

Mansion: Inner Cosmologies, Thresholds, and Contacts

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## ABSTRACT

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This dissertation is in two parts. The first is the dissertation essay, which features an analysis of the work *Mansion*, and the second is the score to the *Mansion Cycle*, written for the International Contemporary Ensemble between 2009 and 2011. The score is included as an appendix, and consists of five works, which may be performed individually or as a complete cycle. In order of appearance, the works are *Prism Path*, *Altar of Two Serpents*, *Mansion*, *Luciform*, and *Portals Before Dawn*.

The essay is an investigation of poetic and aesthetic concerns in my compositional practice, as well as an analysis of my composition *Mansion*, for two alto flutes, percussion, and pre-recorded electronics. Broadly describing the work as an "inner journey", I discuss the relationship of mythological themes to my music and titles, citing examples such as the labyrinth and the trope of the "central structure." I then relate these concepts to my use of form, citing other works in the cycle as points of comparison, and identifying ways in which recurring ideas are elaborated in my body of work. The historical context of my work in "mixed music" is briefly considered, alongside my aesthetic interest in the medium and my choice of musical tools. I then present a concise analysis of the discourse in *Mansion*, and describe how its language of "thresholds and contrasts" operates on a moment to moment level.

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## ACKNOWLEDGEMENTS

Most of the music discussed in this paper grew from my ongoing collaboration with the International Contemporary Ensemble, which began in 2006. The pieces discussed here are as much inspired by our experiences working together, and the artists themselves, as they are a product of my imagination. I am greatly indebted to their profound commitment to developing new works, and the ways in which they have supported and given life my ideas over the last seven years. The musical language discussed in this essay wouldn't exist without the experiences I had as a performer, collaborator, and improviser in the Shinkoyo collective from 2004 – 2009, during which time I worked closely with Zeljko McMullen, Doron Sadjja, MV Carbon, Severiano Martinez, Carson Garhart, and Peter Blasser. Shortly before the composition of *Mansion*, I toured Europe with Iancu Dumitrescu and Ana-Maria Avram, whose approach to music greatly deepened my relationship to an aesthetic of primal sound. I would like to thank John Zorn for giving me the opportunity to document and release my music, and for his persistence and encouragement during the dialogue that led to the composition of *Mansion*. Finally, I would like to thank George Lewis, Fabien Levy, Fred Lerdahl, Brad Garton, and Tristan Murail for their invaluable support and insights during my time at Columbia University.

## **DEDICATION**

To Jay King.

## I. KATABASIS

*From my youth onward has been the incessant, merciless battle between the spirit and the flesh  
And my soul is the arena where these two armies have clashed and met.*

-Sepultura, *Under Siege* (paraphrasing Kozantzakis, *The Last Temptation of Christ*).<sup>1</sup>

In the titles of my works, I sometimes frame the musical journey in terms of a structure or space within which the interior drama unfolds (I internally refer to the earliest stages of the composition process as “charging the space”). The title, *Mansion*, which brings associations with a large, expansive, or even majestic, opulent space, is a case in point. It can be considered suggestive of an inner temple, through which one moves through a series of “vision states,” or rooms.

In world mythology, the idea of a “central structure” is widespread, and is often conceived of as an earthly center, whose cosmological function is a midway point between the earth and the non-physical plane.<sup>2</sup> Examples include Solomon’s Temple, the Javanese temple of Borobudur, the Mesopotamian Ziggurats (Sumerian *Ekur* – “mountain house of the gods”), and the Nordic “world tree” Yggdrasil, whose branches and roots encompassed earth, heaven, and the underworld. My initial encounter with the word “mansion” within a spiritual or cosmological context came from the New Testament (John 14:2)<sup>3</sup>, and the *Urantia Book*, Paper 47, “The Seven Mansion Worlds.”<sup>4</sup>

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<sup>1</sup> Sepultura. *Arise*. Roadrunner Records RR9328-2, 1991, compact disc. The quote was the inspiration for the title, *The Soul is the Arena* (2010), for bass clarinet and electronics.

<sup>2</sup> See Mircea Eliade, *The Myth of the Eternal Return*, (Princeton: Princeton University Press, 1954), 6-17.

<sup>3</sup> “In my Father’s house are many mansions: if it were not so, I would have told you. I go to prepare a place for you.” John 14:2 King James Version

<sup>4</sup> *The Urantia Book* (Chicago, Urantia Foundation, 1955), 530-540.

However, *Mansion* is not a static structure, but a musical work that unfolds in time. In years past, I have generally described my compositions as “movements between vision states.” Implicit in this term is the role of structure, where a “vision state” could be considered a section in the work. Another way to interpret “vision states” is as “layers,” “rooms” or “stages” in the inner journey. “Stages” more appropriately suggests a linear element, which is of crucial importance in all my works. In music-mythic terms, this concept could be compared to the stratification described in the “otherworld” cosmologies of many cultures. There are many examples<sup>5</sup>, including the Three Bardos in the Tibetan *Bardo Thodol* (more commonly known as the *Tibetan Book of the Dead*), the levels of heaven, purgatory, and hell in Dante’s *Divine Comedy*, and the “Houses” of Xibalba, the Mayan hell described in the *Popol Vuh*. Another mythological example of this idea is the “katabasis” motif, in which a god or hero descends to the underworld, in a search for something of great importance, such as advice from the dead (Odysseus), a deceased lover (Orpheus), or as a kind of tour through the ordeal of the afterlife (Plato’s *Myth of Er*).<sup>6 7</sup>

*Mansion* could be considered an inner katabasis, or a passage through an inner temple, which, as its emotional landscape might suggest, is more than a mere tour. It is an ordeal to be confronted, with a strong element of peril. Yet another example from world traditions is the labyrinth, which has served as a symbol for many different types of journeys, in different

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<sup>5</sup> For a comparative study on the subject of afterlife cosmology, see Stanislav Grof and Christina Grof, *Beyond Death: The Gates of Consciousness* (New York: Thames and Hudson, 1980).

For a survey of the spiritual fortress trope in Western alchemy, see Alexander Roob, *Alchemy and Mysticism* (Cologne: Taschen, 2005), 334-355.

<sup>6</sup> For a comparative study of the katabasis, see Raymond Clark, *Catabasis: Vergil and the Wisdom Tradition* (Amsterdam: B.R. Grüner, 1979).

<sup>7</sup> This was the inspiration for the title of the multimedia work “La Legende D’Eer” by Xenakis, and an excerpt of Plato’s account was included in his notes for the first performance, alongside other texts. See Iannis Xenakis, *La Legende d’Eer*. Auvidis Montaigne MO 782058, 1995, compact disc, liner notes by Richard Toop.

cultures, in different eras. Hermann Kern, in his extensive research on the depictions of labyrinths throughout history, contrasts a labyrinth with a maze, which features dead ends. A labyrinth features a single path, which is long, winding, and unicursal, leading to the center and back out. In the words of Kern,

The interior space (of the labyrinth) is filled with the maximum number of twists and turns possible - meaning the greatest loss of time and the most physical exertion for the walker on his or her way to the goal, the center...once at the center, our subject is all alone, encountering him-or herself, a divine principle, a Minotaur, or anything else for which the "center" might stand. In any case, it is meant to be the place where one has the opportunity to discover something so basic that it demands a fundamental change of direction...turning around at the center does not just mean giving up one's previous existence; it also marks a new beginning. A walker leaving a labyrinth is not the same person who entered it, but has been born again into a new phase or level of existence; the center is where death and rebirth occur.<sup>8</sup>

In the section that follows, I discuss aspects of the structure of *Mansion*, the piece's relationship to these themes of transformation, and ways in which these themes can prove fruitful in considering the work. I also compare the structures of *Mansion* and the two pieces that follow it in the cycle of the same name, in order to gain a better understanding of the cycle as a whole, and the role that structure plays in my body of work.

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<sup>8</sup> Hermann Kern, *Through The Labyrinth: Designs and Meanings Over 5000 Years*, ed. Robert Ferré and Jeff Seward (Munich: Prestel Publishing, 2000), 30.

## II. STRUCTURES

*Mansion* exists in three different contexts. Firstly, it is a standalone work. Secondly, it was composed to be the opening work on the album *Enter Houses Of* (Tzadik, 2009). Following this album's release, I proceeded to compose a cycle around *Mansion*, in the interest of creating an evening-length program for five musicians of the International Contemporary Ensemble (ICE). *Mansion*, and its particular discourse, is therefore a journey within a larger journey, a central point of temporal density within a cycle of larger works. One of my goals in writing what I now call the *Mansion Cycle* was to write an evening-length work that would extend the "inner journey" present in a single work over an extended, album-length duration. In addition, care was taken to limit the performance ensemble to a practical size, leaving open the possibility of touring the work to different cities over time. In addition to the works presented here, *The Soul is the Arena* (2010), for bass clarinet and electronics, was composed during this same period, and served as the model for the composition of *Luciform* (2011), my work for flute and electronics.

<i>Prism Path</i> (2010)	2 alto flutes, percussion, electronics	9:28
<i>Altar of Two Serpents</i> (2009)	2 alto flutes	5:38
<i>Mansion</i> (2009)	2 alto flutes, percussion, electronics	11:22
<i>Luciform</i> (2011)	C flute, electronics	13:28
<i>Portals Before Dawn</i> (2011)	C flute, A. flute, bass clarinet, piano, perc., synth, electronics	19:56

Fig. 1: Structural reduction of the "*Mansion Cycle*" (2009-2011)

Like the sections within *Mansion*, *Luciform*, and *Portals*, the character of each piece in the cycle is balanced and contrasted with the others, to create a feeling of progression in the work as a whole. The flute is the only instrument present throughout all five pieces, and as such serves

as the principal “sound character”. *Prism Path* is an introductory work, and explores continua of “thresholds and contrasts” that can be heard in *Mansion*, albeit within a much more singular modal framework, and with a structure that is more continuous. It is intended to evoke a kind of wandering, hallucinatory, melancholic state, and the work ends with a sparse, incantatory section, signaling a transition into the next piece. The removal of percussion and electronics (from the instrumentation) places a spotlight on the alto flutes in *Altar of Two Serpents*, which explores a comparatively focused intensity, in a formal structure that moves from slow and ornamented to fast, shivering arpeggiations. The title is a reference to the mythological symbol of the caduceus, referencing both the staff of Hermes (a guide of souls to the underworld) as well as the interlocking channels of the yogic *sushumna*. The final three works have structural similarities, which are gradually expanded in duration and proportion. *Mansion*, located in the center, is an area of maximum density that finishes with a varied return to the opening section of the work, symbolizing a kind of circularity. *Luciform*, written for flutist Claire Chase and electronics, is a kind of cadenza within the greater structure. It distills the multiple, heterophonic nature of the previous works into a quasi-concerto, thus focusing the musical drama on the relationship between the individual and her sonic environment. Additionally, the flute writing incorporates classical ideas of virtuosity, thematic development, and melodic motion. The title, which literally means “light form” also creates associations with the name Lucifer, and as such is inspired by ideas of transgression and transcendence. The work features a climactic structure that moves beyond the cyclical nature of *Mansion*. *Portals Before Dawn*, for sextet, reduces the modal language of “thresholds and contrasts” to its barest essence, within an expansive, gradually unfolding structure that combines aspects of *Mansion* and *Luciform*. Over nineteen minutes, the work slowly develops in search of a radiant emptiness.



