Trina K. Kissel
Senior Honors Composition Recital
November 3, 2000

Ball State University
Muncie, Indiana

Thesis Advisor:
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Abstract
This project is the culmination of several semesters of composition lessons and electronic music classes. A recital is presented in the last semester of undergraduate study, and includes a mixture of instrumental and electronic music. This compilation of work contains a discussion of important thought processes involved when composing electronic music which parallel general instrumental musical ideas, such as dynamics, rhythm, and motives, the original recital program, program notes which explain the inspiration for the music, and the manuscripts of music.
Composing Electronic Music:

Musical Correlations between
Electronic and Instrumental music
Listening to a concert of electronic music can sometimes be unnerving for an audience. The combination of unfamiliar sounds into an unrecognizable musical form can cause the audience to perceive the piece as boring, unintentionally humorous, or too bizarre to be appreciated. The challenge when composing electronic music is to create a new “soundscape,” which the audience can identify as a musical whole. The most important aspect when creating an effective piece of electronic music is for the composer to think of it as a traditional piece of music. It should possess motives, dynamic variations, rhythmic structures, and form.

I composed two pieces that possess these characteristics most obviously, *A Jawbone in the Yard* and *Endeavors*. Musical form is vital to both of these pieces. In *A Jawbone in the Yard*, the form is a miniaturized three-movement symphony. I chose to write an electronic piece in movements because my compositional ideas are generally very short. I envisioned a set of musical vignettes, where the overall piece had a form, but the effect created in each was very different. The first and third movements have a quicker tempo; that is, the events are short in duration and layered in a way that gives the listener the impression of events occurring quickly. The second movement is similar to a “slow movement” in the sense of a traditional symphony. It is slightly longer and textural changes are introduced more slowly. The movement is meant to evolve from one soundscape to another over time. *Endeavors* has a completely different form and style. It is very similar in length but is not divided into movements. *Endeavors* is in binary form, where section A is based upon the sounds of a tractor, section B uses a toothbrush sound as its basis, and then it returns to a very similar sound, though abbreviated in form, of the original A section. Often times, a great deal of consideration is taken when deciding the form of a piece; however, I knew right away that I wanted *Endeavors* to be unified with a tractor starting at the beginning of the piece and a tractor dying at the end.
In some electronic music, there may be no obvious motivic element. Often motives are simply one electronic sound which recurs throughout a piece. Motives can also be a combination of sounds, which may create a rhythm. In my compositions, I try to create motives which are identifiable by the sound alone, by the pitches of the sound, or by the rhythm. For instance, in *A Jawbone in the Yard*, the first motive is the opening sound by itself, created from a pig squeal. When listening carefully, this pig squeal has three distinct ascending pitches. The next sound I introduce, a plastic sound created by hitting things with a short tube, I pitch shifted three times, so that it matches the three ascending pitches of the squeal. I then tried to match these three pitches to the rhythm of the pig squeal. The extent of my effort to create related motives may not be immediately obvious to the listener, but the overall effect becomes a more unified whole because of the motives. The second section of my composition, *Endeavors*, illustrates how a sound that is used motivically can be combined with another sound to create a new motive. I use two separate and distinct toothbrush sounds in the section. After using both individually, I fuse them together, which creates a new motivic element. Motivic relationships also aid the listener in understanding where the piece is going. If motives occur more quickly and higher in volume, the listener will understand that a climax is being reached, which could signify the ending of a piece or section.

Although electronic music does not always include overt rhythmic structures, in my compositions they are often extremely important. Just as there are moments in some instrumental music, such as Stravinsky’s *The Rite of Spring*, that is defined by an intense rhythm but does not have a discernible melody, when composing electronic music, I strive for a recognizable rhythmic pattern that continually occurs. The rhythms in most of my electronic music could be written out in the standard musical notation system, and sometimes I even find myself whistling or humming them. Rhythmic structures occur in my compositions in two ways. Sometimes a sound by itself or combined with other
sounds creates a rhythm. Many sounds also become rhythmic after some repetition. I use both of these methods to create rhythmic motives.

Although many pieces of electronic music sound very random to audience members who have not been exposed to a great deal of electronic music, much thought is put into the music by the composers. Karlheinz Stockhausen, who composed electronic music in the 1950s and 60s, published a score to his piece Kontakte, for piano, percussion, and tape. He developed a complex notational system which covered every aspect of his music. I attempted to musically notate one of my electronic compositions, before I began the process of actually constructing the piece. My notational system included colors for ranges of pitch, dots and lines for shorter and longer durations, and sparse and dense areas that reflected texture. Although my finished product did not follow my original notation exactly, the process of symbolizing my music with shapes and colors helped me visualize the form and find unifying characteristics that I would use throughout.

