritones.

Variation 7 (Table 19) is in another minor tuning, and played with *pancer*.

The coda on Variation 7 (Table 20), using the same tuning as the one in Variation 7, is the one I usually use for ending the piece. We finish our tour of imaginary villages here, in a 3/4 meter which slows to the final gong, the tritone gently beating the air to fly away. **1/1**

Notes:

1. Woodstock Percussion, Route 1, Box 381A, West Hurley, NY 12491, telephone 1-800-422-4463.

2. Harry Partch, *Genesis of a Music* (Da Capo, New York, 1974).

3. Colin McPhee, *Music in Bali* (Yale University Press, New Haven, CT, 1966), p. 51.

4. An *otonality* is an overtone-based relationship among ratios with common denominators; an example: 7/7 =1/1, 8/7, 9/7, 10/7, 11/7, 12/7, 13/7, 14/7 = 2/1.

5. An enharmonic tetrachord divides the interval of a perfect fourth into a major third and two microtones.

Editor's Note:

* This is not, strictly speaking, a Javanese tuning. Lou Harrison does, indeed, list it in his collection of *pelog* scales in his *Music Primer*, but there he is using the term loosely to mean "anhemitone pentatonic"; Javanese scales are not typically based simple, five-limit ratios, though there is nothing to prevent such a thing from occurring.