## Structure in *Mansion*

In the paragraphs that follow, I will describe ways in which the structure of *Mansion* is transparent and clearly audible, and relevant ways in which my approach to form has developed over time. With regard to the mythological examples I mentioned previously, the structure of this work can be said to combine aspects of the labyrinth and underworld cosmologies. As in the labyrinth, we have a single path with a climax at the center, which precipitates a kind of “death,” after which we reach a series of modified returns to the opening section. However, unlike the labyrinth, our “path” is not continuous; it unfolds in discrete stages, which can be compared to layers in an interior “otherworld” cosmology, or rooms in an inner temple.

Key elements of *Mansion*'s structure are its transparency, the variety of sounds and discourses within it, and the proportioned, balanced arrangement of the sections. It is further characterized by sharp delineations between sections, and the stark entrances with which they often begin. While I have explored slowly unfolding structures in works such as *Psalterion* (2006, string quartet) and *Portals Before Dawn* (2011, sextet and electronics) the present work was composed with the intention of using a quickly moving, episodic sections. In relation to other works in the modern classical tradition, this work reconciles moment form<sup>9</sup> with more traditional elements of linearity.<sup>10</sup>

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<sup>9</sup> Jonathan Kramer defines moment form as “a mosaic of moments” and a moment as a “self-contained-quasi independent section, set off from other sections by discontinuities.” See Jonathan Kramer, *The Time of Music* (New York, Schirmer Books, 1988), 453. Although this approach can be found in works of other composers, the term originated with Stockhausen, in relation to his work *Kontakte*. For further reading, see Karlheinz Stockhausen, *Texte Zur Musik*, vol. 1, (Cologne: DuMont Schauberg, 1963), 189 – 210. See also Jonathan Kramer, “Moment Form in Twentieth Century Music” in *The Musical Quarterly*, Vol. 64, No. 2 (1978), 177-94.

<sup>10</sup> For another recent work that reconciles moment form, structural symmetry, and linearity, see Stockhausen's *Freude* (2005), for two harps.

	Section 1	Section 2	Section 3	Section 4 / transition	Section 5 / middle section	Section 6 / repose	Section 7 (pre- reprise)	Section 8 / section 1 reprise	Section 9 / Coda
Fl.	“spirit voice” gestures	Tacet, then loop gesture at climax	Modal gestures		Looped riffs, then high pitched wail	“free” sounding, microtonal	“free,” moving to climax	“spirit voice” gestures	“free,” morendo
Perc.	sparse metals	heavy drums, irr. pulses@ 75 bpm	echo of heavy drums, then tacet	scraped tam-tam	ride pulse to fast rock beat	fast ride cymbal loop, then tacet	tacet, then “free” metals	Tom toms, replacing original tape	Ride cymbal, morendo
	(Metals)	(Drums ff)	(Metals + Drums mp)	(Metals)	(Drums ff + metals)	(Metals)	(Metals)	(Drums ff)	(Metals + Drums mp)
Elec.	Flanger feedback	Feedback loops @ 60bpm	High register sust. tones	Alternating filtered noise vs. silence	Rhythmic sub bass pulses, w/ perc.	Sustained synth chord, morendo	Flanger feedback, varied	Tacet, then intermittent hits with delays	Cassette recordings, morendo
Int.	2	3, 1	2	3-0	2,3	2,1	2, 3	3	2,1

Fig. 2: Chart describing 9 sections of *Mansion*. Flutes, percussion, predominant percussion material (metals or drums), electronics, relative intensity (0=silence, 3=most intense). Chart shows three major points of highest intensity distributed near the beginning, middle, and end of the piece (correlating with presence of heavy drums). Also note staggered, modified returns of opening section in flute and electronics (section 7, 8).

*Mansion* is comprised of nine discrete sections, which vary from just under 1 minute to 2 minutes in length. Of these, seven are substantial in their own right, in the sense that they have a clear beginning, ending, and internal sense of dramatic transformation. Sections 4 and 6 may be described as transitional, and the concluding area functions as a coda. The contour of the work can be divided further into two larger sections, which are bisected by section 5 - the center of the work.

The form has a strong element of symmetry. Sections 2, 5, and 8 are the areas of greatest intensity, and are the only areas in the piece that use loud drums. The structure can be seen as rising and falling in intensity around these sections. What are arguably the most recognizable and memorable parts of the work are found in section 1. These include the “flanger feedback” sound in the electronics, and the “spirit voice” gestures in the two alto flutes. Both of these recur towards the end of the piece, although they appear in succession, not together. The first and eighth sections are connected by the presence of the “spirit voice” gestures in the flutes, and are

played nearly identically each time, while the activity of the electronics in the first section is transferred to the drums in section 8.

The image shows a musical score for two sections. The top section (m. 4-5 to m. 15) features a flute line in the upper staff and a tape line in the lower staff. The bottom section (m. 164-165 to m. 175-177) features a flute line in the upper staff and a percussion line in the lower staff. Vertical dashed lines separate measures into groups. Annotations below the percussion line describe drum activity: 'middle tom dominates, alternated with floor', 'floor tom dominates, alternated with middle', 'floor tom dominates, alternated with middle', 'middle tom culminating in repeated crashes, w/kick', 'sparse high tom with high beep in tape (from section 5)', '(drum fill)', and '(tom tremolos)'. A '(tacet)' annotation is placed in the tape line of the first section, and '(overlap w/ coda)' is placed at the end of the second section.

Fig. 3: Comparison of section 1 (flutes and tape) and 7 (flutes and percussion)

Similarly, in the electronic domain, the reappearance of the flanger feedback (in modified form) during the seventh section can be seen as a precursor to the return of the spirit voice gestures in the flutes, and a signal that material from earlier in the work is returning. In this way, the piece can be said to have a clear beginning, middle, and end.

The coherence of varied compositional approaches in the *Mansion* cycle (and my body of work in general) results in part from a common structural approach. *Mansion*, *Luciform*, and *Portals Before Dawn* are variations on a formal approach that I have been developing since 2002. The climax in the middle section, followed by a marked decrease in intensity, and another rise to a final climax, is a trope that can be heard in other works, including *2.20* (2003, string trio and electronics), *Moonblood* (2005, string quartet), and *Portals Before Dawn*. I consider this sequence as a representation moving from a decisive trial (the central climax) to a period of death (the repose) to rebirth or ascent (the final climax). As in *Mansion*, this central climax arises in causal relation to the rising and falling intensity of the previous sections. For example, the relative calm of section 3 can be heard in relation to the climax of section 2, which drives

itself to exhaustion. Further continuity is supplied by the percussionist, who plays an “echo” of section 2 in section 3. Although the intensity of section 4 arrives in a relatively violent, abrupt way, the end of section 3 does achieve an element of closure, and the harmonic relationship of a perfect fourth (Ab to Db) can be clearly heard between the two sections. Section 4 then shifts into a more austere, hypnotic passage, which then builds in intensity towards a climax, followed by the (relatively brief) “death” of section 6.

In *Luciform* and *Portals* this section is followed by the “rebirth,” which takes the form of a gradual build towards an ecstatic climax that consists entirely of new material. In *Mansion*, the conclusion unfolds differently: the final climax is a return to the opening section, giving the piece a cyclical (hence labyrinthine) quality, rather than one of climactic finality. Rather than achieving new, previously unheard material through a gradual build, we arrive at a modified recapitulation (from flute/electronic duo to flute/percussion duo), which is staggered (and foreshadowed) by a varied return to the opening electronics in section 7. The affect hovers ambiguously between climactic intensity and a more sober tone, and is more suggestive of survival or completion than transcendence. The near-absence<sup>11</sup> of the electronics (and their subsequent return in the coda) is essential to this situation, as is the contrasting character of the flutes and percussion.<sup>12</sup> Although I initially composed *Mansion* as the first song on *Enter Houses Of* (the album needed a powerful opener that wouldn’t exhaust the listener completely), I then designed the entire cycle around its form and character. *Luciform*, which follows *Mansion* in the cycle, features a gradual build towards a climax of new material, and in this way transcends the circularity of its predecessor.

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<sup>11</sup> The sparse synth tones on C and F have carried over from sections 5 and 6 (see further discussion in Section IV, “The Center”).

<sup>12</sup> For a discussion of the contrasting affects in section 1, see Section IV Harmony, Timbre, Gesture, Affect.”

Another key difference among these works is the middle section of *Luciform*, where instead of a climax, we arrive at a more introspective area, which then builds towards the final climax.<sup>13</sup> The conclusion of *Portals* integrates structural aspects of the other two works. It has a central climax, a repose, and brief return to the opening of the work, leading directly into a climax, which then becomes a gradual transition into the coda.

<b>MANSION</b> 2 alto fl, perc, elec. 2009	Intro Flutes + elec.	2 <sup>nd</sup> section polytempo dirge, perc. + elec.	3 <sup>rd</sup> section flutes + elec.	4 <sup>th</sup> section “noise blasts”	Middle Section (fast ostinato + climax)	Repose	7 <sup>th</sup> section (modified return of electronics from first section)	8 <sup>th</sup> section modified return of intro flutes	Coda	
<b>LUCIFORM</b> Fl, tape 2013	Intro Bass glissandi, fl. + tape unison	2 <sup>nd</sup> section (moderate dirge + solo)	3 <sup>rd</sup> section (intro reprise, flute + tape unison)	Short Solo + Transition	Middle Section (slow bassline w/ arpeg. + fragments)	Short Solo + Transition	7 <sup>th</sup> section quasi cadenza + drone	Climax “ascent”		
<b>PORTALS</b> Sextet, elec. 2011	Intro	2 <sup>nd</sup> section (staccato rhythms)	3 <sup>rd</sup> section (slow dirge)	4 <sup>th</sup> section (sustained clusters)	Middle Section (slow ostinato, + climax)	Repose (bs. Cl + piano + synth)	7 <sup>th</sup> section (anticipating intro reprise)	8 <sup>th</sup> section modified return of 2 <sup>nd</sup> section	Climax “ascent”	Coda

Fig. 4: Structural comparison of *Mansion*, *Luciform*, and *Portals Before Dawn*

The appearance of a “dirge” section in all three works also deserves comment. In *Luciform* and *Portals*, this section appears as a slow, 4/4 ostinato, over which other material is layered. These sections have a processional quality, not unlike the funeral marches of, for example, Franz Liszt<sup>14</sup>, and serve to build tension towards a more extended formal development.<sup>15</sup> *Mansion*, by contrast, features a fortissimo drum pulse that frequently shifts speed, and is superimposed on a shrieking electronic riff in another tempo. The feeling is suggestive of something far more violent. It doesn’t prepare the listener for an extended development, but is rather a crucial part of the more episodic and volatile character of the work.

<sup>13</sup> This was an elaboration on the structure of *The Soul is The Arena* (2010), for bass clarinet and electronics.

<sup>14</sup> The introduction of *Portals* is a paraphrase of Liszt’s *Nuages Gris*.

<sup>15</sup> The “processional” association also relates to the labyrinth, which, in most cases, is an ordeal to be undertaken through ritualized walking.

