

SUSAN BOTTI'S *COSMOSIS*: A CONDUCTOR'S ANALYSIS
WITH PERFORMANCE CONSIDERATIONS

Angela Schroeder, B.Mus, B.Ed, M.Mus

Dissertation Prepared for the Degree of
DOCTOR OF MUSICAL ARTS

UNIVERSITY OF NORTH TEXAS

May 2007

APPROVED:

Eugene Corporon, Major Professor
Darhyl Ramsey, Minor Professor
Dennis Fisher, Committee Member
Graham Phipps, Director of Graduate Studies in
the College of Music
James C. Scott, Dean of the College of Music
Sandra L. Terrell, Dean of the Robert B. Toulouse
School of Graduate Studies

Schroeder, Angela. Susan Botti's *Cosmosis*: A Conductor's Analysis with Performance Considerations. Doctor of Musical Arts (Performance), May 2007. 54 pp., 3 tables, 7 illustrations, bibliography, 8 titles.

In 2005, composer Susan Botti won the coveted Prix de Rome in musical composition and spent eleven months in residency at the American Academy in Rome. That same year, the University of Michigan Wind Symphony, under the direction of Michael Haithcock, premiered her exciting new work *Cosmosis* at the College Band Directors National Association Conference in New York City. The bi-annual conference is a venue for the premiere of new works for wind ensembles and bands, and the 2005 conference saw the world premiere of nine works for winds and percussion, many of which were performed in the legendary Carnegie Hall. What made the debut performance of *Cosmosis* exciting and notable was the composer's own appearance as soprano soloist, and the inclusion of a chorus of women augmenting the ensemble of winds and percussion. Such a combination of elements is unique, and created a fresh and powerful sonority. Botti's inventive approach to composition has expanded the repertoire for both women's chorus and wind ensemble with this distinctive work.

This study is intended to serve as a guide to the study and performance of *Cosmosis*. The information provides a detailed examination of the work from its conception to its premiere performance. The work is based on the poetry of American poetess May Swenson, and Botti's interpretation of the poetry in music unveils interesting parallels between these artistic disciplines. The research provides a contextual framework from which the conductor may begin study of the work, and which may lead to an informed performance of the work.

Copyright 2007

by

Angela Schroeder

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
LIST OF ILLUSTRATIONS	v
Chapter	
I. SUSAN BOTTI – BIOGRAPHICAL INFORMATION	1
II. ORIGIN OF THE WORK	2
III. COMPOSER AND PERFORMER	4
IV. MAY SWENSON AND THE POETRY OF <i>COSMOSIS</i>	6
V. ANALYSIS OF <i>COSMOSIS</i>	9
Movement One – “Overboard”	
Movement Two – “The 1st Night”	
Movement Three – “Interlude”	
Movement Four – “The 2nd Night”	
VI. COMPOSITIONAL TECHNIQUES	35
Text Painting in <i>Cosmosis</i>	
VII. CONDUCTING CONSIDERATIONS	39
Conclusion	
APPENDICES	43
BIBLIOGRAPHY	54

LIST OF TABLES

	Page
1. “Cosmosis”: Outline of Movements, Literary and Theatrical Elements	10
2. “Overboard”: Poetry Vs. Rhythm.....	12
3. Text Painting.....	36

LIST OF ILLUSTRATIONS

	Page
1. Movement One, m.22-25 – Choral Canon.....	15
2. Movement One, m.73-74 – Choir.....	16
3. Movement Two, m. 3-6 – Motive A.....	18
4. Movement Two, m. 18-19 – Motive B.....	19
5. Movement Three, m. 9-11 – horns, Motive B, rhythmic variant.....	25
6. (a) Movement Three, m. 23 – harp.....	27
(b) Movement Three, m. 24 – English horn/bass clarinet.....	27

CHAPTER I
SUSAN BOTTI – BIOGRAPHICAL INFORMATION

Susan Botti is a composer who is also an active performing soprano. Many of her works have been written for her own voice¹, and her background in theater has infused her music with a dramatic proclivity that is both original and engaging. Much of her music has a connection to literature, drawing on the works of Shakespeare, Lewis Carroll, Denise Levertov, e.e. cummings, Phillipe Jaccottet, David Kirby and May Swenson. Her works have earned her numerous awards in composition, the most notable being the 2005 Frederick A. Juilliard/Walter Damrosch Rome Prize Fellowship in musical composition. In addition to the Rome Prize, Botti also received a 2005 Guggenheim Fellowship, the 2005 Goddard Lieberon Fellowship given by the American Academy of Arts and Letters, and the third Daniel R. Lewis Young Composer Fellow with the Cleveland Orchestra. Her many accomplishments and numerous accolades as both composer and performer have made Susan Botti a rapidly emerging musical force in the United States and beyond. Botti is currently an Associate Professor of Composition in the music department at the University of Michigan.

Botti earned a Bachelor of Music degree from the Berklee School of Music in Boston, and a Masters in Music Composition from the Manhattan School of Music. Her primary teachers were Ludmila Ulehla and Giampaolo Bracali, as well as jazz composer/arranger Robert Freedman. She has worked with world renowned artists and ensembles including composer/conductor Tan Dun, conductor Kurt Masur, composer/conductor H. K. Gruber, percussionist Christopher Lamb, the New York Philharmonic Orchestra, the Cleveland Philharmonic Orchestra, and the Orpheus Chamber Orchestra.

¹ Susan Botti, *Works* (n.d.). Retrieved July 27, 2006, from <http://www.susanbotti.com>

CHAPTER II

ORIGIN OF THE WORK

Cosmosis was commissioned by a small consortium of university instrumental conductors, organized by Michael Haithcock of the University of Michigan. The piece was to be premiered by The University of Michigan Symphony Band at the 2005 conference of the College Band Director's National Association at Carnegie Hall in New York City. This conference is a well known venue for the premiere of new works for Wind Ensemble and Band, and the 2005 conference saw the premiere of nine original works for this medium. *Cosmosis* became one of these pieces. Haithcock, being familiar with Botti's work as both composer and performer, suggested that Botti be involved with the piece as a performer as well as composer. She agreed, and chose to add a small women's choir to the work as well.

...when I write for myself I write very particularly, and I didn't want it to be about me. I wanted it to be for them, and I can't always draw that line when I get immersed in it. So I had this idea of having these "extensions" of me – twenty young women [the choir] and using those voices.²

The addition of singers to the project led Botti in search of text. Using the concept of "possibilities"³ as a starting point, she investigated poetry inspired by science. She discovered May Swenson's "The Cross Spider" in an anthology of poems about science, and was drawn in by the mythical story of a spider named Arabella. The poem was written by Swenson "in response to the news of a Skylab experiment in which a student project proposed to see whether a spider could spin a web in space."⁴

While Botti continued to research May Swenson's poetry, she discovered her poem "Overboard." She chose to use the text of this poem as the prelude for the work. She combined

² See Appendix A – Interview with Susan Botti

³ Ibid.

⁴ Botti, S. *Cosmosis*. Ann Arbor: SUBO Music, 2005.

the words “cosmos” and “osmosis” to form the title *Cosmosis*⁵. Botti began writing the piece in the spring of 2004, and it was completed for rehearsals in the fall. The piece was recorded in Ann Arbor, Michigan in February 2005, and was premiered on February 25th, 2005, in Carnegie Hall by Michael Haithcock and The University of Michigan Symphony Band, with soprano soloist Susan Botti, and the Women of the University of Michigan Chamber Choir (Jerry Blackstone, director). The piece was received with great acclaim.⁶

⁵ Susan Botti – Personal e-mail to the author, March 17, 2007.

⁶ Botti, S. (n.d.)

CHAPTER III COMPOSER AND PERFORMER

What made the premiere performance of *Cosmosis* so distinctive was Botti's participation as performer. Often a composer is present for the initial rehearsals and performance of a work, sometimes even assuming the role of conductor for the performance. However, the involvement as a performer creates an opportunity for the audience (as well as the other performers) to experience the truest possible interpretation of the composer's written intentions. Botti makes the following comments about the experience:

It is so great, I love singing my pieces. I would much rather sing them than sit in the audience. You're right involved, you have a direct impact on the changes, it's a visceral involvement. I think also it is just great because you're putting yourself on the line – you're asking everyone else to put themselves on the line, and you put yourself on the line too and I think you're not asking them to do something that you're not doing. So it's a nice thing, as far as there's a camaraderie, and a respect that happens.⁷

Because of this involvement, Botti is able to “interpret” for the other performers, who are then able to react to her interpretation. She is able to affect the performance from the inside, rather than as an observer.