I believe that electronic music has not become more popular because the average audience member can not discern the relationships between electronic and instrumental music. Although the musical attributes may not be immediately obvious, most electronic music pieces do possess some of these characteristics, such as motives, form, dynamic variations, and rhythmic structures.
Recital Program
and Program Notes
TRINA K. KISSEL
in a
SENIOR HONORS COMPOSITION RECITAL

Fanfare (1998) .............................................. Trina Kissel (b. 1978)
for piano

Sedimentary (1999)
for stereo tape

Test of Valor (1999)
for trumpet and two French horns
Paul Geraci, trumpet
Travis Golliher and Matt Doublestein, French horn

Sonorous (1998)
for stereo tape

Four Country Scenes (1999)
I. Cemetery
II. The Windmill
III. The Old House
IV. Abandoned Barn
Stephanie Roy, piano

Endeavors (2000)
for stereo tape

Three Poems (1999)
I. Look back in time
II. When roses cease to bloom
III. It's such a little thing to weep
Kathleen Odefay, voice
Jennifer Gaskill, flute - Katie Rosenthal, piano

I Wander in Darkness and Sorrow (2000)
for stereo tape

A Jawbone in the Yard (an unusual way to lose a friend) (2000)
in three movements
for stereo tape

Trina Kissel is a student of Cleve Scott and Jody Nagel
and the recipient of a Young Artist Award and the Mary Ogden Silverly Scholarship.
She is a member of Sigma Alpha Iota,
International Fraternity for women in the field of music;
Golden Key National Honor Society; Pi Kappa Lambda, National Honor Society in Music,
and the Ball State University chapter of the Audio Engineering Society.

This recital is presented in partial fulfillment of the requirements
for the degree Bachelor of Music with a major in Music Engineering Technology
and for the Honors Program at Ball State University.

PRUIS HALL
Friday, November 3, 2000
8:00 p.m.

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Fanfare, for piano

Fanfare is the first composition I wrote, and the assignment was to use a set of four intervals which would always remain the same. At first, being very nervous to commit to pitches on paper, I used my sister's keyboard, which could only record one note at a time. I played all four notes simultaneously over and over, and then took melodic dictation during playback with the resulting notes that the keyboard detected as hit first. However, my random approach wasn't exceedingly musical, so I had to give up and write my own music. I decided to stay within the original pitches that I chose, B, C#, E, F#, for as long as possible. Most of the phrases of the piece only use these four notes, with the exception of two phrases which modulate to four new pitches.

Sedimentary

Sedimentary is a piece in two sections. The first is shorter, and contains sound sources of gravel falling down a roof, hitting concrete blocks with a hammer, and a pitched sound produced by the Yamaha TX81Z. I thought of the concrete blocks as a motive, which I began slowly and increased in number and in volume to the climax of the first section. The second section is longer and uses sounds of cooking steak on a grill and walking in gravel. I also used the K2000 and the TX81Z in this section. I use the sound of sizzles to set up a rhythmic beat, which increases in speed three times as the piece progresses. The finale is a Max patch that chooses a random pitch faster and faster and then abruptly cuts off. I used Peak and SFX Machine to create the audio samples.

Test of Valor

This piece is the most recent of my acoustic compositions. I chose three brass instruments for the contrapuntal texture that I had in mind. I wanted each part to be equally important. The three players interact with complex rhythms and textures. The form of the piece is in three parts. The first section is in C minor and is fast-paced and often uses intervals of a major or minor second between instruments to increase tension. The second section is mostly in F major and is slower and melodic. The third section returns to C minor and is reminiscent of the first section.

Sonorous

This piece was composed using the computer program Max. My intent in this piece was to create a certain sonority by layering sounds that are familiar to the listener. I used preset and slightly modified K2000 sounds such as glockenspiel, bongos, piano, and flute. The changing parameters of this piece all use a counting object. The counter controls the volume, creating a crescendo and diminuendo effect. It also controls how quickly the random number generator receives information, which varies the speeds that the instruments play. There are various other effects also controlled by a counter.
Four Country Scenes
These four movements are written with a simple melody and a static accompaniment. The melodies are based upon the heptatonia secunda modes. The mood of all four movements seems to be somewhat forlorn, and the titles reflect this mood.

