Strange Attractors

for orchestra

Alexandra T Bryant

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Duration: approx 8’00”
Program Notes

In mathematics, a strange attractor is a self-referencing, dynamical system which evolves over time into a subtle, complex pattern. It walks a fine line between complete regularity and utter chaos, never repeating itself exactly but always cyclically haunting the same paths.

Like these transient mathematical forms, the instrumental lines in Strange Attractors possess contours, shapes, and melodies which recur in recognizable patterns throughout the piece, yet never twice repeat themselves in the same way – they are ever changing, evolving, and expanding.

The individual musical elements – such as the opening motif of the piccolo and celesta, the asymmetrical rhythmic pattern of the winds and strings immediately following, as well as the descending figure found in the violas and cellos at the conclusion of the first climax – together provide a dynamic and organic whole which is esthetically greater than a simple linear addition of their parts.

Instrumentation

Piccolo
Flute I & Flute II (doubled on Alto Flute)
Oboe I & II
English Horn
Clarinet in Bb I & II
Bass Clarinet
Bassoon
Contrabassoon

Horn I, II, III, & IV
Trumpet I, II, & III
Trombone I & II
Bass Trombone
Tuba

Timpani
Percussion I: Suspended Cymbal, Tom-Tom (3), Bass Drum, Marimba, Claves, Snare Drum, Tubular Bells
Percussion II: Glockenspiel, Woodblock, Tam-Tam, Cymbal, Vibraphone (bowed), Tubular Bells, Slapstick

Harp
Piano & Celesta

Strings

Performance Notes

If contrabass does not have a C extension, play the octave up.

Harp: V发现自己 is the notation for an ascending pitch bend (as in the piccolo and flutes)

Contrabass, page 7, measure 48, the upper voice should be pizzicato, while the lower voice is arco.

Violin I, pages 12-14, indicate a divisi a3 solo passage. As indicated, the top staff should be performed by the first stand and the second staff by third chair. The tutti line is also included on the second staff and should be distinguishable between the solo line.

The strings, on pages 13-15, should begin by playing divisi a3, slowly begin to hum the note he or she is playing, and then finally switch to humming only, all of which are notated. It should not be evident from the audience where the sound is coming from.
ABSTRACT

Strange Attractors for Orchestra

by

Alexandra Tyler Bryant

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