While the piece was composed with the understanding that the solo part would be written for Botti herself to perform, this does not limit the possibilities of the performance. When asked about her reactions to others performing works that were conceived for her own voice, Botti states the following:

I love that someone else is interested in doing it. I love that someone else is going to interpret it and bring different things to it so it grows, it's alive! One time I wrote this piece, *Jabberwocky*, which is a structured improvisation that I did with percussion. It's

⁷ See Appendix A – Interview with Susan Botti

very extreme, but there is a score. I did a workshop once where someone did it with a pianist, not even with percussion, which is fine because they played in the piano and did all kinds of sound things. And she didn't listen to the recording; she only did it from the score. And it was fantastic – she was a fantastic singer. But to me it was so exciting that something that unstructured – not that [the improvisation] is unspecific, but that it still had some similar moments as when I did it, and so there is a sense of sharing on a different level. So I love it when others do it [improvise]. I love other singers – I love singers! I hope that my music is stuff that others will do. I mean, to have a singer as a composer hopefully feeds back to singers to come.⁸

The work has received subsequent performances by the University of North Texas Wind Symphony, Julie McCoy – soprano (October 2005), and the Hartt School of Music Wind Ensemble, Susan Botti – soprano (December 2006). Botti will perform the work with the University of Minnesota Wind Ensemble in April 2007.

⁸ See Appendix A – Interview with Susan Botti

CHAPTER IV
MAY SWENSON AND THE POETRY OF *COSMOSIS*

The source of the text found in *Cosmosis* is the poetry of American poetess May Swenson (1913-1989). Swenson was raised in Logan Utah, but went on to live most of her adult life in New York City. Swenson wrote thousands of poems in her lifetime, and published eleven books (four more were published after her death). Swenson was honored with numerous awards in her lifetime, including grants from the National Institute of Arts and Letters, the Rockefeller Foundation, the Ford Foundation Grant for Poets and Writers, and the John Simon Guggenheim Memorial Foundation Grant. She received an Honorary Doctorate in Literature from Utah State University in 1987. Additionally, her poetry was published in *The New Yorker* magazine fifty-nine times over a thirty-eight year period.

Though she lacked formal literary training, Swenson was involved in writing from a very early age. She wrote her own column in her high school newspaper, the *Scribbler*, and would begin her career in New York working as a ghostwriter. Her break into the poetry world came in 1953, when her fourth collection of poems, *Another Animal* was accepted for publication by Charles Scribner's Sons. This led to further interactions and connections with artists and poets such as Robert Frost and John Ciardi, and would provide Swenson with even greater impetus to continue writing poetry.

Swenson's distinctive canon of poems is full of imagery, and includes a plethora of references to her own life experiences and events. Swenson described her work as "experimental"⁹, and felt that "the writing of poetry can't be taught."¹⁰ In a lecture to students at

⁹ Knudson, R.R. & Bigelow, S. (1996). *May Swenson: A Poet's Life in Photos*. Logan: Utah State University Press.

¹⁰ *Ibid*, p. 85

Purdue University, Swenson made the following comments:

The reason a good diet of other poets' poems is helpful is that such a diet adds richness to the soil your seed grows in. You are the loam of your poems – your character, personality, experience, and sensitivity, your wishes, griefs, loves, frustrations, and searching into what life is all about. How you feel and how you give form to your feelings in a poem is more important than how anyone else has ever done it.¹¹

Some of Swenson's most unique poems are found in the book *Iconographs*, which is a collection of her inventive shape poetry. The configuration of the words on the page is inherent to the poetry itself, sometimes providing a visual representation of the topic found in the poetry, or creating a puzzle for the reader to solve. Swenson was renowned for these intricate wordplay designs, and *Iconographs* is one of her most popular collections.

One of the poems selected by Susan Botti for *Cosmosis* is the shape poem "Overboard"¹², in which Swenson depicts the force of gravity within a series of shortening and lengthening phrases. The opening phrase provides the majority of the words used for the rest of the poem, with a few transformations. The actions of "throw" and "drag" are interspersed with the prepositions "out" and "in" as the poem condenses and expands both poetically and visually.

The second poem that Botti selected was "The Cross Spider"¹³. This poem depicts the fictional story of a spider named Arabella, sent into space to see if she could spin a web. Swenson was inspired to write the poem after hearing about a Skylab experiment in which a student proposed sending a spider into space to see if it was possible for it to spin a web. The poem is written in the narrative voice, telling the story from an objective point of view. The poem is divided into two sections: "The 1st Night" and "The 2nd Night." Swenson is vivid in her textual descriptions, providing the reader with a strong depiction of the events that befall the

¹¹ Knudson & Bigelow, p.86.

¹² Swenson, M. (1994). *Nature: Poems Old and New*. New York: Houghton Mifflin Company, p.225.

¹³ Swenson, M. (1987). *In Other Words: New Poems*. New York: Alfred A. Knopf, Inc., p.39.

spider. She experiments with punctuation, sometimes continuing a phrase over several lines with no punctuation, and sometimes ending in the middle of a line. Certain words are capitalized for emphasis, and one phrase even expresses Arabella's own thoughts, presented in quotation marks and further justified by the narrative voice. The poem is written much like a short story, and draws a stark contrast to the earlier shape poem "Overboard."

CHAPTER V
ANALYSIS OF *COSMOSIS*

Botti states that her experience in theatre and drama has been a major influence on her as both performer and composer.¹⁴ May Swenson was also interested in the theatre, and wrote one play, *The Floor* in 1966. This provides a frame of reference when investigating the formal construction of *Cosmosis*. The compositional structure of the work can be compared with that of a traditional theatrical or operatic production, which is typically structured in Acts and Scenes. The dramatic content of both the poetry and the music in *Cosmosis* relate to dramatic structure. Botti herself subtitles the opening movement, “Overboard”, as “Prologue,” and the third movement is called “Interlude,” as might be found between acts of a dramatic production. The four movements can then be regarded as Prelude/Overture, Act One, Interlude/Reprise and Act Two (See Table 1). The soprano soloist appears only in Act One and Act Two, delivering the majority of the poetic narrative from “The Cross Spider.” However, Botti instructs that the movements be performed “attacca” (with little to no break between), unifying the piece in its entirety. The four movements are further unified in a number of ways that will be explored in the discussion of each individual movement.

¹⁴ See Appendix A – Interview with Susan Botti

Table 1. *Cosmosis*: Outline of Movements, Literary and Theatrical Equivalents

**Movement One –
“Overboard”**

Prologue/Prelude/
Exposition
Shape poetry
Spoken word

**Movement Two – “The
Cross Spider”**

“The 1st Night”/Act One
Soloist/Aria
Setting/Rising
action/Development

**Movement Three –
“Interlude”**

Reprise of Previous
Material
Transition

**Movement Four – “The
Cross Spider”**

“The 2nd Night”/Act Two
Soloist/Aria
Further Rising
Action/Development
Climax/Denouement

Movement One – “Overboard”

The first movement, “Overboard”, was written to be a prologue to the other three movements of the piece. Because it is based on a poem that is separate from the rest of the piece, Botti uses this unique shape poem as a pre-cursor to the story and ideas of the poem “The Cross Spider”, which is the basis for the remainder of the work. Botti writes in the score:

“Overboard” plays with musical equivalents of gravitational force following the shapes laid out in the poem, before entering the gravitation-free sea of space [in “The Cross Spider”].¹⁵

Botti explores the musical equivalents to gravitational force referred to in “Overboard” with the use of overlapping and rhythmically varied entries of identical material, repeated ostinato patterns and tutti ensemble arrivals. These are contrasted by Botti’s inventive non-gravitational musical concepts, including phrasal elisions, cadenza-like solo passages and dissonant chordal accompaniment. The visual schemata of the poem is honored and cleverly translated into musical phrases. For example, Botti uses shorter note values for lines with greater syllables, and longer values when there are fewer words or syllables. While the layout of the musical score is unable to appear in a single unit or page like the poem, the changing note values do provide a visual connection to the layout of the poetry, working functionally as well as appearing in a visually aesthetic way. (See Table 2)

¹⁵ Botti, S. (2004).

Table 2. “Overboard”: Poetry vs. Rhythm

What throws you out is what drags you in	..... eighth, two sixteenth, eighth, quarter triplet
What drags you in is what throws you	..... eighth, quarter triplet, sixteenth, eighth
What throws you out is what drags	..... two eighths, two sixteenths, eighth, sixteenth, quarter
What drags is what throws you	..... dotted quarter, eighth, sixteenth, two eighths
What throws you drags	..... eighth, quarter-dotted quarter, sixteenth-half
What drags throws	..... eighth, quarter-dotted quarter, half
Throws drag	..... sixteenth, quarter
Thrags	..... dotted quarter
Drags throw	..... half, eighth
What throws drags	..... eighth, quarter, half
What drags you throws	..... eighth, quarter, eighth, quarter
What throws is what drags you	..... eighth, quarter, two eighths, quarter
What drags you in is what throws	..... eighth, quarter triplet, sixteenth, eighth, eighth
What throws you out is what drags you	..... two eighths, two sixteenths, eighth, quarter triplet
What drags you in is what throws you out	..... quarter triplet, quarter triplet, sixteenth, eighth, two sixteenths, eighth – eighth triplet/eighth/quarter triplet
What throws you in is what drags you	..... two eighth, three sixteenth, eighth, quarter triplet
What drags you out is what throws	..... quarter, dotted quarter, quarter, eighth
What throws you out drags you	..... two eighths, quarter, quarter triplet
What drags throws you in	..... two quarters, dotted eighth, sixteenth, eighth
What throws drags you	..... eighth, quarter triplet
Drags throw you	..... half triplet
Thrags ^{16, 17}	..... dotted half

¹⁶ Swenson, M. (1994).