### III. CONTACTS

#### Mixed Music in Historical Context

*Mansion*, like the majority of my classical works, is for live instrumentalists and pre-recorded electronics. While a history of work in this medium is beyond the scope of this paper, a brief summary will help to place my music in its historical context. The first integration of “tape” sounds and live instrumentalists dates back to the 1950’s and 1960’s, coming after the first electronic works created using magnetic tape. Following the earliest innovations by Maderna, Varese, Luening, and Ussachevsky,<sup>16</sup> the medium was further developed by composers such as Stockhausen (*Kontakte*, 1958-1960), Luciano Berio (*Omaggio a Joyce*, 1958), Mario Davidovsky (the *Synchronisms* series, begun in 1962), and Milton Babbitt (*Philomel*, 1964). Important centers of production for this music included the WDR Studio in Cologne, the Columbia-Princeton Electronic Music Center in New York, and the Studio di Fonologia in Milan. Concurrent efforts in the development of live electronic music provided other pathways for composers and performers to explore, and, while the use of electronic sound is by no means a given in today’s concert music, the last forty years are rich with a variety of approaches to integrating the two media.

While there are many reasons I have used this medium extensively since 2001, for the purposes of this paper it will suffice to mention a few. One is a matter of sonic relationships and context. Stockhausen, when speaking of *Kontakte*, gave the following statement: “These known sounds give orientation, a perspective to the aural experience; they function as traffic signs in the

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<sup>16</sup> “The earliest work to combine tape and live instrumental music was the *Musica su due dimensioni* (Music on Two Dimensions) for flute, percussion, and tape, created by Bruno Maderna in the Cologne studio in 1952. Shortly thereafter Ussachevsky and Luening collaborated on two works for orchestra and tape: *Rhapsodic Variations* and *Poem in Cycles and Bells*, both completed in 1954. In this same year Varese’s *Deserts* appeared, alternating sections for chamber ensemble with segments of purely electronic music.” Robert P. Morgan, *Twentieth-Century Music: A History of Musical Style in Modern Europe and America* (New York: W.W. Norton, 1991), 470.

unbounded space of the newly discovered sound world. Also, the electronic sounds sometimes come close to being confused with the known sounds.”<sup>17</sup>

For me, this dynamic between “known” sounds and the “unbounded space” of the electronic sounds has proven to be one of endless fascination. In my works, I consider this in terms of a continuum. On one extreme we have two instruments, whose characters are contrasting and bring each other into stark relief, allowing for greater appreciation of inherent characteristics in a potentially infinite variety of contexts. The other extreme would be a situation where we have difficulty distinguishing between acoustic and electronic sound sources, where the timbres of two or more sounds blend to create a new sound. Moving through this continuum, we find a state that is fluid, where acoustic and electronic elements are in dialogue.

For me, pre-recorded sounds allow a tremendous variety of timbres, with which I integrate a range of influences and contexts into my concert works. Dialogues between divergent musical practices and cultures have and continue to be crucial to my work as a composer. For example, one can readily hear the timbral relationships between a composition like *Luciform* and certain songs from my avant metal project Oneirogen. Similarly, the sound world of *Mansion* and *Prism Path* was developed alongside my improvising practice (using woodwinds and electronics) during the time of its composition. This timbral variety also relates to the tools I use, which include analog feedback, magnetic tape, concrete sounds, and analog and digital synthesis. My relationship to these tools is not limited to the composition of concert works; I actively use them in live contexts (both composed and improvised), and this element of discovery through realtime performance has always been crucial to my work.

Other reasons are both practical and compositional. My reliance on a medium as basic as

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<sup>17</sup> Cited in Paul Griffiths, *Modern Music: A Concise History*, (New York, Thames and Hudson, 1994), 152.

the playback of digital sound files creates fewer issues with regard to the long-term realization of my work as technologies change. Furthermore, many of the aforementioned tools are hardware-based<sup>18</sup>. An electronic track like *Mansion* features extensively edited arrangements of improvised passages, some of which are performed on relatively unstable tools, such as feedback. Arrangements such as these would be difficult if not impossible to recreate in live settings.

### **Electronic Feedback, *The Flesh Needs Fire*, and Association**

Feedback, featured prominently in sections 1, 2, and 6 of *Mansion*, is a common technique of sound production in various approaches to experimental electronic music, which are often subsumed under the name “noise”.<sup>19</sup> David Novak, in his book “Japan Noise: Global Media Circulation and the Transpacific Circuits of Experimental Music”<sup>20</sup> describes feedback as “(that) which generates sound in a cyclical electronic system, by “looping” the outputs back into the inputs.” Feedback loops “generate sounds immediately in and of themselves.” Novak continues:

...feedback loops are playable electronic environments that produce a palette of changing sounds. Noise systems make feedback loops infinitely more complex by placing a number of effects – perhaps 5 or 6, or as many as 20 - into the loop. The effects are

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<sup>18</sup> Viable hardware tools need not be costly. On the contrary, approaches such as circuit bending and pedal feedback can be used with relatively inexpensive consumer electronics, and offer rich sonic possibilities outside the scope of most commercial hardware synthesizers.

<sup>19</sup> My personal points of reference for this technique are artists such as Wolf Eyes, Aenezephalia, and Merzbow, as well as styles of music which are variously described as “power electronics,” “noise,” “Japanese Noise,” and “industrial music.” For a discussion of the problematics of genre names in this field, see David Novak, “Japan Noise: Global Media Circulation and the Transpacific Circuits of Experimental Music” (PhD diss., Columbia University, 2006), 82-149.

<sup>20</sup> Novak, “Japan Noise,” 348-349.



chained together and their outputs are fed into a central mixer, and then the mixer's outputs are plugged back into the effects units' inputs. The path of a Noise feedback loop travels through every one of the effects with each cycle, and the sound fluctuates and changes according to the complexity of the total system. In a feedback loop, each effect connects to the other in a symbiotically interdependent electronic environment. The Noisician (sic) does not use a pedal in order to "turn on" a particular sound or to produce a specific effect (as when a guitarist steps on a wah-wah pedal to create a "crying" tone). Rather, the effect only occurs within the system's entire Noise, so that turning on a pedal or changing its settings shifts the productive conditions of the whole system. Feedback systems, then, are enclosed, insular sound-generating environments whose parameters emerge from the interconnection of its enclosed parts.

My approach to integrating acoustic and electronic elements could be explained in terms of *affinities* between sounds, which I previously described in terms of a continuum of possible relationships. The electronics can communicate an expressive power that is potentially equal to that of a live instrumentalist, or combine to create a discourse that is, expressively, more than the sum of its parts. An example of an approach that informed *Mansion* can be heard in my 2007 work, *The Flesh Needs Fire*, for flute, clarinet and electronics. The instrumental parts include interpretive transcriptions of the electronic part (which is itself an unedited segment of an improvisation on electric guitar and circuit-bent electronics). Measures 143 – 146 feature a simple doubling - the flute plays Aeolian tones in a near rhythmic unison with the white noise in the electronics. The overblown flute gesture is then paired with the sub-bass in the electronics, and here we have an affinity between the attack envelopes of the two sounds, while the timbres

themselves are contrasting. The clarinet interprets the high frequency feedback by playing in its extreme altissimo register, in addition to adding its own voice through controlled bursts of overblowing in Bb (corresponding to the sub bass note in the electronics). In the final measures of the work, the sub bass and feedback continue, while the instrumentalists contribute a contrasting microtonal motive in between the extremes of register.

Of further interest here is the type of flute sound produced – high in noise content and microtonal in its activation of the flute’s natural overtones. A dialogue is created between the unstable, noise oriented aspects of the instruments. Timbral fluctuation is an essential part of the gesture, as is the activation of higher noise content (distortion). This balance between pitch and noise elements is a natural part of feedback systems, where frequency and amplitude changes create differing degrees of stasis and overload, allowing for a wide range of pitches, distortions, and states in between.<sup>21</sup> These sounds also have a strong associative quality, with an expressive domain that is ancient and ritualistic. The flute, being played without the intervention of a reed, is the simplest and most widespread wind instrument. The oldest known musical instruments are flutes made of bird bone and mammoth ivory, and are presently thought to be 42,000 to 43,000 years old. The striking of a resonant body for percussive effect is of course, far older, and can be seen in pre-musical contexts such as primates striking their chests, or the rapid beating of tree trunks. The imaginative world of “Mansion”, which favors a decidedly raw instrumental sound, is an attempt to connect with this timeless space. The use of noise electronics, which also evokes a primal quality, is comparatively unique to our time, and creates a combination that imbues the music with a distinctive visionary quality.

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<sup>21</sup> With practice, the expressive breadth of some pedal based feedback systems can be learned and played with a high degree of control. For a discussion on the aesthetics of control and intention in the live use of these systems, see Novak, “Japan Noise,” 357-361.

140

6

Fl.

Cl.

Elec.

fast, random overblowing in Bb major

hissing, approximate rhythm

whistle tones

exhaling noise

screaching noise, approximate rhythm

full, resonant pitched noise, w/ tape bass

fast, random overblowing in Bb major

sub bass tone at Bb

noisy, breathy gliss.

w/ tape, attempt to get overall contour, as close as possible

poss.

gliss.

gliss.

sing 1/8 tone above

(screaching noise loops continue)

(screaching noise loops continue)

Fig. 5: *The Flesh Needs Fire* (2007), measures 148 – 170. Electronic feedback, white noise, and sub bass in electronics, combined with overblowing in flute and clarinet. Notation of electronic feedback is approximate.

#### IV. VISION STATES

In the section that follows, I will articulate in greater detail the principles at play in the musical language of *Mansion*, in an analysis of the moment to moment. I have previously discussed *Mansion* in terms of an inner journey, and related this idea to the form of the work. Here I present an analysis of the sensory, temporal and affective experience of key aspects, as they unfold in time. I begin with more singular discussions of timbre and harmony, and then present more complex examples in which a variety of musical parameters interact. My use of the term “linear” deserves some explanation. Jonathan Kramer describes linearity as “the determination of some characteristics of music in accordance with implications that arise from earlier events in the piece.” This is contrasted with non-linearity, or “the determination of some characteristics of music in accordance with implications that arise from principles or tendencies governing an entire piece or section.” Kramer points out that most music uses a combination of both, and that it is rare to encounter music that squarely fits in one category. As such, these should be considered aids to considering the nature of time in *Mansion*, rather than ends in themselves.

##### **Harmony**

The harmony in *Mansion* is decidedly circumscribed, focusing on a modal approach, which allows for greater subtlety in other areas, such as timbre, intonation, rhythm, and the dialogue between instruments. Despite its relative simplicity, the harmonic language features carefully considered relationships. The chart below outlines some of these, as they appear through section 7. The notes that are in boxes trace the development of the G/Ab/Bb chord. In section 1, it is a part of the melodic movement of the flutes, being the highest notes that the flutes

play in this section, and part of a harmonic palette suggesting Bb Mixolydian. Section 2, largely a duet between percussion and electronic feedback, could be described as intersection of noise and monophony, with an electronic riff centered on the pitches of A quarter sharp and E quarter sharp. The only appearance of the flute in section 2 is a riff from m. 50 – 59, which focuses exclusively on the pitches G and Bb. The note Ab, absent in section 2, features prominently in section 3, as the root note of the mode, a kind of Ab Phrygian limited almost entirely to the root, 2<sup>nd</sup>, 3<sup>rd</sup>, and 5<sup>th</sup>. From the Ab root of section 3, we move directly the transitional section 4, the only chord of which is a perfect 5<sup>th</sup> on Db / Ab. In section 5, the flute ostinato is centered on G, and is juxtaposed with a Bb sub bass tone in the electronics. Here we have G / Ab / Bb in melodic succession for the first time (with an added E), in the tail of the opening loop. These four notes are verticalized in the following section, which features a sustained E / G / Ab / Bb synthesizer chord throughout.

