KINETICO
FOR
CHAMBER WIND ENSEMBLE

THESIS

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

MASTER OF MUSIC

By

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This single movement work is written for 2 flutes, 2 oboes, 3 clarinets in Bb, bass clarinet in Bb, 2 bassoons, alto saxophone in Eb, 2 horns in F, 2 trumpets in Bb, trombone, euphonium, tuba, contra bass, and 3 percussion. The approximate length is eight minutes. Both traditional and proportional systems of notation are employed.

The entire piece is freely chromatic with some implications of whole tone and other nondiatonic scales. The harmonies are tertian yet have no functional tonal basis. Changing meters with asymmetrical divisions are used in all sections except C and E, which have time indications (in seconds) for each measure with subdivisions to aid the conductor.

There are seven major formal divisions: A B transition C retransition A' D E.
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DISCUSSION AND ANALYSIS

One of my objectives in composing *Kinetico* was to write music which was by and large very fast and continuously active. Both traditional and proportional systems of notation were employed, the former representing contained energy (tension) and the latter, its dispersion (release). The work is approximately eight minutes in length.

The exploration of orchestration (timbre, texture, doublings, etc.) was a second major objective in writing *Kinetico*. Much attention was paid to timbral counterpoint and the creation of new voices by doubling.

The formal divisions of *Kinetico* coincide with the pressure/dispersion or tension/release dichotomy. There are seven major sections and each is further segmented (Fig. 1).

Section A consists of three varying statements of the first eleven-measure theme (Fig. 2). The aforementioned dichotomy is alluded to at the very beginning. For example, measure eleven provides a brief pause in the continuous eighth-note pulse. The a' version develops these dichotomous ideas simultaneously by superimposing the lower half of the original theme against sustained notes. At m. 19, an inverted pedal point precedes the final statement of the first theme (m. 26),
Fig. 1--Formal Scheme

which is re-orchestrated, transposed down a half step, truncated, and restructured rhythmically. When the solo passage begins at m. 33, the previous thematic material becomes the basis for a chordal accompaniment. Each chord in measures
32-44 is constructed from the pitch content of the beginning theme. At m. 42, the pedal point returns to close the A section which cadences at m. 47.

Section B begins right after section A without any transition. The b theme is twelve measures long as is its counter theme (Fig. 3). The second statement of the b theme (m. 59) is transposed down a perfect fourth, re-orchestrated, and rhythmically as well as melodically reshaped. Rhythmic and temporal characteristics are similar to those of the A section, while melodic material is significantly different. As a completely
new theme is introduced, the changing meters and basic eighth-note pulse remain to provide continuity between sections.

The transitional section, beginning in m. 67, is marked by a reduction of tempo. Measures 76-81 include another fragmentary reference to the b theme and counter theme. The b material is further transformed and fragmented during the gradual ritard in measures 82-92. The transition ends with three recitative-like solos in the bass clarinet, saxophone, and flute.

The transition is melodically elided with section C, beginning with the last six notes of the flute solo (m. 107).
This elision of melodic material serves to make a smooth connection between the traditionally and proportionally notated music (Fig. 4).

Fig. 4--Elision between transition and section C

Section C marks the first major dispersion of the energy previously dependent upon measured rhythm (Fig. 5). It consists of five groups or waves of polyphonic sound in which timbral counterpoint is most important. While a single melodic strand progresses, the color changes by the use of octave displacement and varying instrumentation.

Directions for the boxed notation are given in the score at m. 108. In each part, the length of the box dictates the general pace of the note or notes within. For example, the first horn part in m. 108 has only one note in the box indicating that this note will be approximately two seconds long.
Fig. 5--Example of proportional notation

and reiterated until the end of m. 109. Therefore, within a period of six seconds, there will be three separate notes articulated. It is most important that the players observe the direction for aperiodic durations. They will thereby avoid any tendency for synchronization of parts. At m. 118, there is a return to standard notation. The tempo and rhythm again become exact, however the pitch content is initially unchanged. A great reduction of the original tempo at this point in section C continues the dispersion of energy and pressure which had been building in the first two sections.
The retransition begins in measure 137. Here, the staccato articulation returns as does the original melodic and harmonic material. The notes from the opening chords are transposed down a minor third and used in an arpeggiated, ostinato pattern (Fig. 6). In measures 142-152 this ostinato pattern is rhythmically shifted and ornamented. The pattern continues at a new pitch level in m. 153. Material presented in the brass section from m. 158-164 recalls the treatment of the a' section. Once again, timbral counterpoint is abundant. When the original tempo returns, the texture becomes quite full. While most of the ensemble plays a sporadic chordal accompaniment, the first oboe, first trumpet, and xylophone play a sustained passage again reminiscent of the a' section. The texture continues to grow and at the point of climax (m. 191), the first theme returns.
The A' section is a brief fragment of the first theme (3 measures) attached to the original cadential measure of the A section (m. 47). It is heard at the original pitch level and reinforced in two other registers by horns, trumpets, and the other woodwinds.

The D section, beginning in m. 195, presents new material. As was the case between the A and B sections, there is no transition between sections A' and D. The texture of the new section is quite transparent with generally smoother articulation and less activity. Once again, timbral counterpoint provides interest. Measures 206-215 serve as a transitional link to section E as did measure 107 to section C.

The final section is very much like section C in design. The only difference in the boxed notation is that some parts (flutes, xylophone, 3rd clarinet) have stems and beams with a forty-five degree slash through the beams. These notes are to be played as fast as possible (first and second flutes not synchronized). At the end of the E section, some of the parts are no longer encased in boxes. They should be played only once.

Since no section is based upon functional, harmonic progressions, and "harmony" is used mostly for coloristic effect, many sections have a static quality. In most cases, the pitch content is the main unifying factor. New melodic shapes and harmonies are created by rearranging certain
pitch groups. Figure 7 is a skeletal, harmonic catalog for each section.

Sections A, tr., C, retr., E

Sections B, D

Fig. 7--Catalog of harmonic material

As previously stated, the pulse of Kinetico is dictated by constant eighth-note activity (except for the proportional sections) within a framework of changing asymmetrical meters and divisions. Figure 8 is an attack density graph which illustrates this characteristic. The pitch content is also restricted to further the impression of static energy. Finally, the proportional sections represent the random dispersion which occurs when pressurized energy is released.
Fig. 8--Attack density graph
INSTRUMENTATION

2 flutes
2 oboes
3 clarinets in B♭
bass clarinet in B♭
2 bassoons
alto saxophone in E♭
2 horns in F
2 trumpets in B♭
trombone
euphonium
tuba
contrabass
3 percussion

1st suspended cymbal, snare drum, wood block, celeste, triangle, xylophone, glockenspiel

2nd celeste (shared), xylophone (shared), snare drum, timpani, wood block, tam tam, triangle, glockenspiel (shared), 3 tom toms, suspended cymbal (shared), triangle, marimba

3rd xylophone (shared), suspended cymbal (shared), timpani (shared), snare drum (shared), bass drum, wood block
$J = 160 \ (J = 320)$

flutes

oboés

clarinets in B♭

bass clarinet in B♭

bassoons

alto saxophone in E♭

horns in F

trumpets in B♭

trombone
euphonium
tuba

contrabass

percussion

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Boxed Notation:
Play pitches in given order, using legato
tedo articulations and Mein
ations (without synchronization between
parts).