The Serpentine Harp

for retuned harpsichord

David M. Gordon

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for Daniel Paul Horn

Duration: ca. 8'30"

Performance Instructions

- Accidentals only apply to pitches that they directly precede. For added clarity, numerous cautionary natural signs have also been included in the score.
- "l.v." markings indicate that each pitch is to be sustained (i.e., each key is to be held down) until its sound has completely decayed (insofar as this is possible), creating the illusion that the instrument is equipped with a sustain pedal. Each marking stays in effect until an upward or downward bracket (i.e., ______ or _____) appears. "Pedal up" markings (i.e., ______) indicate that the sustain of all preceding pitches should be stopped, creating the impression that the imaginary sustain pedal has been lifted momentarily.
- The notated rhythms should be played as accurately as possible, and expressive timing variations such as rubato should be avoided, since the rhythmic patterning is already designed to emulate such effects at the appropriate points.
- The harpsichord should be amplified, and, if possible, the volume of the bass register should be raised slightly above its normal level.
- The harpsichord must be tuned to ¹/₂-comma meantone temperament. The following charts provide information on that temperament's pitch frequencies, interval sizes, and deviations from standard equal temperament.

C4	265.64 Hz	$F \sharp_4$	364.40 Hz
C_{44}	271.60 Hz	G4	396.00 Hz
D4	295.16 Hz	G_{4_4}	404.88 Hz
E_{\flat_4}	320.76 Hz	A4	440.00 Hz
E4	327.96 Hz	B_{\flat_4}	488.89 Hz
F4	356.40 Hz	B 4	531.29 Hz

Frequencies of pitches in C₄ octave ($A_4 = 440$ Hz):

А	0¢	above A	0¢ higher/lower than standard equal-tempered A
B♭	144¢	above A	44¢ higher than standard equal-tempered B _b
В	182¢	above A	18¢ lower than standard equal-tempered B
С	326¢	above A	26¢ higher than standard equal-tempered C
C#	365¢	above A	35¢ lower than standard equal-tempered C#
D	509¢	above A	9¢ higher than standard equal-tempered D
E♭	653¢	above A	53¢ higher than standard equal-tempered E _b
E	691¢	above A	9¢ lower than standard equal-tempered E
F	835¢	above A	35¢ higher than standard equal-tempered F
F#	874¢	above A	26¢ lower than standard equal-tempered F#
G	1018¢	above A	18¢ higher than standard equal-tempered A
G#	1056¢	above A	44¢ lower than standard equal-tempered G#

Pitch deviations (in cents) from standard equal temperament:

Sizes (in cents) and locations of intervals:

AU	38¢	C-C#/Eb-E/F-F#/G-G#/Bb-B
m2	144¢	C#–D / D–E / E–F / F#–G / G#–A / A–B / B–C
M2	182¢	C–D / D–E / E _b –F / E–F# / F–G / F#–G# / G–A / A–B / B _b –C / B–C#
A2	221¢	E - F # / F - G # / B - C #
d3	288¢	C#–E / G#–B
m3	326¢	C-E, / C#-E / D-F / E-G / F#-A / G-B, / G#-B / A-C / B-D
M3	365¢	C-E / D-F# / Eb-G / E-G# / F-A / G-B / A-C# / Bb-D
A3	403¢	Eb-G#
d4	470¢	C#–F / F#–B), / G#–C / B–E),
P4	509¢	C-F / C#-F# / D-G / E-A / F-Bb / F#-B / G-C / G#-C# / A-D / Bb-Eb / B-E
A4	547¢	C-F# / D-G# / Eb-A / F-B / G-C# / Bb-E
d5	653¢	C#-G / E-B, / F#-C / G#-D / A-E, / B-F
P5	691¢	C-G / C#-G# / D-A / Eb-Bb / E-B / F-C / F#-C# / G-D / A-E / Bb-F / B-F#
A5	730¢	$C-G#/E_{b}-B/F-C#/B_{b}-F#$
d6	797¢	G#-E
m6	835¢	C#–A / D–B / E–C / F#–D / G–E / G#–E / A–F / B–G
M6	874¢	C-A / D-B / Eb-C / E-C# / F-D / G-E / A-F# / Bb-G / B-G#
A6	912¢	Eb-C#/Bb-G#
d7	979¢	C#-B, / F#-E, / G#-F
m7	1018¢	C-B, / C#-B / D-C / E-D / F-E, / F#-E / G-F / G#-F# / A-G / B-A
M7	1056¢	C-B / D-C# / Eb-D / F-E / G-F# / A-G# / Bb-A
d8	1162¢	C = C + C + E + F + F + G = -G + B + B + B + B + B + B + B + B + B +