Endeavors
*Endeavors* is a study in rhythmic interactions. The sound sources I used for this piece include: a two-cylinder John Deere tractor, Velcro, aluminum foil, steel wool, and my sister brushing her teeth. Sounds from the tractor are used nearly every moment of the piece. *Endeavors* begins and ends with a tractor starting and dying. The most important features of this piece are the rhythmic motives, which I create with the tractor, the Velcro, and the toothbrush. This piece was created using Metasynth, Peak, SFX Machine, and ProTools.

Three Poems
I chose three short poems by Emily Dickinson for these movements. I attempted to make the words as intelligible as possible through speech-like rhythms and pitch inflections.

I. Look back on time with kindly eyes,
   He doubtless did his best;
How softly sinks his trembling sun
   In human nature's west.

II. When roses cease to bloom, dear,
   And violets are done,
When bumble-bees in solemn flight
   Have passed beyond the sun,
The hand that paused to gather
   Upon this summer's day
Will idle lie, in Auburn,—
   Then take my flower, pray!

III. It's such a little thing to weep,
   So short a thing to sigh;
And yet by trades the size of these
   We men and women die!

I wander in darkness and sorrow
This is an electronic piece based on the reading of a poem. I chose to have my sister read a portion of Tennyson's poem, "I wander in darkness and sorrow." All the sound sources were created using her voice. Intelligibility is meant to fade in and out. Operations employed to manipulate the voice include pitch shifting, time stretching, and granular synthesis. I used Metasynth and ProTools to produce this piece. The two stanzas she read are:
I wander in darkness and sorrow,
Unfriended, and cold, and alone,
As dismally gurgles beside me
The bleak river's desolate moan.
The rise of the volleying thunder
The mountain's lone echoes repeat;
The roar of the wind is around me,
The leaves of the year at my feet.

I wander in darkness and sorrow,
Uncheered by the moon's placid ray;
Not a friend that I loved but is dead,
Not a hope but has faded away!
Oh! When shall I rest in the tomb,
Wrapt about with the chill winding sheet?
For the roar of the wind is around me,
The leaves of the year at my feet.

A jawbone in the yard (an unusual way to lose a friend)
I chose to write an electronic piece in three movements because my compositional ideas are generally very short. I envisioned a set of musical vignettes, where the overall piece had a form, but the effect created in each was very different. The sound sources I chose for this piece were all collected at my family’s farm. The first movement, which I affectionately call, “a pig’s monologue,” I used sounds from adult and baby pigs. I also used walking in gravel, and a plastic tube hitting things. The second movement (which doesn’t have a clever name) is the “slow” movement, if one is imagining a typical three-movement form. It uses sounds obtained by hitting the blades of a tractor disk with a plastic tube. It also contains the sound of cats. The third movement (which I call “a cat’s aside,” following the dramatic title of the first movement) uses the meow of a kitten and gravel falling down a roof. This piece employed Metasynth, Peak, SFX Machine, and ProTools. I promised my parents that I would not explain the title of this piece. (Just imagine growing up on a pig farm).
Compositions
Test of Valor

Trina Kissel (1999)
2. The Windmill
3. The Old House

Piano}

\( \text{\textbf{\textit{J=54}}} \)

\( \text{\textit{mp}} \)

\( \text{\textit{mf}} \)

\( \text{\textit{rit.}} \)

\( \text{\textit{p}} \)
4. Abandoned Barn
Three Poems

text by Emily Dickinson

I. Look back on time

Trina Kissel (1999)

back on time with kindly eyes, He doubtless did his best;

How
softly sinks his trembling sun
in human nature's west.
II. When Roses Cease to Bloom

\[ J. 60 \]

\[ mf \]

\[ mp \]

\[ rit. \]

\[ mf \]

\[ rit. \]
When roses cease to bloom, dear,
And violets are done, When bumble bees in solemn flight
Have passed beyond the sun,
The
hand that paused to gather
Up on this summer's day
Will idle lie in

Au burn, - Then take my flower pray!
III. It's such a little thing to weep
It's such a little thing to weep, So short a thing to sigh, And yet by trades the size of these We men and women die!
Acknowledgments
I would like to thank my thesis advisor, Dr. Cleve Scott, for overseeing this project and my recital, and for giving me composition lessons. I would also like to thank Dr. Jody Nagel for many semesters of composition lessons. My family and friends also deserve many thanks: Mom, Dad, Carrie, Christine, and Josh.