

# Tone and interval measurements for the gender barung pelog<sup>1</sup>, gamelan Kyahi Biwara, Grinnell College

octave	<b>2</b>	<b>3</b>							<b>4</b>							<b>5</b>		
slendro scale degree	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3
frequency (eq. temp.)	B +40	D -16	D#	F -36	G# -40	A -20	A# -10	C -36	D +8	D# +40	F -36	G# -15	A	A# -6	C -35	D	D# +29	F -18
frequency (Hz.)	63	73	78	85.5	101.5	109	116	128	147.5	159	171	206	220	232.5	256.5	293.5	316.5	345.5
interval (cents)	244	116	164	296	120	110	174	244	132	124	321	115	94	171	235	129	153	
octave interval 7-7	1224							1201										
octave interval 1-1	1224							1192										
octave interval 2-2	1240							1189										
octave interval 3-3	1200							1218										
octave interval 4-4	1225																	
octave interval 5-5	1220																	
octave interval 6-6	1184																	

note:

<sup>1</sup> To render a complete tuning profile for the pelog scale (which is heptatonic) as represented on the gender barung of this gamelan, all three of the set's gender had to be used. The pelog bem gender (tuned to the pentatonic scale 1-2-3-5-6) was measured in its entirety, the pitch 7 keys on the pelog barang gender were measured and incorporated. And finally the pitch 5 keys on the slendro gender--this is a common tone with pelog pitch 4--was added.