Fig. 6: Harmonic reduction of *Mansion*, showing the most salient pitches through section 7. Bass clef in sections 1, 2, and 7 are an approximation of tape. Microtones omitted in sections 1, 6 and 7.

## Timbre

Within the harmonic (and generally riff-oriented) context of each section, timbre fluctuates greatly, both in the local sense (shifts between pitch and noise, overblowing in the flutes), and sequential, with dramatic timbral contrasts between sections (as described previously). My preoccupation with tone color, distortion, continua between pitch and noise, and timbres that fluctuate continuously or “shimmer,” can be likened to a hallucinatory,

synaesthetic vision state, where stimuli external to the perceiver are themselves charged with an inner life. This is manifested sonically through timbral fluctuations, particularly in the higher partials of spectra, which distortion compresses and brings to the forefront. Iancu Dumitrescu, in his discussion of the use of distortion in his music, has said something similar: “You could say that this distortion in the sound comes from the attempt to release or unveil the God that is living in every piece of base matter.”<sup>22</sup>

Timbral distortions and fluctuations are a natural part of feedback systems, where frequency and amplitude changes create differing degrees of stasis and overload, allowing for a wide range of pitches, distortions, and states in between. The local fluctuation of timbre is evident from the beginning of the work, where the electronic feedback fluctuates between more distinct tones and distorted, metallic glissandi that border on noise. The distorted glissandi in the electronics are eventually given prominence, from measures 18- 23. At the same time, the percussion makes its first entrance with freely timed, pointillistic metallics, and the flutes change from their melodic character (outlined above) to a more improvisatory, noise oriented sound, with percussive overblowing and fluctuating sustained tones (*bisbigliando*).

Another dynamic is at play in section 2, where from measure 29 – 49, the electronics are the only pitched element. The distorted feedback tones have been digitally edited into riffs, alternating between repeated tones on A quarter sharp and E quarter sharp, and various states of glissandi and static noise textures. In contrast to this binary alternation, the relative repose of measures 38 and 39 allow us to hear a subtle shift from B natural to noise, perhaps evoking a low fidelity trumpet recording in a reverberant space.

Timbral fluctuation also features prominently in the flutes, as in sections 1 and 8, where

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<sup>22</sup> Tim Hodgkinson, “Interview with Iancu Dumitrescu.” In *Acousmatic Provoker*, ed. Iancu Dumitrescu and Ana-Maria Avram (London: ReR Megacorp, 2002), 94.

they use a “chin vibrato”, which results in a periodic fluctuation of overtones. Another example is in measures 140 – 150, where clearly pitched tones, half step glissandi, microtones, and overblown notes appear within a single gesture. The part is notated generally – a significant amount of performer interpretation and is called for. In this way, I am seeking to recreate an element of the conditions in which the material was generated--an improvisation (my own) on a damaged instrument, performed by a novice player.

This approach came as a natural outgrowth of my work in free improvisation, and experimenting with a variety of instruments with which I had no prior experience. I found that my performances on flute produced timbrally rich results, and directly captured the “raw” sounds that I envisioned. This was possible in part because of the flute’s highly intuitive interface – blowing air across an opening (without the intervention of a reed or mouthpiece) is the closest our Western instruments come to the act of singing. The majority of flute material in *Mansion* and *Prism Path* was transcribed from my own (recorded and edited) performances, with varying degrees of pre-compositional planning and rehearsal. The resulting notation was then given a new dimension of vitality and expressiveness through the interpretations of flutists Claire Chase and Eric Lamb.

Fig. 7: *Mansion*, flutes, m. 138-143

### **Harmony, Timbre, Gesture, and Affect**

The harmonic forms outlined above relate to the affective qualities of each section, with regard to the articulation and phrasing of the flutes, as well as the expressivity of the electronic timbres and percussion. For example, section 1 features a notable balance between violence (the electronics, synthetic) and relative composure (the flutes, human, breath-oriented), which, due to the volatility (and physicality) of the electronics, feels as though it may collapse into the former direction. The legato articulation and clear phrasing of the flutes contributes to the balance, as does the overall harmonic character, suggesting a harmonic shift from F to B $\flat$  (in a B $\flat$  Mixolydian collection) from measures from measures 11-17. The harmonic dimension is complicated by the fact that the bass note, played by the electronics, fluctuates significantly, as in many other areas of the piece where intonation plays an expressive role. Nonetheless, an element of straightforward modal harmony is unmistakably present, as is the harmonic movement between 1-10 and 11-17.

The main interest in the concluding area (measures 17-28) is the control with which the peril of chaos manifests itself. Although the activity of all the instruments is destabilized into noise and atonality, it succeeds in maintaining an element of composure. This is achieved through another example of balance, which I will discuss in the section that follows.

### **Thresholds of Convergence and Divergence**

Thus far, I have briefly discussed the roles that harmony and timbre play in creating various thresholds between pitch and noise and contrasting affects. Within these contexts, we can observe the fluctuation of lead and accompaniment relationships, foreground and background, and relatedness in streams of superimposed tempi. These can generally be referred



to as thresholds between convergence and divergence.

In section 1, a lead and accompaniment relationship “converges” to become one of equal foregrounding between flutes and electronics. At the entrance of the flutes in measure 4, we hear a clear timbral and registral separation between the main line (the heterophonic melody in the flutes), and the bassline accompaniment in the electronics. The higher-register electronic noise that opened the work occasionally interrupts the clear registral delineation, adding a further element of tension to the sound. At measures 9-10, the electronics cut out and the flutes conclude the first of two four-line phrases alone. In the second phrase, the electronics extend the duration of the high register tones, which creates a strong sense of binary alternation between high and low, and in addition to the harmonic change described previously, a new sense of dialogue emerges with the rising and falling pitches of the flutes. These high register episodes do not synchronize until measure 15 (the flutes’ third gesture of four), when they create a momentary dissonance. As if acknowledging the significance of this brief moment of contact, the flutes then have their longest pause yet – a full bar -- while the electronics briefly re-focus on low register activity. Along with the next feedback glissando, flutes re-enter with the delayed fourth gesture at measure 17. Although measures 18-23 feature intermittent playing in the flutes and electronics, the element of equal foregrounding is maintained. The flutes briefly emerge in a lead role at the tremolo gesture of measures 23 and 24, as they converge with the electronics through rhythm (a synthesizer tremolo at about the same speed) and dynamics (diminuendo). Finally, the sustained metallic tones of the electronics conclude the section, supported by metallic percussion.

From measures 15 – 20, we have a relatively smooth transition between quasi-modal harmony and atonal noise, which I previously described as a controlled onset of more chaotic

activity. The music has transitioned into atonality and chaotic noise, yet the mood still contains an element of sober reflection, and a degree of perceptual clarity. One reason these elements are possible is because the repetition and sense of pulse is extremely varied in the preceding material. While there are unmistakable elements of repetition, such as the two-note bassline in measures 2-3, this repetition is continuously varied. As mentioned previously, the interruption or alternation with the high register tones creates an affective situation where one feels that the stabilizing repetitive element may collapse into chaos. While the music does change into a more chaotic state, it does so relatively smoothly. This is in part because of the listener's past familiarity with the electronic glissandi, which has been part of the dialogue since the beginning of the work. Also, the sustained synth texture at measure 18 provides an element of stability, due to its periodic tremolo rhythm. The aforementioned element of equal foregrounding, with a clear timbral separation between instrument groups, and sparse phrasing in the flutes and percussion, helps us hear each element relatively clearly.

Another threshold of convergence and divergence is at play in section 2, where a percussion part at 75 bpm is superimposed with an electronic riff at 60 bpm. Through a synchronization of phrase divisions, we can perceive not only their relatedness, but also linear elements of tension and release. The overlapping of tempi creates a base pulse relationship of 5:4. The dominant pulse is the 5 count, which governs the percussion's quarter note. Each group of 5 quarter notes at 75 bpm is therefore equal to 8 eighth notes at 60 bpm. In the electronics, we have a recurring riff that repeats at an even eighth-note pulse. At about measure 32 (2:01), tension is increased through a halving of the note value – four quarter notes at 60 is laid over 5 quarter notes at 75. I say "about" because the placement of the change is loose. Finally, in measure 34 (2:08), a kind of release is attained when the tape changes from an A

quarter sharp pulse to a sustained E quarter sharp. However, the element of release is complicated by the percussion, which changes from a quarter note pulse to an irregular quintuplet pulse. After a brief tail in the electronics (distorted glissandi again), the element of unity between the instruments is reaffirmed by the next crash at measure 36, coinciding with a re-articulation of the E sustained tone in the tape. At 37, the electronics resume the phrase from the beginning, while the electronics seem to lag behind, and withhold return to the eighth note pulse until measure 39. At this point however, the percussion changes back to quintuplets, moderately raising the level of intensity, while we clearly recognize that the electronic material is being repeated. After this variation on the opening measures, a sense of expectation is created around 2:35, when both the electronics and percussion change to quarter notes in their respective tempi. At about measure 41, the electronics shift to the aforementioned sustained tone. However its now even more unstable than the first time, since the percussion plays a drum fill. when the percussion plays a drum fill. The sense of increasing urgency is maintained when the E rearticulates at 2:50, as the percussion plays irregular septuplets, which may be heard as an increase in speed in relation to previous material, or as a threshold zone between the “pulse” material and the drum fills.

In this midst of this instability, the flutes enter at measure 49, which are slightly faster than the percussion (at 80 bpm), and intentionally asynchronous. They serve as an element of continuity during the transition of the percussion. The faster, stable beat of the percussion gives a sense of arrival, and has been prepared by the gradual increase in speed since measure 39. The stability is short-lived, as the part becomes a transition to the blast beat.<sup>23</sup> This moment of

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<sup>23</sup> A blast beat is a drumming technique most commonly associated with various forms of extreme metal. It typically consists of rapid coinciding or alternating hits on the snare drum, bass drum, and cymbal. Since most classical percussionists have no experience with this specialized technique, the score simply asks the player to alternate between the kick + ride cymbal and snare “as fast as possible.”

climax is (somewhat crudely) prepared by the change to half-time ride, the emergence of noise glissandi in the tape, and the change in timbre created by the ride cymbal (from the center to the edge). The “dead zone” that follows, as well as the entirety of section 3, is experienced as a consequence of the “explosion,” moving from a mysterious atmosphere of decay to an incantatory sense of being built anew. A sense of continuity in section 3 is created by the percussion, which plays an “echo” of measures 30-44.