¹⁷ The poetry of May Swenson is used with permission of the Literary Estate of May Swenson.

“Overboard” breaks down into five distinct sections:

Introduction – A – B – C – Coda

The Introduction and Coda are instrumental only, while the inner sections utilize the choir with the ensemble to present the narrative of the poem. One of the main features of the movement is presented in the first measure of the movement by the percussion. The composite rhythmic pattern created by the two percussion voices becomes a recurring ostinato pattern throughout the movement. This heterophonic rhythm becomes a predictable element in the texture, and creates a mood or groove for the movement that will be juxtaposed against the rhythmic complexity that later appears in the choral parts.

The Introduction of “Overboard” begins with two measures of the aforementioned percussion ostinato, repeated three times. This is followed by four phrases of increasing activity and intensity, created by tremolo and trill effects which are set against dissonant chordal sonorities. Each of the four phrases builds in instrumentation and dynamic, and culminates with the sonority of the trumpets, which use a flutter tonguing effect that moves in opposing directions within the section. The phrases are linked by a variety of elisions, most commonly with a new pedal tone that crescendos across the bar line into the new phrase. These elisions provide a linear connection between the phrases, allowing them to flow naturally into each other with no disruption. The links between the first and second, and second and third phrases are achieved with trills in the low woodwind and string bass parts. A whole note crescendo links the third and fourth phrases, while the fourth phrase ends with an ensemble outburst followed by a percussive link to the A section. This link is followed by a vocalization from the entire ensemble, stating the first phrase of the poem – “What throws you out.” This elides the entry of the choral

parts with the transition from the introduction into the A section. This full ensemble vocalization initiates the choral canon that begins the A section of the movement.

The importance of the musical introduction cannot be overstated, as it creates a distinct contrast between the poem and its musical reincarnation. Botti is able to set the mood of the poem before any words are uttered – a luxury not available to the poet. However, Botti’s decision to include an introduction provides a preparation for the impact that the words will have on the listener. The appearance of the poem on the page acts as its own introduction to the poetry, as the reader develops a brief sense of expectation because of the unique nature of the shape poetry. Botti has translated this sense of preparation into her musical introduction, including a sense of direction and expectation through form and sound. In addition, the sense of growth and direction created by the first four phrases of the movement provide an implication of the musical equivalent to gravitational pull that Botti has gleaned from the poetry, and which will continue to permeate the movement.

The A section is divided into three shorter sections. The first section features the women’s choir speaking the text of the poetry, accompanied by the continued percussive ostinato that was presented in the introduction. Botti chooses to notate the spoken parts with slashes in place of traditional notes. This provides a directional context to the vocal line, approximating pitch locations even though no exact pitches are expected. Because of the contour created by these approximate spoken pitches, the canonic displacement of the voices is distinctly heard.

The first two lines of the poem are spoken in three-part canon. This canon is one and a half measures long, beginning in the highest voice and followed by the other voices two beats and four beats after (See Figure 1). The canon continues through all three phrases of the A

section, becoming less rhythmically active as each line of the text becomes more sparse, eventually arriving on a sustained “pitch” for the word “thrag” (line 8 of the poem).

Fig. 1 – Movement One, m. 22-25 - Choral Canon. Reprinted, by permission, from Susan Botti, *Cosmosis* (Ann Arbor: Susan Botti/SUBO Music, 2004), p. 3-4

The B section of the movement continues with the voices in canon, but now increasing in rhythmic intensity as the text of the poem uses progressively more text in each line. The canonic rhythm of the three parts is again spread over one and a half measures, but is gradually condensed to only one beat between the parts. The ever-increasing rhythm culminates in measure 73, where all three voices simultaneously and repeatedly exclaim the word “out”- each part on a different rhythm. (See Figure 2) While this choral outburst serves as an arrival point in the movement, the simultaneous use of three disparate rhythms creates a suspension of time that defies gravity. The contradiction between the sense of arrival and the stopping of time is another musical exploration into the theme of gravity in the poem.

enter with the next phrase of text. The B and C sections of the movement are linked in measures 75 and 76, with a percussive shot followed by a series of trills in the trumpets and the upper woodwinds, and ending with a downward glissando in the trombone and timpani. Finally, the C section concludes with a D flat pedal tone in the contrabassoon, string bass and timpani (m. 89) that leads to the Coda.

These musical links are important to the relationship between the music and the poem. The poem has no implied scansion or metrical structure, as each successive phrase is a fragment or derivation of a previous phrase. A recitation of the poem allows the performer the opportunity to impose his or her personal concept of pacing to the poem. Botti has provided the sense of scansion within the musical construction of the movement. By creating distinct sections within the structure of the poem, varying the rhythmic expression of the words, and allowing the musical links to serve as moments of repose, the poem is given moments of stress and pause that are not otherwise inherent to this style of poetry. Together the ensemble and choir provide Botti's interpretation of the scansion of the poem.

Movement Two – “The 1st Night”

The second movement of *Cosmosis* marks the first appearance of material from the second poem of May Swenson selected by Botti, “The Cross Spider”. Swenson has visually separated the two sections of the poem with the use of the subtitles “The 1st Night” and “The 2nd Night”, as well as using an indentation following each subtitle.¹⁸ Botti's decision to use each section of the poem as a separate movement emphasizes this element of the poetry. Botti further highlights Swenson's two subtitles at the start of the second and fourth movements by having the choir speak the titles at the start of each respective movement.

¹⁸ See Appendix B – Swenson, M. “The Cross Spider.”

“The 1st Night” can be disseminated into the following sections:

Introduction - A - transition - B - B1 - C - Coda (B2)

The introduction allows the choir to proclaim the title/subtitle of the text in unison, which is followed by a somewhat atmospheric sound effect produced by the bending of a saw. Unlike the predictable rhythmic ostinato of the percussion in the first movement, this percussive sonority provides the opposite effect, channeling the unpredictable meandering of sound in space. The following measure is similarly non-rhythmic, juxtaposing trills and tremolos against five-tuplets, six-tuplets and seven-tuplets.

The A section begins with the first semblance of a tonal center thus far in the piece. The spoken text and percussive ostinato of the first movement provided no identifiable key area, depending more on rhythmic stability and consistency to provide direction to in the movement. The third measure of “The 1st Night” begins with the outline of an open fifth interval of B and F-sharp, suggesting a tonic of B. However, Botti maintains some modal ambiguity by including both an A and a C-sharp in the first measure, and in the next, an A-flat and a C natural. This suggestion of a major/minor modal mixture permeates the movement, as Botti uses this musical fragment or motive repeatedly, and in a series of rising tonal centers (see Figure 3).

The image shows a musical score for Movement Two, measures 3-6, Motive A. The score is in 3/4 time with a tempo marking of quarter note = 104. It features a piano part with a trill in the right hand and a bass line in the left hand. The bass line starts with a triplet of eighth notes marked 'mp'. The right hand has a trill on a sharp note, followed by a series of chords and a final trill. Dynamics include 'pp' and 'mp'.

Fig. 3 - Movement Two, m. 3-6, Motive A (Reprinted with permission)

The next appearance of this motive is in measure 13, and suggests the tonic of C-sharp. The transition at measure 25 uses the same material with E as the tonal center, while the opening of the B1 section repeats the material, now around the tonal center of F. Finally, the Coda uses the material, but instead of rising further, Botti drops the tonal center to D-flat to end the movement.

The rhythm of Motive A is also repeated, providing another rhythmically predictable element which will permeate the movement. Beginning in 3/4 time, Botti occasionally shifts into 4/4 time, causing a momentary displacement of the rhythm and a development of the melodic material that leads to the next tonal center.

The melodic material, while sporadic at first, evolves into a predictable rhythmic and linear line that will also return throughout the movement. The rhythmic motive of four dotted quarter notes which follow a repeated contour of rising and falling chords becomes another motivic element in this movement (Motive B, See Figure 4), and will also reappear in the third movement, “Interlude.” This motive appears first in the ensemble, and is further emphasized two measures later by the addition of the choir. This leads directly into the transition, in which the earlier open fifth figure – now in the tonal center of E – is repeated four times, leading to the B section of the movement.