The figure displays two musical staves. The upper staff, labeled 'Tape', is in 6/8 time with a tempo of 60. It shows a sequence of notes with various articulations and dynamics, including a section marked '(unpitched)'. Time markers are placed above the staff at 1:51, 1:53, 1:56, 1:59, 2:01, 2:08, and 2:15. The lower staff, labeled 'Perc.', is in 6/8 time with a tempo of 75. It shows a complex rhythmic pattern with many notes, some marked with '5'. Time markers are placed above the staff at 1:51, 1:54, 2:01, 2:08, 2:15, 2:24, 2:36, 2:42, 2:51, and 2:54. Measure numbers 29 through 48 are indicated below the staff.

Fig. 8: *Mansion*, notation of percussion and tape in their respective tempos, m. 29 – 48. Tape notation is highly reduced with regard to articulation and pitch/noise content, and does not appear in the score. Approximate minutes and seconds from recorded version are given in key areas of both scores for comparison. Times in bold represent simultaneous or near-simultaneous events.

## The Center

Sub bass frequencies play an important part in most of my works for electronics. When amplified (typically using a subwoofer), these frequencies are physically felt, and envelop the entire listening space. They can be accommodated in the concert hall without the need for hearing protection, and also allow acoustic instruments to be clearly heard. Furthermore, due to the length of the waveforms, directionality of sub bass frequencies is not perceived (under ideal listening conditions), which gives each listener the impression of being in “the center” of the sound.

In terms of variety and context, the electronics constitute the “stages” or “rooms” through which the players move, each section conjuring a distinctive atmosphere or sound space. The activity of the players is of course dynamic, and change in character with each new section, but this dynamism is greatly augmented by the choice of electronic sounds, which create a virtual sound space. An example of this is section 5, where, after a dense texture of static noise, the flutes are left alone, bringing their timbres into stark relief. When amplified, this passage is full of artifacts, including the sound of breath, as well as the subtle ‘pop’ of articulated accents. In addition, the periodicity heard here contrasts greatly with the comparatively irregular gestures of section 3. In measures 106 – 111 the flute is intermittently combined with the electronics, which consist of a fast alternation between a short A5 and a Bb1 sine tone, temporarily suggesting Bb Lydian. When this is amplified at a moderate to loud volume, the sub bass of the Bb1 (at 58.27 Hz) vibrates the entire listening space or concert hall. Here we have another delicate balance in play – an acoustic sound full of artifacts and overtones, in combination with a synthetic “pure” sound (nearly absent of overtones) vibrating the bodies of listeners and the listening space. Since the bass sound in question is nearly devoid of overtones, its aggressive affect cannot be equated with the more distorted electronic passages of the piece. Rather, it is a colder, more impersonal and more mechanical aggression. Similarly, the electronic rhythms that emerge contrast greatly with the more varied and complex amplitude envelopes of the flutes, and in this way they bring each other into relief. This passage in particular conveys a strong element of the juxtaposition between human and machine, in part because the electronics themselves are particularly mechanical in affect. Through their absence and presence, the electronics re-contextualize the experience of the listening space itself, bringing the domains of acoustic performance and amplified electronic music closer together, using sounds that are physically felt.

Another way of considering the contrasts at work here is in terms of mechanical periodicity versus freely gestural material. From measure 94 (end of section 3) to the near-silence at measure 150 (end of section 6), most changes are the result of addition or subtraction of static elements, or an abrupt switch between ostinatos. For example, in measures 95 – 126, instruments are either added or subtracted, with the exception of the transition from 103 – 107. Here, at the entrance of the flute loop, the speed of the cassette recording is slowed down, which is easy to hear since the material is rhythmic – a recording of a percussion ensemble. Following this brief goal-directed gesture, a zither chord enters at measure 105, which has a longer decay, merging with the decay of the live tam-tam. In other areas, when each instrument is sounding, we have loops, sustained tones, or sustained textures, which themselves are non-developmental, or static. These include the filtered white noise at 95 – 104, the cassette recordings of wind, and the percussion, which only has three parts (loops) in the entire section, each of which is arrived at discretely. Following measure 126, the percussion and electronics continue this tightly controlled discourse, while the flutes, engage in the most improvisatory section of the entire work<sup>24</sup>. Only the entrances are notated; the score simply says play “noise gestures and instructs the interpreters to “get faster, more dense, and high pitched” at 134 and after.

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<sup>24</sup> This section was realized in collaboration with flutists Eric Lamb and Claire Chase, who performed it as heard on the recorded version after very little explanation. I have so far refrained from transcribing their performances into the score, preferring instead to embrace the spirit of openness that we used in creating the gestures for all performances. Furthermore, performers can use our commercial recording as a reference, while also discovering the passage for themselves.

## CONCLUDING REMARKS

My hope is that this paper has provided insight into some fundamental motivations for my compositional practice, on a level that is integrative of both inner experience and compositional technique. Mythological ideas have been a continuous source of inspiration in my thirteen years as a composer, in part because of their ubiquity in a wide range of cultural, historical, and psychological contexts. Furthermore, I believe that mixed music is uniquely suited to explore and express these ideas of transformation, due in part to its unique dialogue with the past and present, and a tremendously varied engagement with sensory extremes.

In discussing my approaches to generating compositional material, I would like to lay groundwork for future discussion. In addition to the great variety of computer music techniques currently taught, I propose that approaches to mixed music can also be fostered through the use of hardware electronics, particularly with regard to their use in improvisatory contexts during early stages of composition. Workshops incorporating acoustic and electronic instruments could be used as fruitful pedagogical tools in programs devoted to the composition of concert music, and young composers may benefit from spaces where they are encouraged to incorporate ideas and material derived from these types of direct sound experience.

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**Appendix I: Compositions by Mario Diaz de Leon cited**

*2.20* (2003) 9'  
string trio and stereo playback

*Moonblood* (2005) 15'  
string quartet

*Psalterion* (2006) 16'  
string quartet

*The Flesh Needs Fire* (2007) 9'  
flute, clarinet, and stereo playback

*Mansion* (2009) 11'  
two alto flutes, percussion, stereo playback

*Altar of Two Serpents* (2009)  
two alto flutes

*Prism Path* (2009-2010)  
two alto flutes, percussion, stereo playback

*The Soul is the Arena* (2010)  
bass clarinet, stereo playback

*Portals Before Dawn* (2011)  
flute, alto flute, clarinet / bass clarinet, percussion, piano, synthesizer, stereo playback

*Luciform* (2011) 14'  
flute, stereo playback

**Appendix II****Mansion Cycle (2009-2011)**  
Complete Score

Mario Diaz de Leon

WORK	Page #
Prism Path (2009-10) two alto flutes, percussion, electronics	32
Altar of Two Serpents (2009) two alto flutes	49
Mansion (2009) two alto flutes, percussion, electronics	57
Luciform (2011) flute, electronics	73
Portals Before Dawn (2011) flute, alto flute, clarinet / bass clarinet, percussion, synthesizer, piano, electronics	83

# PRISM PATH

For Two Alto Flutes, Percussion, and Electronics

MARIO DIAZ DE LEON  
2010

## PRISM PATH

Composed August 2009 – October 2010 in New York City.

Duration : 9 minutes, 30 seconds

Two Alto Flutes  
Percussion  
Stereo Playback (tape)



Score is in C

Composed for Claire Chase, Eric Lamb, and Nathan Davis of the International Contemporary Ensemble  
Premiered November 19<sup>th</sup>, 2010 – Velvet Lounge, Chicago

In addition to a stereo PA, one **subwoofer** (with a built –in crossover) must be used for the tape part. The bass tones should vibrate the room significantly, and be physically felt.

The most optimal way of **synchronizing with the tape** is for the percussionist to use a click track, cueing the flutists as necessary.

## General Notes :

 = crescendo from nothing  
 = diminuendo to nothing

## Flutes:

All grace notes are slurred.

Numbers indicating level of overblow appear above arpeggiated figures and boxed grace notes, as in m. 3-14.

0 = fundamental, 1 = octave above, etc.



= chin vibrato : use chin to create a tremolo – like vibrato. This is often used in combination with spectral overblowing.



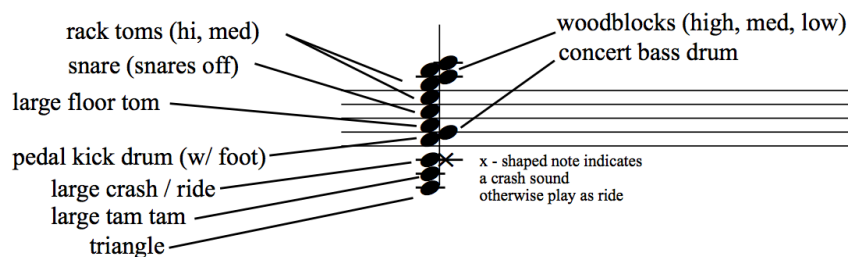
= pitched noise (aeolian tone)

## Percussion :

concert bass drum  
 pedal kick drum  
 2 rack toms (hi and medium)  
 large floor tom  
 snare drum  
 large Tam Tam  
 large ride cymbal  
 large crash cymbal  
 triangle  
 3 woodblocks (high, medium, low)

N.B. - the snare and 3 toms should all be playable at a standing height and on their own stands (NOT mounted to the bass drum).

- toms should be double-headed, 12'''-14''' -16''' or 12'''-13'''-16'''



Mallets : sticks, yarn, large beater (concert bass drum mallet)

# PRISM PATH

♩ = 70

Alto Flute *mf* *all grace figures slurred* 7:6<sup>b</sup> 0 → 1 → 0 8:6<sup>b</sup> 0 → 1 → 0 etc...

Alto Flute *mf* 8:6<sup>b</sup> 0 → 1 → 0 6:5<sup>b</sup> etc...

A. Fl. 6 7:6<sup>b</sup> 0 → 1 → 0 7:6<sup>b</sup> 1 → 0/1 0 → 1 1 → 0

A. Fl. 6:5<sup>b</sup> 0 → 0/1 → 1/2 → 0 0 → 0/1 → 1/2

A. Fl. 10 0 → 0/1 1 → 0 → 1 → 0/1 3:2 2 2/1 (from overblown C: 2/1) 2 - 1 - 1/2

A. Fl. 0 → 0 0/1 → 1/2 → 0 3:2<sup>b</sup> 0 → 1/2 0/1 0/1 → 0 become more noisy

A. Fl. 14 become more noisy 3 6 3 7 5 5

A. Fl. 3 6 3

Perc. *mf* 5 6 5 6 7

Tape *synth pad*

18

A. Fl.

A. Fl.

Perc.

Tape

21

A. Fl.

A. Fl.

Perc.

Tape

*like a drone w/ shifting overtones*

25

A. Fl.

A. Fl.

Perc.

Tape

*cassette recording of flute, with tape speed effects*

*mf*

30

A. Fl.

A. Fl.

Tape

*cassette recording of guitar with tape speed effects*

*mf*

4:3<sup>2</sup>

8<sup>va</sup> (scratching)

36

A. Fl.

A. Fl.

Tape

*mp*

*f*

*f*

*mp*

*f*

*guitar with tape speed effects*

*pitch shifted flute with tape speed effects*

5

41

A. Fl.

A. Fl.

Perc.

Tape

*overblow*

*ff*

*f*

*f*

3:2

5

5

3

3



16

A. Fl.

A. Fl.

Perc.

Tape

low pass filter sweep on G, high partials

48

A. Fl.

A. Fl.

Perc.

Tape

low pass filter sweep on G, high partials

50 *breath tone*  
A. Fl. *mp*  
A. Fl. *mp*  
Perc.  
Tape  
*synth bass tones, long decay*

57  
A. Fl. *mf*  
A. Fl. *mf*  
Perc. *mf*  
Tape

63  
A. Fl. *mf*  
A. Fl. *mf*  
Perc. *mf*  
Tape  
*arpeggiated synth chords at 60 bpm approximate placement*  
*gradually o.b. to highest partials*

69

A. Fl. *mf*

A. Fl. *mf*

Perc. 5 6 7 7 3 3 7

Tape

74

A. Fl. *f*

A. Fl. *f*

Perc. 5 6 5 6 7 7 3 3 7

Tape *zither, all notes sustained* 8<sup>b</sup>

79 *fl.*

A. Fl. *mp* *ff* *o.b w/ dynamics* *f*

A. Fl. *fl.* *gliss* *mf* *ff* *f*

Perc. 5 6 5 6 7 7 3

Tape 8<sup>b</sup>

84

A. Fl.

A. Fl.

Perc.

Tape

89

A. Fl.

A. Fl.

Perc.

Tape

electronic handclap w/ delay

decay

95

A. Fl.

A. Fl.

Perc.

Tape

tam - tam swell w/ soft mallet

mp

pitch shifted down 8va

103

A. Fl.

A. Fl.

Perc.

Tape

(zither)

synth pad

108

A. Fl.

A. Fl.

Perc.

Tape

110

A. Fl.

A. Fl.

Perc.

Tape

freely change register (always gradually and smoothly)

freely change register (always gradually and smoothly)

cassette recording of guitar with tape speed effects

Musical score for measures 112-113. The score includes parts for A. Fl., Perc., and Tape. The A. Fl. part features a melodic line with dynamic markings  $1$  and  $0$ , and a  $0 \rightarrow 0/1$  transition. The Perc. part consists of a dense rhythmic pattern of woodblocks, with a  $9$  marking. The Tape part includes a *flute recording* and a  $6$  marking.

Musical score for measures 114-115. The score includes parts for A. Fl., Perc., and Tape. The A. Fl. part features a melodic line with dynamic markings  $1$ ,  $0$ , and  $0/1$ . The Perc. part consists of a dense rhythmic pattern of woodblocks, with a  $9$  marking. The Tape part includes a  $6$  marking.

116

A. Fl.

A. Fl.

Perc.

(still generally loud, but with more variation in dynamics)

return of arpeggiated synth, through m. 128  
rewind + scratching - guitar & flute  
(etc.)

Tape

120

A. Fl.

A. Fl.

Perc.

Tape

A. Fl. *mp* *fingered note + o.b. -----*

A. Fl. *1/2* *1/0* *3:2*

Perc. *3* *3* *7* *3:2* *5* *6*

Tape *guitar recording w/ tape effects*

A. Fl. *126* *6* *3* *3*

A. Fl. *3* *3*

Perc. *5* *6* *7* *7* *10:8* *12:8* *3:2* *3:2*

Tape *gl.* *15<sup>me</sup>* *arpeggiated synth and guitar stop together*



130

0---0/1--0---0/1-----0

1 0 1 0/1

1 1 0 1

A. Fl. *freely timed*

A. Fl. 0---1---0---1---0--- 1---0 *repeat gesture, approximately* 0 0/1

Perc. *mf*

zither w/ tremolo

Tape

134

0/1 1/2

*o.b from G* 1/2

1 1/2

A. Fl. 1/2 0 0

A. Fl. 1/2

Perc. 3 3 7 3-2 3

Tape 3

A. Fl. <sup>1</sup> <sup>1/2</sup> <sup>6</sup> <sup>9</sup>

A. Fl. <sup>2</sup> <sup>2/1 (end w/ noise tones)</sup>

Perc. <sup>3</sup> <sup>7:4</sup> <sup>9</sup> <sup>9</sup> <sup>3</sup> <sup>3</sup> <sup>3</sup>

flute recording w/ tape speed effects

Tape <sup>3</sup> <sup>6</sup> <sup>bxx</sup> <sup>bxx</sup>

Detailed description: This system contains five staves. The first staff is for Alto Flute (A. Fl.) with a treble clef, starting at measure 137. It features a melodic line with a slur over measures 137-138, a fermata over measure 139, and a slur over measures 140-141. The second staff is also for A. Fl. with a treble clef, starting with a slur over measures 137-138 and ending with a fermata over measure 141. The third staff is for Percussion with a snare drum clef, featuring a complex rhythmic pattern of eighth notes in the first measure, followed by quarter notes and rests. The fourth staff is for Tape recording, with a treble clef and a note indicating 'flute recording w/ tape speed effects'. It contains a melodic line with slurs and dynamic markings. The fifth staff is for Tape, with a bass clef and a note indicating 'e. handclap, w/ delay'. It contains a melodic line with slurs and dynamic markings.

A. Fl. <sup>7</sup>

A. Fl. <sup>6</sup> <sup>7</sup>

Perc. <sup>3</sup> <sup>3</sup> <sup>3</sup> <sup>3</sup> <sup>3</sup> <sup>3</sup> <sup>mf</sup>

soft mallet on concert bass drum

Tape <sup>6</sup> <sup>bxx</sup> <sup>bxx</sup> <sup>bxx</sup> <sup>bxx</sup> <sup>bxx</sup> <sup>bxx</sup>

e. handclap, w/ delay

low pass filter sweep on G, high partials

Detailed description: This system continues the musical score. The first staff is for A. Fl. with a treble clef, starting with a slur over measures 142-143 and a slur over measures 144-145. The second staff is for A. Fl. with a treble clef, starting with a slur over measures 142-143 and a slur over measures 144-145. The third staff is for Percussion with a snare drum clef, featuring a rhythmic pattern of quarter notes and rests, with a dynamic marking of 'mf'. The fourth staff is for Tape recording, with a treble clef and a note indicating 'soft mallet on concert bass drum'. It contains a melodic line with slurs and dynamic markings. The fifth staff is for Tape, with a bass clef and a note indicating 'e. handclap, w/ delay'. It contains a melodic line with slurs and dynamic markings.

147

A. Fl.

A. Fl.

Perc.

Perc.

*ppp* *p*

*synth pad slowly decays*

*low pass filter sweep*

155

A. Fl.

A. Fl.

159

everyone ends together, w/tam swell

A. Fl.

A. Fl.

Perc.

*mf* *ff*

# ALTAR OF TWO SERPENTS

For Two Alto Flutes

MARIO DIAZ DE LEON  
2009

## ALTAR OF TWO SERPENTS

Composed October 2009 in New York City.

Duration : approx. 5 minutes, 45 seconds

Two Alto Flutes

Score is in C

Composed for Claire Chase and Eric Lamb of the International Contemporary Ensemble  
Premiered February 20<sup>th</sup>, 2010 – Park Avenue Armory, NYC



= chin vibrato : use chin to create a tremolo – like vibrato. This is often used in combination with overblowing.



= pitched noise or Aeolian tone



= lighter accent



= more intense accent



= most intense, staccato accent

All grace notes are slurred.

# ALTAR OF TWO SERPENTS

$\text{♩} = 170$

Alto Flute

$mf \leftrightarrow f$

Alto Flute

$mf \leftrightarrow f$

10

A. Fl.

A. Fl.

16

A. Fl.

A. Fl.

*o.b. w/ cresc.*

*o.b. w/ cresc.*

24

A. Fl.

A. Fl.

*w/ vib - o.b.*

$\text{♩} = 145$  *slower*

$\text{♩} = 170$  *a tempo*

*f* *p* *f* *f*

*p* *f*

32

A. Fl.

A. Fl.

$\text{♩} = 140$

*f*

*a tempo*

*mf*

*faster vibrato*

*o.b.*

*mf*

41

A. Fl.

A. Fl.

$\text{♩} = 140$

$\text{♩} = 170$

$\text{♩} = 140$

48

A. Fl.

A. Fl.

$\text{♩} = 170$

*sharp, fortissimo accent, activating higher partials via overblow.*  
*(indicated pitches are approximate)*

*ff*

58

A. Fl. *pp*  $\leftarrow$  *f*

A. Fl. *p*

64

A. Fl. *p*  $\leftarrow$  *f* *mf* *overblow w/ dynamics, a new C*

A. Fl. *mf*

69

A. Fl. *slight dim.* *continue pattern through end of bar - accel to 16th notes*

A. Fl. *slight dim.* *continue pattern through end of bar - slight decel*

76

A. Fl.

A. Fl.

85

A. Fl.

A. Fl.

93

A. Fl.

A. Fl. *play best timbre for bass presence*

101

A. Fl. *vibratos generally slower* *mp*

A. Fl.

112

A. Fl.

A. Fl.

118 *no overblowing. smooth and as blended as possible throughout*  
*focus on pitches and rhythms*

A. Fl. *p* ↔ *mf*

A. Fl. *p* ↔ *mf*

122 *deccel*  $\text{♩} = 160$

A. Fl.

A. Fl.

126  $\text{♩} = 140$

A. Fl.

A. Fl.

130

A. Fl.

A. Fl.

134

A. Fl.

A. Fl.

138

A. Fl.

A. Fl.



♩ = 150

142

A. Fl. 

A. Fl. 

146

A. Fl. 

A. Fl. 

150

A. Fl. 

A. Fl. 

154

A. Fl. 

A. Fl. 

♩ = 160

158

A. Fl. 

A. Fl. 

162

A. Fl. 

A. Fl. 

166

A. Fl. 

A. Fl. 

170 (overflow) cresc. *ff*

A. Fl. (overflow) *ff*

A. Fl. (overflow) *ff*

177 ♩ = 130

A. Fl.

A. Fl. 6

181 ♩ = 140

A. Fl.

A. Fl. 6

184 smooth timbral transition *mp*

A. Fl. *mp*

A. Fl. *mp*

188

192

196 ♩ = 150

200  $\text{♩} = 160$

A. Fl.

A. Fl.

204

A. Fl.

A. Fl.

208

A. Fl.

A. Fl.

*o.b with accent + dynamics*

*p* *f* *ff*

*o.b with accent + dynamics*

*p* *f* *ff*

# MANSION

For Two Alto Flutes, Percussion, and Electronics

MARIO DIAZ DE LEON  
2009

## Mansion

Composed December 2008 – January 2009 in New York City.  
Dedicated to Doron Sadjá.

Duration : 11 minutes.

2 alto flutes (amplified)  
percussion  
stereo playback

Score is in C

Composed for Claire Chase, Eric Lamb, and Nathan Davis of the International Contemporary Ensemble  
Premiered February 10<sup>th</sup>, 2009 – Musica Nova Helsinki Festival, Finland

World premiere recording: Mario Diaz de Leon / International Contemporary Ensemble – “Enter Houses Of” :  
TZADIK 8065

Claire Chase, Eric Lamb – Alto Flute



Nathan Davis – Percussion

Available for purchase from Tzadik. [www.tzadik.com](http://www.tzadik.com) / 200 East 10th Street, pmb 126, New York, NY 10003, USA

In addition to a stereo PA, one **Subwoofer** (with a built –in crossover) must be used for the tape part. The bass tones should vibrate the room significantly, and be physically felt.

The most optimal way of **synchronizing with the tape** is for the percussionist to use a click track, with the flute players taking cues from both the percussionist and the tape. Everyone plays from the score.