Fig. 4 – Movement Two, m.18-19, Motive B (Reprinted with permission)

The material from the third measure of the movement up to the B section represents the indentation of the poetry as it appears on the page. Botti uses the A section of music to prepare the listener for the main text of the poem, which will be presented by the soloist in the B section of the movement. This aural depiction of the poem's visual schemata further honors Swenson's poetry, and her literary decisions in the composition of the poem.

The B section of the movement has its own brief introduction, allowing the soloist five measures of induction into the established texture of the music. This also allows the audience an aural preparation for the actual text that will appear in the sixth measure, sung by the soloist. The first words of text – “A spider” – are written melismatically and sounding improvised. This foreshadows Botti's further use of free time which will appear later in the movement, as well as in the third and fourth movements of the piece. These moments of free time allow the soloist, who personifies the narrative voice of the poem, a certain degree of freedom in the way the poem is delivered, allowing the delivery of the story an element of spontaneity that would exist were the poem recited on its own. Botti marks each of the measures of free time in the piece with a “0” in place of a time signature.

As the text of the poem is presented by the soloist, the ensemble and choir provide a subtle and staggered accompaniment that is interspersed with motivic material from the A section. Botti is careful to allow space for the text to stand out, either sustaining or dropping out the accompaniment momentarily, or highlighting the pitches and rhythm of the text with a smaller group of instruments. This awareness of balance between the text and musical accompaniment allows the text to be heard as well as understood by the listener, and continues throughout the movement.

The poetry of “The Cross Spider” is non-strophic, allowing Botti the freedom of a through-composed compositional style. Despite the motivic connections that occur, it is the text that determines the direction of the music. Botti writes several tempo instructions in the music to serve the textual articulation of the soloist and choir, including fermatas within full measures, passages marked slowly, and ritardandos. At measure 54, she suspends time with the marking “Freely”, allowing the soloist the freedom of interpretation in the form of another melismatic phrase. The melismatic phrases also serve to allow the soloist to declaim a larger portion of the text more quickly.

The next section (B1) emulates the opening of the original B section. Botti once again uses Motive A, now in the tonal center of F, and repeats the figure four times before the soloist enters. As in the B section, there is a cautious balance between the soloist and the accompanying ensemble, once again allowing the text to be prominent in the texture. Further manipulation of time through fermatas and changes of the marked tempo leads to a reiteration of Motive B (measure 83), which is then followed by another melismatic section for the soloist. A variation of Motive B occurs in measure 87, where the soloist and – one measure later – the choir sings only the first eighth note of each dotted quarter note as found in the original motive. The texture of the music becomes gradually thicker, leading to an unusual transition in measures 92 and 93. Both the ensemble and the choir are asked to oscillate between the notes of a semitone with the instructions to “start slowly together” followed by “accel. & wild”, indicated in the score with rapidly moving lines that indicate rapidly changing pitches. The next measure (93) calls for those same voices to accent the higher of the two pitches on the downbeat, descend rapidly to “any low pitch”¹⁹ on the second beat, and ascend to the original note on the following downbeat, beginning the next section of music. Measure 93 is marked at quarter note = 66 in 2/4 time, while

¹⁹ Botti, S. (2004).

the next measure is double time, quarter note = 132. Measure 93 thus establishes the new tempo when conducted at the eighth note, making the transition seamless.

The next section of music, Section C, is in an entirely new style and character. A highly rhythmic ostinato in the bass line is reminiscent of the percussion ostinato found in the introduction of the first movement, “Overboard.” The heroic nature of the music, centered on the tonal area of C, suggests a victory on the part of the heroine – Arabella – who, according to the text, catches the “the first extraterrestrial Fly”²⁰. The ensemble parts include a variety of staggered entrances, sixteenth note runs and trills, suggesting great activity. In measure 103, the ensemble presents another variation on Motive B, now using two sixteenth notes in place of two dotted quarter notes, and completing the measure with an additional two sixteenth notes. This measure serves as a transition into the return of the text, now sung by the soloist and choir in unison, and further augmented by the English horn and clarinet.

This section of the movement features a great deal of interplay between the ensemble and the vocal parts. Botti uses a great deal of imitation between the two entities, and utilizes rhythmic displacement and canonic entrances to maintain the energy of the music as it shifts between the ensemble and the voices. This section culminates in measure 117, where the choir and ensemble are in unison rhythm for the text “extraterrestrial Fly”. At the completion of this phrase, a slapstick and plucked string bass together indicate the catching of the fly, followed by a unison choral sigh (“Ah”), written under a fermata, releasing the energy that was built up throughout Section C.

The final section of the work, the Coda, completes the movement. Motive A reappears in the bassoon, now in the tonal area of D-flat, and becomes rhythmically distorted and slowed. The final five measures of the piece use only the soloist and choir to pronounce the final phrase of the

²⁰ See Appendix B – Swenson, M. “The Cross Spider.”

poem – “She ate it, and the web.” Botti uses the open fifth originally found in Motive A, but inverted (the A-flat sung below), on single eighth notes for each word. The word “and” is sung by the soloist a minor third above the tonic (E natural). The interval then changes on the second last word of text (“and”), dropping the A-flat to a G natural for one note. The final word of text (“web”) returns to the original inverted interval of D-flat and A-flat. The significance of this interval recurs at the conclusion of the third movement, and is implicit in the transition to the final movement of the piece.

Movement Three – “Interlude”

The third movement of *Cosmosis* serves to link the two sections of the poem “The Cross Spider.” Swenson creates a visual separation of the two sections on the page, and Botti realizes this separation by inserting a musical interlude that separates them aurally. The material in this movement is partially derived from previous thematic material found in Movements One and Two, providing a quasi-recapitulation or reprise of the narrative thus far. The movement also features new musical and textual material, allowing the movement its own distinction from the other three movements.

The third movement has four sections:

Introduction – A – B (B1, B2, B3, B4, B5) – transition – C

The Introduction for this movement is, once again, to be approached “attaca” from the previous movement. The chord (interval) that ended the preceding movement was a perfect fourth, A-flat and D-flat. The third movement begins with the entrance of the low woodwinds and brass playing an accented eighth note on the pitches A, D and E, shifting the listener’s ear upward. In addition, Botti writes an upward flourish in the harp and vibraphone, leading to a fermata on a

sustained fortissimo chord in the upper woodwinds and brass. The pitches are further expanded from the first eighth note of the movement, adding a D-sharp, G and G-sharp which creates an ambiguous cluster of sound. This chord fades into the second measure, which is an un-measured and non-synchronized effect created by gentle shakers and whispered “sh” sounds in the choir.

The overall effect of these two measures creates a somewhat ethereal effect which further evokes the other-worldly setting of the poetry in “The Cross Spider.” Although not related to the body of the poem, Botti treats the opening of the “Interlude” in a similar fashion to the opening of the second and fourth movements, where the subtitles are whispered by the choir with an atmospheric accompaniment. This provides further continuity to the composition, and further delineates the sections of the piece that, because the four movements are to be played “attacca,” might not be otherwise distinguished.

The A section of the movement continues in an analogous style to the introduction. The harp plays a quasi-melodic line whose individual pitches are staggered in various parts of the ensemble, gently punctuating the line. A melodic “echo” occurs three measures later in the oboe, which is similarly accompanied by various sustained pitches throughout the winds. The lack of any tonal or rhythmic anchor maintains the ambiguity of the movement to this point. In measure 9, the horns present the return of Motive B, (in a varied rhythmic guise, see Figure 5) originally heard in the second movement of the piece, providing a momentary sense of familiarity.



Fig. 5 – Movement Three, m. 9-11, horns, Motive B, rhythmic variant (Reprinted with permission).

The shakers and whispers of the introduction return in the following measure, leading to a wild outburst from the bass clarinet and the bassoon.²¹ This is followed by another appearance of Motive B in the upper woodwinds, trombone, vibes and harp, which leads directly into the B section.

The subsections found in the B section of the movement consist of a series of un-metered cues, the majority of which are uncoordinated with other parts of the ensemble. This aleatoric aspect of the piece adds a creative variable to every performance that is dependant on the pacing of the cues by the conductor. Botti is very specific in providing a tempo marking for each new entrance, and uses various ensemble sections as a unit playing in the same tempo and style.

One of the most interesting diversions from the poetry appears in the choral parts at measure 18. Botti refers to her own research and program notes, found in the score, and uses the Latin name for the cross spider – *Araneus diadematus* – as a part of the text for the choral parts. These two words are freely but quietly chanted by one half of the choir beginning in subsection B1 through to subsection B3. The rest of the choir is asked to sustain a hum on the same pitch as the chant. Botti then begins a progression of layered entrances above this chant. She brings back

²¹ Botti, S. (2004). The note in the score references jazz saxophonist/bass clarinetist Eric Dolphy (1928-1964) as the inspiration for the appropriate style to be played.

the percussion ostinato that opened the first movement of the work as the first layer, which is written in a much quicker tempo than the chant that is already in motion. The entrance of the flutes and clarinet opens subsection B2, with a three part canonic entrance that gently complements the rhythm and tempo of the percussion ostinato. At the same time, part three of the choir is instructed to interject with “intermittent whispers” as a part of the texture. As these three parts continue, repeating freely, Botti links this section to the start of the next with a whole-note chord in the low brass that consists of notes found in the choir, flute and clarinet parts. The relationship of pitches between these layered parts suggests a possible tonal center of G major. At this point, part three of the choir is instructed to interject with “bursts of laughter” while the rest continue to chant and hum.

Subsection B3 begins with a lively tarantella in the trumpets – the composer’s thematic “nod” to the subject matter of the poem.²² This is followed by a melodic entrance in the harp, written as seven eighth notes in 7/8 time (See Figure Six A). The pitch content of this melody maintains the relationship to the tonal center of G, and is imitated by other sections throughout the remainder of the B section. The English horn and bass clarinet that follow mimic the harp melody, alternating the first four pitches in quarter note triplets (see Figure Six B).

²² The association between the tarantella and spiders (namely tarantulas) has a long history. Legend said that dancing a tarantella could cure the bite of a tarantula. However, the name for the folkdance comes from the Italian city of Tarantu where it originated. (from E. Schwandt: 'Tarantella', *Grove Music Online* ed. L. Macy (Accessed 22 January 2007), <<http://www.grovemusic.com>>

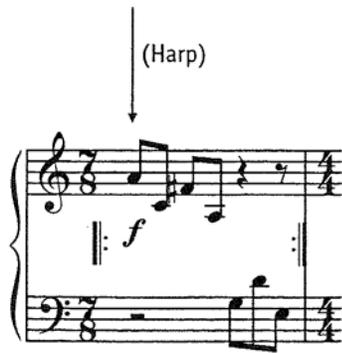


Fig. 6A – Movement Three, m.23, harp



Fig. 6B – Movement Three, m. 24, English horn/bass clarinet

The next point of imitation occurs in the choir, where parts two and three replicate the English horn part and bass clarinet part of measure 24. The choir now uses the word “Arabella” – the name of the spider in “The Cross Spider” – as the text for the remainder of the movement. Part one of the choir enters the texture with the pitch set found in the other voices, beginning in a higher range and alternating with part two, while part three returns to the chant, humming and laughter. The subsection ends with another sustained chord in the low brass, with the addition of B-flat and E-flat to the pre-dominant tonal area of G, emphasizing the modal mixture of major and minor.

The final subsection, B5, begins with a clearing of the layered texture, with only the percussion and choir continuing through. The low woodwinds create a low rumble with a tremolo that supports a repeated scale-like flourish in the bass clarinet. The choral parts enter in a still higher pitch range, creating greater intensity while maintaining the tonal center. This range is imitated by entrances in the flutes, the high brass and the glockenspiel. Botti again inserts a sustained chord in the low brass that acts as a pedal tone underneath the layered texture. She

further augments the chord with the inclusion of a C-sharp and a G-sharp, now straying away from the implied tonal center of G previously established.

Each of these layered parts are instructed to crescendo through each repetition of their given figure, and eventually accelerate in dynamic and tempo to the arrival at measure 36, where the transition begins. Botti uses a slow timpani crescendo in measure 36 to set up the dramatic doubling of the tempo and change of style that begins in measure 37, where the ensemble quotes itself based on measure 103 of the second movement. This “shout chorus” is followed by a two-measure drum fill that leads to the start of the C section.

By layering so many different musical figures on top of themselves, Botti challenges the listener to distinguish music that has been previously heard in the work from music and text that are new to the piece, and to hear all of them simultaneously as one entity. She makes this possible by using common pitches and intervals between the different entrances. Despite the aleatoric composition as well as the diversity in tempos and styles, the different figures have a strong relationship to each other, making their juxtaposition successful.

In this final section of the movement Botti uses the ensemble to reprise much of the material from the previous movements. For example, measure 39 uses the melodic material found in the soprano and choral parts in measure 104 of the second movement, while measure 46 uses the same material found in measure 114 of the second movement. These reiterations are combined with the recurrence of the percussion ostinato of the first movement, also present earlier in the movement. Botti also quotes material from earlier in the third movement – measure 56 uses the melodic figure that was played by the flutes and clarinet in subsection B2 in the English horn, clarinet, soprano saxophone and choir, varied in that she no longer uses staggered

entrances. Finally, the choir reprises the outbursts of laughter of the B section, completing the movement with a final extended episode of laughter that leads to the fourth movement.

By referencing previous material, Botti provides the listener with a reminder and recapitulation of the events of the poem thus far, in much the same way that a prelude or interlude to a dramatic production uses previously heard material to recreate the scene for the continuation of the story that was broken up by an intermission. This movement, therefore, IS the intermission as well as the prelude to the next act. Botti also intended the movement to feature the instrumentalists, providing them with the opportunity to play and demonstrate their own strengths.²³

Movement Four – "The 2nd Night"

The final movement of *Cosmosis* concludes the poem "The Cross Spider." The movement truly begins on the final beat of the third movement, where Botti writes a fermata chord in the ensemble that is tied into the first measure of the fourth movement by the aural sustain of the percussion (vibraphones). This chord uses all of the notes of a D-flat major scale, which is the same tonal area that ended the second movement of the piece. The continued ambiguity surrounding tonal centers throughout the work make even moments of concrete key areas such as this seem uncertain.

The fourth movement has the following sections:

Introduction – A (A1, A2) – B – (reprise) – Coda

Once again, the introduction begins with the chorus speaking the second subtitle – "The 2nd Night", accompanied by the sustained chord of the percussion and an embellishment by the harp. The opening lines of the poetry are expressed in a recitative style, beginning with the only phrase

²³ See Appendix A – Interview with Susan Botti.

of the poem that expresses the spider's own thoughts – “‘Act as if no center exists’ Arabella advised herself”²⁴ – is written in an unmeasured chant that is up to the performer to interpret. The next phrase, though written in time, is accompanied only by a sustained pitch in the flute, allowing the solo part to remain somewhat free. This is followed by the entrance of the choir, who state the next phrase of text, accompanied by a *molto ritardando* descending scale passage in D-flat major in the ensemble that leads to the A section of the movement. This tonal moment relates back to the conclusion of the second movement, where the final cadence is in the key of D-flat. This creates an expectation for the tonality of the fourth movement. However, an immediate shift of tonality occurs on the downbeat of the A section, as Botti maneuvers the pitch material around the perfect fifth of D and A. Two measures of this interval repeated in the accompaniment serve to establish this new tonal center, while setting up the next entrance of the soloist.

At this point of the movement (Section A1) Botti uses the soloist as the narrator, presenting a large portion of the remaining text with the choir and ensemble augmenting the story with a variety of sound effects and text painting. This section of the poetry, like the second movement, is non-strophic, and is again through-composed to suit the text declamation. Most of the text in the movement is set syllabically, allowing for a quicker delivery of the story within a deliberate and unhurried timbre. The choir provides a harmonic base for the upper melodic line of the soloist, often filling in a four-part accompaniment below the soloist.

The majority of the ensemble parts double those of the soloist and choir, highlighting their melodic lines and direction. Where there are breaks in the text, the ensemble provides the harmonic structure with sustained pitches, quick percussive sound effects and tremolos. Botti brings to the fore one solo voice from the ensemble – the soprano saxophone asserts itself as a

²⁴ Swenson, M. (1987).

soloist beginning in measure 15, and continues to appear as a link between phrases and, eventually, fragments of the text.

The movement shifts style beginning in section A2 (measure 45). A sudden shift in the tempo alters the intensity of the rhythm, and leads to a highly rhythmic proclamation by the choir. The text is interspersed with hand claps and foot stomps that create a unique and unexpected aural and visual (theatrical) effect. Written in compound time, the elements of dance and music found here once again allude to the lively Italian dance, the tarantella. This brief disruption to the atmospheric setting of the movement transfers the energy away from the soloist momentarily, and allows her next entrance even greater impact as the poem nears completion.

At measure 50, the soprano saxophone is given a poignant cadenza that foreshadows the conclusion of the poem. This moment of repose acts as a transition into the B section of the movement. The soprano soloist delivers the next line of text in a melismatic style, lingering over the words that precede the demise of Arabella. The words “Arabella crumple –died” are delivered in a whisper, with no accompanying pitch in the ensemble. The final words of the poem – “experiment frittered” appear in free time, repeated, and are also whispered, initially in unison and slowly evolving into a “sh/ch” sound that is accompanied by a timpani roll and a shaker. A series of cues follow, including cadenza-style outbursts from the bassoon, contrabassoon and bass clarinet and a distant and indeterminate reprisal of the word “afloat” in the solo soprano. The section concludes with several bowed sound effects in the percussion, followed by the creation of white noise and radio noise by the choir. This unexpected sonority continues to the conclusion of the movement, figuring prominently in the overall scheme of the work.