## General Notes :

 = crescendo from nothing  
 = diminuendo to nothing

## Flute :

This piece often favors a very raw, yet controlled flute timbre. Overblowing is an important part of the style, so octaves are often marked, showing some blend of fundamental and octave (2<sup>nd</sup> harmonic), or 2 octaves above the fundamental (3<sup>rd</sup> harmonic), which are all achieved through overblowing. This of course has a natural effect on the dynamics.

**o.b.** = overblow



= chin vibrato : use chin to create a tremolo – like vibrato. This is often used in combination with spectral overblowing.



= pitched noise.



= slightly sharp or (arrow) down slightly flat ( 1/8 tone or less ). This should be via the position of the flute relative to the mouth.



= quarter tone sharp



= 3/4 tone sharp

## Percussion :

concert bass drum  
 pedal kick drum  
 2 rack toms (hi and medium)  
 large floor tom  
 snare drum  
 large ride cymbal  
 large crash cymbal  
 large tam tam

Crotale on G# (specified in the score with text)

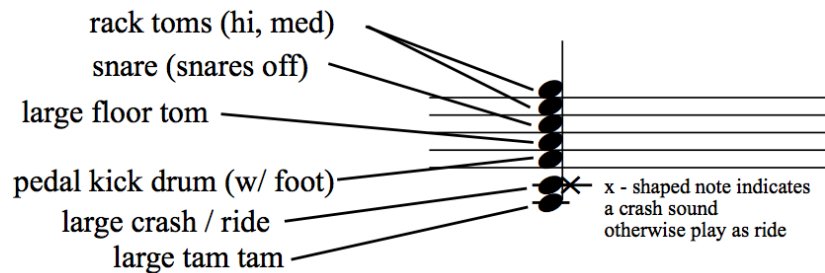
The following are also specified in the score with text, as “metallic percussion”, with general instructions for improvisation :

1 small crash  
 1 china cymbal  
 1 splash cymbal  
 2-3 finger cymbals of differing pitches, suspended (approx 5")  
 3 temple bowls (differing size)

-the snare and 3 toms should all be playable at a standing height and on their own stands (NOT mounted to the bass drum)

- toms should be double-headed, 12"-14" -16" or 12"-13"-16"

## Key



## Mallets

sticks  
 yarn mallet  
 concert bass drum mallet  
 superball mallet  
 bass bow

# MANSION

MARIO DIAZ DE LEON  
2009

♩ = 60

Alto Flute

Alto Flute

Tape

*bass synth*

*(approximate rhythm / phrasing)*

*dynamics change with overblowing: mp ↔ f*

A. Fl.

A. Fl.

Tape

A. Fl.

A. Fl.

Tape

A. Fl.

A. Fl.

Perc.

Tape



*bisbigliando with RH ring, middle, index tremolo. (rmi,rmi,rmi,rmi...) octaves indicate overblowing.*

18 19 20 21 (same technique) 22 23

A. Fl.

(chin vib. w/ bisbigliando - trill @ 5th) *mf p < f* *mf* (chin vib. w/ bisbigliando - trill @ 5th) *p < f*

Perc. *perc: atmospheric metallic percussion, pointillistic*

Tape *rhythmic synth + dist. feedback*

24 25 26 27 28

A. Fl.

A. Fl. *60 bpm tape cue - signals percussion to start @ 75 BPM*

Perc. *make bright ringing decay to fill the space as tape dies out (LET RING) continue for 6 beats, then let ring*

Tape *gliss.* *15 min* *pp* *ff* *ff*

**A**

**J = 75** (tape is @ 60 bpm)

29 Percussion 30 31 32 33

Perc. *ff*

34 35 36 37 38 39

Perc. *5* *5* *5* *5* *5*

40 41 42 43 44 45

Perc. *5* *5* *5* *5* *5*

flutes : play this at 80 bpm, loop 19 times, or stop when the percussion stops.  
be intense in a focused, hypnotic way, rather than climactic.

46 47 48 49

A. Fl.

Perc.

50 51 52

A. Fl.

Perc.

53 54 55 56 57

A. Fl.

Perc.

58 59 60 61 62 63 64

A. Fl.

Perc.

as legato as possible, with occasional, shivering interruptions - but also primitive and raw, ancient feeling  
unless otherwise noted, all pitches above middle Eb/D# (concert) are overblown

65 66 67 68 69

A. Fl.

A. Fl.

Perc.

Tape

70  
A. Fl. *6:4*  
A. Fl. *o.b.* *3:2*  
Perc.  
Tape

73  
A. Fl. *3:2*  
A. Fl. *6:4* *7:4*  
Perc.  
Tape

76 *gliss. to G natural*  
A. Fl. *77 tr*  
A. Fl. *5:4* *tr* *3*  
Perc. *tam-tam w/ soft mallet*  
Tape *a similar, but much brighter sustained tone fades in here*  
**f**

80 81 82 83 84

*gradually add low G#*

*some multiphonic* 4:3<sup>b</sup> 3:2<sup>b</sup>

*slower vib. gently overflow*

*messy sync, heterophonic* 4:3<sup>b</sup> 3:2<sup>b</sup>

Perc. *bowed crotale @ G#*

Tape

85 86 87 88

*o.b.*

*multiphonic trill around concert DII, overflow*

*gl. (vibrato rhythm)*

*o.b.* 3:2<sup>b</sup> 4:3<sup>b</sup> 3:2<sup>b</sup> 3:2<sup>b</sup> *tr* *noise to pitch* *p < f* *p*

Perc. *improvise slow cresc. and dim of bowed crotale* *f*

Tape

89 90 91

*gl.* *gl. (vibrato rhythm)*

*p* *tr* *5* *3* *PPP* *mf* *p < f* *p*

Perc.

Tape

**C** *improvise Eb / Bb vibrato, ethereal, from o.b*  $\text{♩} = 60$

92 93 94 95 96 97 98 99

A. Fl. *7* *3*

A. Fl. *gl.* *tr* *5* *tr* *fl.*

Perc. *filtered noise blast*

Tape *p* *f* *ff* *distorted wind noise* *ff*

*flutes are @ 75 bpm - loop flute figure until tape cue*

100 101 102 103 104 105

A. Fl. *gl.* *mf* *6* *gl.* *mf* *6* *gl.* *mf* *6*

Perc. *bow tam-tam with bow and hand cymbal* *after this entrance of distorted wind noise, count 5 beats, then let ring*

Tape *(high pass filter)* *ff* *distorted wind noise* *dist. zither chord*

106 107 108 109 110 111

A. Fl. *15<sup>th</sup>* *15<sup>th</sup>* *15<sup>th</sup>*

A. Fl.

Perc.

Tape

$\text{♩} = 80$

112 113 114 115 116 117 118 119 120 121 122 123

A. Fl.

A. Fl.

Perc. *cue flutes to end* *improvise slow changes of timbre on tam-tam* *mf* *(2 bars solo tape)*

Tape *new rhythm starts here.... follow the soft white noise* *soft white noise* *f* *f* *cue perc to start*

124 125 126

A. Fl.

A. Fl.

Perc.

Tape

*flutes, 120 - 134; play noise gestures around G*

*mf*

127 128

A. Fl.

A. Fl.

Perc.

Tape

129 130

A. Fl.

A. Fl.

Perc.

Tape

131 132

A. Fl.

A. Fl.

Perc.

Tape

**♩ = 60** *tape and flutes change tempo to 60 BPM.  
percussion stays at 80 BPM: repeat ride cymbal  
measure 9 times.*

133 134 135

A. Fl.

A. Fl.

Perc.

Tape

*here, when bass drum stops,  
get faster, denser, more high pitched over 4 beats*

*fast, shivering, high pitched*

*maintain 80 BPM, repeat 9 times, let ring at end*

**D**

Flutes:  
Count 4 beats after perc stops, then start

136 137 138 139 140 141

A. Fl. *gl.*

re-entrance of tape is cue to stop at m. 138

STOP

microtonal intonation. powerful, strident, but not at maximum energy

tongue

*p ↔ ff*

Perc. move toward edge of cymbal (approximate ending)

Tape (w/ delay)

synth pad

(moderate microtonal scribbling)

142 143 144 145 146

A. Fl. *gl.*

graceful, microtonal, airy, glissy

(detune)

(up and down, overblow, microtonal)

irregular rhythm

*f*

Perc.

Tape

147 148 149

A. Fl. *gl.*

small glisses off these accented notes

pulse should not be too regular

some kind of multiphonic around F#4 that changes with dynamics - pulse should not be too regular

Tape

**E**

150 *tr* *tr* *tr* 151 152 *a.b.* 153 *gliss*

A. Fl.

A. Fl.

Perc.

Tape *"beep" cue w/ delay* *8<sup>va</sup>* *ff* *gliss* *distorted feedback synth*

154 155 156 *7* *7* *5*

A. Fl.

A. Fl.

Perc. *perc enter here with metallic gestural percussion, play more when tape is high pitched*

Tape *15<sup>va</sup>*

157 *(gestural guide) - irregular, fast, overblown, raw* 158

A. Fl.

A. Fl. *(gestural guide) - irregular, fast, overblown, raw* *6* *9* *9* *6* *9* *9* *9*

Perc. *perc : get more dense, wild, play with the flutes!*

Tape *chaotic glisses*



everyone finish together;  
dramatically!

159 160 161

A. Fl.

A. Fl.

Perc.

Tape

$\text{♩} = 77$

162 163 164 165 166 167

**F**

same dynamics as beginning of piece

15<sup>ms</sup> (relative rhythm) 15<sup>ms</sup> tape exits

A. Fl.

A. Fl.

Perc.

Tape

168 169 170 171

A. Fl.

A. Fl.

Perc.

172 173 174 175

A. Fl.

A. Fl.

Perc.

Tape

high beep w/ delay

176 177 178 179

A. Fl.

A. Fl.

Perc. *decel to 16th notes....*

Tape *zither field recording / lo-fi percussion*

180 181 182

A. Fl.

A. Fl. *hard overblow with accents* *bisbigliando* *gliss.*

Perc.

Tape

*bisbigliando with RH ring, middle, index tremolo (rmi,rmi,rmi,rmi... octaves indicate overblow)*

183 184 185 186

A. Fl.

A. Fl. *hard overblow with accents* *bisbigliando* *gliss.*

Perc.

Tape *zither with delay* *zither field recording*

slow wailing tone on concert G, bisbig.

187 188 189 190

A. Fl.

A. Fl. *slow wailing tone on concert Bb*

Perc. *let ring* *improv-metallic percussion, progressively sparse, overall decelerando, continue for two bars* *dark timbre, let ring*

Tape *decelerando of low-fi percussion (slowing down of tape speed)*  
*distorted chord*

191 192 193 194 195

A. Fl.

A. Fl. *again with the G/ Bb technique*

Perc.

Tape *distorted chord*

# LUCIFORM

For Flute and Electronics

MARIO DIAZ DE LEON  
2011

# LUCIFORM

composed October – December 2011

commissioned by Jessica Falvo  
dedicated to Claire Chase

Premiered March 8<sup>th</sup>, 2013 at Roulette, Brooklyn

Unless otherwise noted, all trills are semitone.

The performer synchronizes with the electronics using a click track, which comes as a separate audio file.