At this point in the movement, a reprisal of the material found in the introduction to movement one appears. This musical interruption brings the poetry and the music full circle, and reminds the listener where the piece began prior to the dramatic conclusion of the story. It also reminds us of Botti's inference to the play on gravity found in the text of "Overboard" and which provided a thematic foil to the elements of outer space in "The Cross Spider." The six measure section follows the same aural scheme found in the first movement, beginning with the now familiar percussion ostinato, and slowly stacking a series of sustained pitches and trills on top of each other, leading to an accented arrival on the downbeat of measure 66. At this moment, the sound effects that were initiated prior to this interpolation re-emerge, signaling the beginning of the Coda.

The final section of the movement is written in free time, and involves some of the most creative elements of the entire work. The choir is called upon to provide a great deal of improvisation and drama to the piece, having a great deal of artistic freedom bestowed upon them. Botti also incorporates some visual elements to this section of the music. The choir and soloist react to the fortissimo ensemble chord in measure 67 by markedly and rapidly covering their ears with their hands. The soloist is then instructed to open her hands around her ears, seemingly "tuning in" to the radio and space sounds that the choir will make. The choir lowers one of their hands, keeping the other at their ear as though they are listening to something quiet. It is at this point that the improvisation begins. Botti offers the following supplemental program note for this section of the movement:

For the Chorus Improvisation (in "The 2nd Night"), the singers follow cues from the conductor alternating between "white noise"-based textures to concrete tuned-in "stations". These stations can be radio-oriented (all styles of music, talk shows, announcements, weather reports, etc.); cell phone conversations, and/or any other cosmic sounds riding the wave of an available frequency (all languages)! These "stations" should

be caught in progress when cued and cut off at any point in their progress by the following cue.²⁵

The conductor provides twenty-one cues to the choir which correspond with twenty-one events. The events, as stated by Botti, alternate between the white noise/radio sounds that began earlier in the movement, the unison finger snaps or clicks by the members of the choir, and a mixture of vignettes from a variety of imaginary radio stations. The effect should be one of turning the dial on a radio between a variety of stations, and the static or feedback that is heard while tuning in. These events become closer and closer to one another, the delay between them getting shorter and shorter. The final cue to the choir involves only white noise, which will continue to the end of the piece, and which is followed by one final chord in the ensemble that begins piano and does a mild crescendo-diminuendo. This chord juxtaposes the triads of D major and D-flat major, remaining tonally ambiguous to the end of the piece. The percussion resumes the bowed sound effects that began the coda, while the rest of the ensemble creates slowly diminishing air sounds through their instruments. The choir and percussion complete the movement with a drawn-out fade into silence.

The final movement of the piece provides two of the foremost elements of the overall formal construction. The climax for the “story” found in “The Cross Spider” occurs when Arabella the spider dies. In the poem, Swenson follows this event with only two final words – “experiment frittered”. This can be considered the denouement of the poem or story, as the climax has occurred and there are no more questions to be answered. The musical climax, however, does not coincide with the timing of the story. Botti’s decision to create the section of improvisation after the climactic moment in the text creates its own climactic energy, providing

²⁵ Botti, Personal e-mail to the author, March 17th, 2007.

additional information to the story before the musical “denouement” that occurs in the final three measures of the piece.

CHAPTER VI COMPOSITIONAL TECHNIQUES

A striking feature in the composition of *Cosmosis* is Botti's approach to sound. She is not bound by traditional harmonic structure or function, in much the same way that Swenson was not bound by the conventions of grammar or punctuation in either "Overboard" or "The Cross Spider." While there are many allusions to tonal centers or keys throughout the work, the sense of direction in the music is driven more strongly by rhythmic and dynamic gesture than by any chordal progression or tonal expectation. Without such constrictions, the text becomes the inspiration that motivates her decisions surrounding pitch and tonal selection.

Both Botti and Swenson approach the composition of their respective art forms in a similar way. The two poems of Swenson display some unconventional stylistic elements – "Overboard" for its original appearance and repetition, "The Cross Spider" for its use of selective capitalization, punctuation and through-composed narrative style. Botti's own through-composed style and "layered"²⁶ approach to the music is unique in its own right. There is an unfettered nature and freedom that both artists apply to their craft that are non-compliant with any traditional standards. Because the poetry preceded the music, Botti's musical decisions are influenced by Swenson's style, and lead her to compose in a style that honors the poetry.

Text Painting in *Cosmosis*

One of the most common ways that Botti conjures the imagery of the poem is by the use of text painting, where the musical sound imitates the word (or words) that it represents. This compositional technique is the exact opposite of the literary device onomatopoeia, which is when

²⁶ See Appendix A – Interview with Susan Botti

a word imitates the sound that it represents. Botti creates specific musical depictions of ideas, sentences and individual words found in the poetry. This technique further elucidates Swenson’s text, and brings greater cohesion to the relationship between the text and the music. The music becomes an integral part in the expression of the poem, rather than simply accompanying the words. Table 3 outlines the instances of text painting that occur throughout the work.

Table 3. Text Painting

Movement One – “Overboard”

Ms. 36 and 61 - “drags”	Trombone 1 slides (drags) between pitches
Ms. 79 – “drags you”	The rhythm slows (drags) on the words “drags you”

Movement Two – “The 1st Night”

M.1 – “night”	The percussion and harp depict “night” with a single pitch followed by the erratic effect created by the bending of a saw
Ms. 33-34 – “spider”	The soprano soloist has 8 melismatic notes, symbolic of the 8 legs of a spider
M.47 – “hollow”	The soprano soloist is left unaccompanied (empty/hollow)
M.52 – “having no weight”	Following the utterance of “weight” by the soloist and choir, the flute and clarinet play a series of 16 th notes above the staff, a tone or half tone apart, creating a light texture with no lower accompanying pitches (cont.)

Table 3, cont.

Ms. 54-55 – “paralytically slow”:	The soprano soloist sings “paralytically” in a melismatic style over two pitches, and is joined by staggered entrances in the ensemble and choir in m. 55 at a new, slower tempo on the word “slow”
Ms. 60-67 – “free”	The soprano soloist repeats the word “free” in unpredictable rhythmic locations, culminating in m. 67 where the soloist is directed to sing the word repeatedly as quickly as possible
M.79 – “afloat”	The soprano soloist “floats” on a sustained pitch above the sustained chord of the ensemble accompaniment
Movement Three – “Interlude”	
M. 18 – “Araneus diadematus”	The Latin classification for the common cross spider is sung by the choir in a chant-like style, depictive of the words serving only as a definition
Movement Four – “The 2nd Night”	
M.2 – “Act as if no center exists”	The soprano soloist sings all of these words on the pitch C, which is tonally insignificant to the sustained chord that accompanies it
M.10 – “Circles unraveled”	The soprano soloist creates the aural equivalent of circles by wide intervallic leaps on each syllable of the word, and completes the phrase-“unraveled” with a rapid upward slide, accompanied by the choir who also slide either up or down (cont.)

Table 3, cont.

M.12 – “ladders lost their rungs”	The soprano soloist and choir sing the same pitch in three different octaves, and the intervals slowly condense on each other, losing the equally spaced interval; also emulated by the oboe, English horn, bassoon and vibraphone
M.35 – “spun”	The choir are instructed to sing random changing notes in varying directions
M.38 – “dizziness”	The oboe, English horn, soprano soloist and choir rapidly alternate between chromatic pitches
M.42 – “jumble”	The oboe, clarinet, soprano soloist and choir interrupt a steady rhythm by playing either two or three sixteenth notes, creating a rhythmic “jumble”
M.56 – “experiment frittered”	The soprano soloist and choir speak the words together, and the choir slowly fades away into a sh/chch sound effect

CHAPTER VII
CONDUCTING CONSIDERATIONS IN *COSMOSIS*

The combination of a wind ensemble, women's choir and a soprano soloist presents considerable balance issues. The most important consideration throughout the work is the balance of the text with the ensemble. The piece is composed in a chamber-like style, where the vocal parts (solo or choral) are frequently accompanied by only a small group of instrumentalists. The instrumental soloists must project their parts in a soloistic manner, as the texture is often quite sparse.

The difficulty of the choir parts necessitates a great deal of rehearsal separate from the ensemble and the soloist. The choir must be assertive in their spoken parts to create the desired timbral effects that Botti has created. The voices of the choir split into as many as six separate parts at a time. As all of the voices are female, the parts are commonly written quite close together, making it more difficult to hear the different parts. Botti has supplied a piano reduction of the piece to facilitate the rehearsal of the choir parts.

The soprano solo part requires a singer with a strong ear. Many of the solo entrances have no prior pitch reference for the soloist to locate their next note. Therefore, the soloist must be familiar with the accompanying parts and the relationship to her next pitch. The soloist must also have the ability to capture the audience through the narration of the poem, using a theatrical approach to the articulation of the words. Botti's theatrical background suggests that the soloist should interpret the music musically and textually, and visually represent that interpretation to the audience.

The various moments of "free" (un-metered) time throughout the work require the conductor to manage the cues for the various parts that occur within each free section. This may

be done in a variety of ways, and may include assigning a number to each predetermined cue (noted in the score with an arrow at the top of the staff) that the conductor can show with their fingers. A consistent approach to each of these free moments will allow a clear understanding of how this will take place is important for all of the performers.

Botti includes a variety of extended sound techniques throughout the work that the conductor should consider in their interpretation of the piece. The instrumentalists are required to vocalize in the same manner as the choir (in “Overboard”). This demands an interesting decision concerning the timbre of the female choir versus the inclusion of male instrumentalists in the ensemble. Should the conductor wish to maintain the higher timbre of women’s voices, they may ask that only the female instrumentalists participate in the vocalized sections. However, Botti makes no indication of this in the score, and the inclusion of the male voices simply creates another vocal texture to the work.

All of the instrumentalists are asked to blow air through their instruments to create a wind/air sound effect. The flutes are required to flutter tongue (Movement One, m.71), and all of the woodwinds have trills of various length and styles throughout all four of the movements. The brass section is asked to use a variety of mutes, including a plunger in the trombone 1 part. The percussion section is featured throughout the work, and employs a variety of unique timbral effects. Some of these include the striking and bending of a saw, the timpani bending a pitch by moving the pedal up and down, and the bowing of cymbals, vibes, crotales and a saw. Botti is very specific in her markings concerning the choice of mallets and sticks, and the conductor should consider these instructions when making balance decisions. The harp is asked to create a buzz/thunder effect on the lowest strings of the instrument (Movement Two, m. 57), as well as creating the opposite effect with the marking “bisbigliando” (a whispered tremolo created by a

light back and forth motion across the strings). The choir, in addition to the spoken parts found in “Overboard”, provide additional percussive effects that are often in tandem with the percussion section, as in Movement Three, m. 2, where the “sh” of the choral parts mimics the sound of the shakers in the percussion parts. Finally, the choral improvisatory section at the end of the fourth movement requires great imagination and assertiveness by members of the choir who must emulate a variety of radio stations. The theatrical instructions (placing hands over ears, and later slowly lowering them) add still more drama to a very dramatic work.

Conclusion

Cosmosis demonstrates the possibilities of collaboration that exist between musical disciplines as well as artistic disciplines. Botti’s decision to combine all of the elements found in the piece has provided a work of a unique style and character that will add significantly to the limited repertory for wind ensemble and choir. She has brought the poetry of May Swenson to the attention of a new genre, and has interpreted it with a distinct compositional voice that speaks also from the perspective of a performer. This analysis of the work provides an opportunity to compare the work of two female artists whose work in differing artistic disciplines has very similar elements and compositional concepts. Swenson’s particular approach to language and poetic form informs Botti’s own musical response, which is achieved more through musical gesture and sound than through conventional musical form and harmony. The non-restrictive elements in both the music and poetry solicit deeper investigation into what might be described as the feminine characteristics that pervade the work. Not only did Botti select the work of a female poet, she chose a poem (“The Cross Spider”) that features a female subject (Arabella the spider), and chose to augment the work with a women’s choir while assuming the role of the

soprano (female) soloist. Because the music and the poetry are atypical in their approach to formal conventions, there is a suggestion of what might be defined as a feminine approach to composition. Botti's music honors Swenson's text in a manner consistent with the free poetic style, and she chooses to transgress formal musical constraints when necessary. While Botti chooses not to identify her music in an engendered way, the possible classification of a feminine element of *Cosmosis* calls for further investigation into the works of both artists. This may also provide greater insight into this aspect of their respective creative voices. It is hoped that future performers will benefit from this research, and that *Cosmosis* will receive performances for years to come.

APPENDIX A

INTERVIEW WITH SUSAN BOTTI
JANUARY 29, 2006, NEW YORK, NY

Angela Schroeder:

Talk about the conception of the piece, how did the commission come about?

Susan Botti:

Michael Haithcock (Director of Bands, University of Michigan) approached me to write a piece, and I said that I was more interested in writing for Wind Ensemble than writing for “band”, and he said that would be great. He also asked could I possibly be involved in it as a performer as well, as that would be very interesting for them. And I said hmmm....because when I write for myself I write very particularly, and I didn’t want it to be about me. I wanted it to be for them, and I can’t always draw that line when I get immersed in it. So I had this idea of having these” extensions” of me – 20 young women (the choir) and using those voices. Also from a practical standpoint, there are always so many wonderful – not that there aren’t wonderful male singers at the college level, but at the college level there usually is a larger number of women sopranos/mezzo sopranos, and vocally it seemed like a nice choice, and like I said that extension of voice. So I suggested that and he said fine. I added harp and basses, but otherwise, it is for Wind Ensemble. And then, whenever I start a new piece I usually am coming away from what it is I’ve been doing, so if I have been writing for strings I tend to want to write for winds. But I always ask myself what do I want to say right now, and what do I want to say in this context, what do I have to say that’s worth listening to or that compels me for some reason or in some way. And so, what felt interesting to me was the idea that I was going to be doing this with students, and then I felt another sense of responsibility because it is talking to them as well, and I wanted them involved. I had a great experience at Tanglewood doing a piece of [composer] Tan Dun’s called *Red Forecast* – it’s all about the 60’s. When we went to perform it they said “go out and you can wear anything 60’s like in the concert”. And so they came dressed – they went to all these pawn shops and used clothing stores, and they came dressed. They were so into it and they got so into the piece and I thought you know, I really want that, I really want them to be engaged. So I decided I wanted to write a piece about possibilities, and the sense of you’re at a point in your life where you have so many possibilities not to have the sense of “oh, I have to get THAT job, or I have to reach that goal” – to have an open sense. And so I thought, where is there a world, where can I find text that reflects that. And to me I think that science is an area that has that sense of discovery. So I went to a used bookstore, which is usually a place I start. And I

thought “I wonder if they have an anthology of books/poems about science – and they did. And in this book was a poem by this poet May Swenson, who I did not know. It was a poem she only published in a scientific journal – it was never published in any of her anthologies, called “The Cross Spider.” I fell in love with it – bought the book!- and began to research, I read a lot of her other poetry, and that’s when I discovered “Overboard” which also really fascinated me, the whole concept of being flung overboard seemed like a great prologue to me. And I loved the idea of the shape poem – it’s a shape poem, because I love musical form and being challenged by different forms, whether it’s a visual thing. Poetry to me is always very interesting that way because you need to deal with a form. So that was fun to find that. And then I just went at it. I felt like I wanted an interlude in between “The 1st Night” and “The 2nd Night”, because I wanted to get a little bit away from the text, in a way I wanted to get back to the sense of space, and that things had evolved by the time “The 2nd Night” rolled around, just expanded. So that was really fun. I also needed a place – the commission was from a wind ensemble and so it was very important to give them time to play, and to let them stretch out and to show what they could do, so the interlude was very important from that standpoint.

AS

Had you written for wind ensemble before?

SB

No – I had written for winds, I had written for orchestra, not for wind ensemble.

AS

How did it affect you in your writing, did you approach it differently in any way?

SB

If you think of it relative to the orchestra, I had percussion, I had harp, I had voices, so I had other elements, to give it warmth and glow and another “pad” or palette. So it wasn’t just “Wind Ensemble,” it’s hard to call it just wind ensemble

AS

Would you consider writing a strictly wind ensemble piece – do you see yourself doing that?

SB

I don't know, I don't have plans to. Michael Haithcock wants me to write another piece, but I've got a lot of other things, so not for now.

AS

Being the soloist in the piece, how does/did that affect the process when you are actually in rehearsal?

SB

It is so great, I love singing my pieces. I would much rather sing them than sit in the audience. You're right involved, you have a direct impact on the changes, it's a visceral involvement. I think also it is just great because you're putting yourself on the line – you're asking everyone else to put themselves on the line, and you put yourself on the line too and I think you're not asking them to do something that you're not doing. So it's a nice thing, as far as there's a camaraderie, and a respect that happens. MOST of the time.

AS

Concerning the notation for portions of the vocal parts, how did you conceive of them, did you intend for them to be “esoteric”?

SB

They are spoken and not sung, there are no pitches. The score is a tool – I write all my scores by hand first and there is the REAL art. There's a contour to it – yeah, absolutely. That is just a limitation when you put it into Finale. But the slashes are an accepted way to show the unpitched vocal parts – that's standard in the New Music World. It's common, and is really not unusual.

AS

Were the movements composed in any particular order?

SB

Well, I think “The 1st Night” came before “The 2nd Night”... “Overboard,” I kind of knew what I wanted to do, but I remember that it was kind of a puzzle to work out, you know. The canonic lines of the three voices were sort of a puzzle that you go back to it and work with the puzzle. So I didn’t really work it all out until later. And also things inform each other, so I don’t work from beginning to end. And the ending also, I played around with a lot of ideas of how to end it. I knew that the radio sounds would be an element, and I wanted that sense that everything goes on, the continuity. But I had different ideas about how to do it. And then I really wanted there to be a choral feature at the end where they could “play”. But that was another puzzle – what was the right way to leave it.

AS

I assume you must be open to different ways of interpreting that last page of music.

SB

The improv? Yeah I think it’s pretty open – I loved the *Bohemian Rhapsody*, by the way. Everyone has their feature – ours was *I Will Always Love You*. So to me, that is completely about the individual, it should be.

AS

How was it recording the piece?

SB

We brought an amazing engineer [Todd Whitelock] in to record the piece, a guy from New York. He recorded my husband’s last record, and he records major classical and jazz artists, so it was great.

AS

How did the students react to the recording environment?

SB

I thought they did very well. They are still students; there are still things that can slip by. For the most part I think it was excellent. They were very professional, very well prepared by the professionalism of the conductors. They were very good.

AS

Is there anything structurally or harmonically that guided the composition that might not be obviously evident

SB

Well there is thematic material that comes back. I like to work in layers, in orchestration and in scoring. It's like when I wrote this chamber opera on Lewis Carroll. It's all written and I'm doing the orchestration and you're still reading about the person and researching. And one thing I read about him was that he loved music boxes and toys and mechanical things. So I used that in the scoring, that kind of layer. So with this there are, of course, issues about spiders. One is the tarantella – the dance of the spider, and it's Italian, which I like. So, there's little “wisps” of tarantella in there at different speeds.

AS

I'm not sure that ever came up!

SB

It probably shouldn't – it shouldn't, it's not meant to be, you know, it's just kind of hidden.

AS

How do you feel hearing others sing parts that you have written specifically for your voice?

SB

I love it, love it love it! I love that someone else is interested in doing it. I love that someone else is going to interpret it and bring different things to it so it grows, it's alive! One time I wrote this piece *Jabberwocky*, which is a structured improvisation that I did with percussion. It's very extreme, but there is a score. I did a workshop once where someone did it with a pianist, not even

with percussion, which is fine because they played in the piano and did all kinds of sound things. And she didn't listen to the recording; she only did it from the score. And it was fantastic – she was a fantastic singer. But to me it was so exciting that something that unstructured – not that it's unspecific, but that it still had some similar moments as when I did it, and so there is a sense of sharing on a different level. So I love it when others do it, I love other singers – I love singers! I hope that my music is stuff that others will do. I mean to have a singer as a composer hopefully feeds back to singers to come.

AS

Who are/have been your greatest influences as a composer?

SB

They are probably not all composers, you know. My greatest influences artistically are Samuel Beckett, current composers like Kurtag, Handel, Bartok, Stravinsky.

AS

Who were your teachers?

SB

Ludmila Ulehla at Manhattan School of Music, and Giampaolo Bracali, and before them Robert Freedman – who is more in the jazz world, has worked with Wynton Marsalis on Hot House Flowers, he is the one who really got me writing. My background is really strongly in theatre, so, it's hard to think just music when I think of influences.

AS

There are obviously a lot of literary influences in your music.

SB

Yeah, though more theatre-literary, and then I find poets as I go along, and just try and absorb everything I possibly can.

AS

What about performers that have influenced you?

SB

[Playwright] Dario Fo, [Actress] Billy Whitelaw, who performs a lot of Beckett, as for singers I listen to a lot, there are great jazz singers like Sarah Vaughn, Betty Carter that have been big influences, and then I listen to a lot of world music, so there is a lot of amazing world music – I have very eclectic taste.

AS

How do you find the balance of composing and performing?

SB

Fun! It's great. You know, it's been a challenge to add the layer of teaching to the mix. In the days when I was working with Tan Dun, in those days it was different because I was doing someone else's music when I was performing, and so I was, I think, more careful about it because when I do someone else's music I am so immersed in it, in their language, so I kind of needed a break. It seemed like there was more of a separation in those days. But when I am performing my own music, which has been more the case, then it's different. Then there will be periods where I do a recital of different things, where I can tie in myself. They feed each other, they fuel each other, it puts you right in touch with the issues of performance that other people are going to face dealing with your music, and I mean, I am one person, and they are all meshed together.

AS

Where does that line happen?

SB

There is no line, really. It's just different levels, different ways of expressing the same person, I guess. There are practical things like time management. We were sitting on a "Talk to the Composer" panel thing with [the entire] faculty who had pieces on this one concert. And one of the questions was "What is the biggest challenge of being a composer?" Somehow the

microphone landed in front of me, and I said “Time management.” And one of my colleagues (Betsy Jolas) says “Spoken by a woman!” But that’s really it. It comes down to preparation, you have to be prepared. You never enter a rehearsal unprepared, you have the materials or people need the materials, so it’s learning to manage that and making decisions to do performances and all that. So it is a big challenge. I’m grateful for what’s happening, but I try to be honest – I want to do things at a high standard. If I felt like I couldn’t perform something at a high standard, whether it was my piece or someone else’s piece, I wouldn’t do it. I have been told many times you should sing Mozart, you have the perfect Mozart voice. And I love Mozart! I love singing Mozart and working on Mozart. But, to devote myself to doing that is a time commitment. And I feel also that there are some absolutely unbelievable Mozart singers out there who need to do it. For me I feel like I am filling an area that not everyone is going to want to do. But that is one of those choices.

AS

Do you think you have a compositional style, and can you describe it?

SB

I like to think that there is something of a personal nature in my music. That there is something of humor – what fascinates me is human emotions, human expressions, human situations. So I like to think there is a human element. You can write something that is an incredible mathematical puzzle and it’s fascinating, but that’s not really me. And that’s not a judgment, of course.

AS

Who is Isabel? (the dedicatee of the work)

SB

My daughter. The piece is also a message to her as well that there’s endless possibilities, that the world is endless. She loves that page! And also “Arabella” is a bit close to Isabella.

APPENDIX B
MAY SWENSON'S "THE CROSS SPIDER"

“THE CROSS SPIDER”

The 1st Night

A spider, put outside the world
given the Hole of Space for her design,
herself a hub all hollow, having no weight,
tumbled counterclockwise, paralytically slow
into the Coalsack.

Free where no wind was, no floor, or wall,
afloat eccentric on immaculate black
she tossed a strand straight as light,
hoping to snag on perihelion, and invent
the Edge, the Corner and the Knot.
In an orbit's turn, in glint and floss
of the crossbeam, Arabella caught
the first extraterrestrial Fly
of Thought. She ate it, and the web.

The 2nd Night

“Act as if no center exists,”
Arabella advised herself. Thus inverted
was deformed the labyrinth of grammar.
Angles melted, circles unraveled, ladders
lost their rungs and nothing clinched.
At which the pattern of chaos became plain.
She found on the second night her vertigo
so jelled she used it as a nail
to hang the first strand on.
Falling without let, and neither up nor down,
how could she fail?
No possible rim, no opposable middle,
geometry as yet unborn, as many nodes and navels
as wishes – or as few – could be spun.
Falling began the crazy web.
Dizziness completed it. A half-made, half mad
asymmetric unnamable jumble, the New
became the Wen. On Witch it sit wirligiggly.
No other thing or Fly alive.
Afloat in the Black Whole, Arabella
Crumple –died. Experiment frittered.²⁷

²⁷ The poetry of May Swenson is used with the permission of the Literary Estate of May Swenson

BIBLIOGRAPHY

Susan Botti:

Botti, S. *Cosmosis*. (Ann Arbor: SUBO Music, 2005.)

Susan Botti, interview by author, tape recording, New York, N.Y., 29 July 2006.

Susan Botti, *Works*. (n.d.). Retrieved July 27, 2006, from <http://www.susanbotti.com>

Susan Botti, personal e-mail to author, March 17th, 2007.

May Swenson:

Knudson, R.R., & Bigelow, S. (1996). *May Swenson: A Poet's Life in Photos*. Logan: Utah State University Press.

Swenson, M. (1987). *In Other Words: New Poems*. New York: Alfred A. Knopf, Inc.

Swenson, M. (1994). *Nature: Poems Old and New*. New York: Houghton Mifflin Company.

Other sources:

E. Schwandt: 'Tarantella', *Grove Music Online* ed. L. Macy (Accessed 22 January 2007),
<http://www.grovemusic.com>