With the exception of very small performance spaces, the flute should be amplified, and a subwoofer must be used in combination with the stereo speakers. The bass tones should vibrate the room significantly, and be physically felt.

# LUCIFORM

for Claire Chase

MARIO DIAZ DE LEON  
2011

*freely, w/ rubato*

♩ = 110

Flute: *f*

Tape:

Flute:

Tape: *gliss.*

Flute:

Tape: *gliss.*

Flute:

Tape: *gliss.*

Flute:

Tape:

Flute:

Tape:

Flute:

Tape:

Fl. *f* *p* *f* *as loud as possible*

Tape *single gliss voice emerges*

Fl. *mp to f*

Tape

Fl. *aeolian tone*

Tape

Fl. *mf*

Tape

Fl. *mf*

Tape *tremolo organ*

Fl. *sing F*

Tape

begin at fingered pitch, then overblow to 2nd octave

105

110

Fl.

Tape

organ lead + reverb

(etc) mp

Fl.

Tape

115

Fl.

Tape

120

SOLO 1

Fl.

125

as written, no rubato

130

Fl.

ff

FLUTE AND DIST. ORGAN IN UNISON, through m. 146

Tape

synth drone enters on downbeat

Fl.

135

Fl.

140



Fl. *(tape plays m2 below)* *(resume unison)* *high frequency cresc.* 145

Tape

*SOLO II* *pause* 150

Fl. *f*

Fl.

*hard accent* *fp* *clean organ w/ tremolo* 155 160 165

Fl.  $\text{♩} = 107$  *deccel*  $\text{♩} = 103$   $\text{♩} = 98$   $\text{♩} = 91$   $\text{♩} = 89$

$\text{♩} = 81.5$   $\text{♩} = 79.5$  170

Fl.

Tape *fast arpeggio crescendo from pp* *cresc.*

$\text{♩} = 70$

Fl.

Tape

Fl.

Tape *f*

175  
Fl. *ff*  
Tape *ff*

180  
Fl. *p* *ff*  
Tape *p* *ff* *mp* *f*

185  
Fl. *p* *mp* *mf* *ff* *mp*  
Tape *p* *mp* *mf* *ff* *mp* filter sweep on D#

190  
Fl. *f*  
Tape *mf* *ff* high frequency noise gestures fast modulated tone

195  
Fl. *f*  
Tape *f* repeat

200  
Fl. *f* *mp* *ff* *p* *f*  
Tape *p* *f* *mp* *ff* long filter sweep on G

SOLO III  
210  
Fl. *f* *mp* *ff* *p* *f* slow 1/4 tone gliss.

Fl. *215*

Tape

Fl. *♩ = 80*

Tape

Fl. *220*

Tape *(w/ delay)*

Fl. *225*

Tape *(w/ delay)*

Fl. *♩ = 67 227 - 250 : ALL GRACE NOTES SLURRED*

Tape *mf to f Db drone continues through m. 249*

Fl. *chrom. gliss. 235 gl.*

Fl. *gl. down (tr) 240 bisbig. 240 chrom. gliss.*

Fl. *bisbig.* *chrom.* *gliss.*

245 *gl.* *gl.* *gl.*

250 *f poss.*


255


260 *10:8<sup>3</sup>* *10:8<sup>3</sup>* *10:8<sup>3</sup>* *10:8<sup>3</sup>* *10:8<sup>3</sup>*

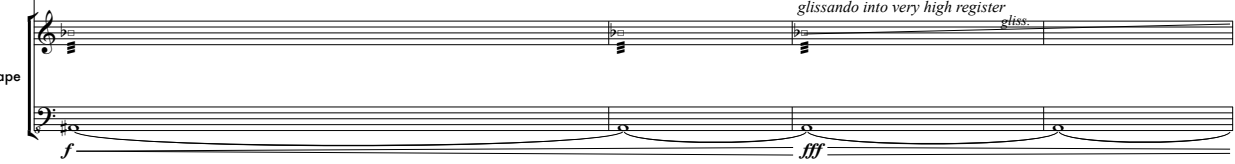
265 *(random melody continues)*


*ALL GRACE NOTES SLURRED*

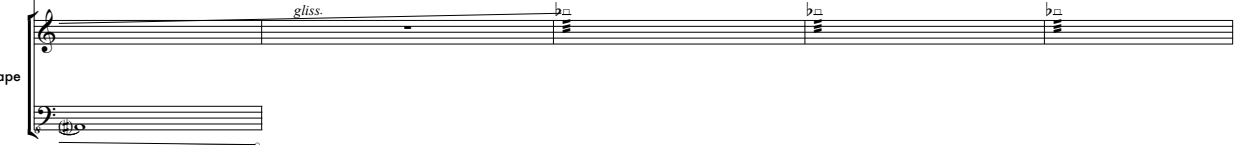
270


Fl. 


Fl. 


Tape 


Fl. 

Tape 

Fl. 

Tape 

Fl. 

Tape 

# PORTALS BEFORE DAWN

For Flute, Alto Flute, Bass Clarinet, Piano, Synthesizer,  
Percussion, and Electronics

MARIO DIAZ DE LEON  
2011

## PORTALS BEFORE DAWN

Composed November 2010 – March 2011 in New York City.

Duration : 20 minutes

Flute in C  
 Alto Flute  
 Bass Clarinet (doubles B flat Clarinet)  
 Synthesizer  
 Piano  
 Percussion  
 Stereo Playback



Score is in C

Composed for the International Contemporary Ensemble, as part of the ICELAB Program.  
 Premiered March 30<sup>th</sup>, 2011 – Le Poisson Rouge, NYC

In addition to a stereo PA, one **subwoofer** (with a built –in crossover) must be used for the tape part and synthesizer. The bass tones should vibrate the room significantly, and be physically felt.

The most optimal way of **synchronizing with the tape** is for all players to use a click track.

### General Notes :

 = crescendo from nothing  
 = diminuendo to nothing

### Flute :



= chin vibrato : use chin to create a tremolo – like vibrato. This is often used in combination with spectral overblowing.



= pitched noise or aeolian tone

## Synthesizer :

A Dave Smith Prophet '08 was used in the composition and first performance of this work. Patches are available in SysEx format, or if another instrument will be used, block diagrams are available from the composer.

The instrument must have separate controls for PITCH BEND, MODULATION (doubling as cutoff), and RESONANCE.

The instrument must have an ARPEGGIATOR.

In the original performance, the analog output of the synthesizer was run through two guitar pedals:

DELAY (originally a Boss RV-3, in stereo mode)

DISTORTION (originally a Boss Metal Zone)

The use of the pedals is specified in the score.

If software effects are used instead, they must be easy to turn on and off during performance.

Patch 1 – tone + resonance + cutoff + arpeggiator

Patch 2 – tone + cutoff modulated via random square wave

Patch 3 – LFO noise loop + pitch bend

Patch 4 – tone + noise via mod wheel

## Percussion :

concert bass drum

pedal kick drum

two rack toms (hi and medium)

large floor tom

snare drum

large tam tam

large ride cymbal

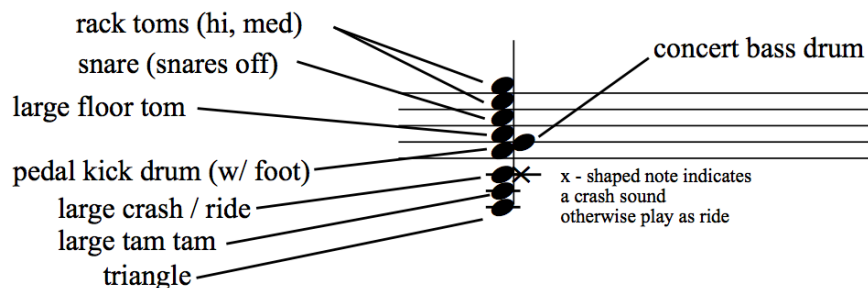
large crash cymbal

crotales, one full octave (mounted)

triangle

N.B. - the snare and 3 toms should all be playable at a standing height and on their own stands (NOT mounted to the bass drum).

- toms should be double-headed, 12"-14" -16" or 12"-13"-16"



Mallets : sticks, yarn, large beater (concert bass drum mallet)  
bass bow (for cymbal and crotales)



# PORTALS BEFORE DAWN

MARIO DIAZ DE LEON  
2011

♩ = 55

Flute *f*

Alto Flute *f*

Bass Clarinet in B<sub>♭</sub>

Percussion

Synthesizer *patch 1 + dist + delay resonance (3) cutoff (5)*

Piano *mp* *mf*

Tape

5 10

Detailed description: This block contains the first system of the musical score, measures 1 through 10. It features six staves: Flute, Alto Flute, Bass Clarinet in B<sub>♭</sub>, Percussion, Synthesizer, and Piano. The Flute and Alto Flute parts play a series of chords with a forte (*f*) dynamic. The Synthesizer part has a low-frequency oscillating pattern with parameters 'patch 1 + dist + delay', 'resonance (3)', and 'cutoff (5)'. The Piano part has a simple accompaniment with a mezzo-piano (*mp*) to mezzo-forte (*mf*) dynamic range. The tempo is marked as quarter note = 55. Measure numbers 5 and 10 are indicated at the top.



C. Fl.

A. Fl.

B. Cl. *bass clarinet higher o.b / m/ptnc quieter high partial around F#5*

Perc. *m. 12 - 20 tam-tam scraping noise* *let ring*

Synth. *5 8 3 cutoff (8)*

Pno.

15 20

Detailed description: This block contains the second system of the musical score, measures 11 through 20. It features six staves: C. Fl., A. Fl., B. Cl., Percussion, Synthesizer, and Piano. The C. Fl., A. Fl., and B. Cl. parts play chords with a forte (*f*) dynamic. The B. Cl. part has a specific instruction: 'bass clarinet higher o.b / m/ptnc quieter high partial around F#5'. The Percussion part has a 'tam-tam scraping noise' from measure 12 to 20, with the instruction 'let ring'. The Synthesizer part has a low-frequency oscillating pattern with parameters '5', '8', '3', and 'cutoff (8)'. The Piano part has a simple accompaniment. Measure numbers 15 and 20 are indicated at the top.

**A**

25

C. Fl. *f* 12:8)

A. Fl. *f* 12:8)

B. Cl. *f*

Synth. 2

Pno. *f* 12:8)

Tape *f*

*synth and voice sample*



30

C. Fl. 12:8)

A. Fl. 12:8)

B. Cl.

Synth.

Pno. 12:8)

Tape *f*

(1/8 note triplet @ 55)

♩ = 82.5

Musical score for measures 35-39. The score includes parts for Clarinet in F (C. Fl.), Alto Flute (A. Fl.), Bass Clarinet (B. Cl.), Percussion (Perc.), Synthesizer (Synth.), Piano (Pno.), and Tape. The tempo is marked as ♩ = 82.5. The key signature has two flats. The time signature is 4/4. The piano part features a complex rhythmic pattern with many triplet markings. The tape part includes notes with a 'pitch shifted up' instruction and dynamic markings of *f*. The percussion part includes 'Crotales'. The synthesizer part has long, sustained notes.



Musical score for measures 40-44. The score includes parts for Clarinet in F (C. Fl.), Alto Flute (A. Fl.), Bass Clarinet (B. Cl.), Crotales (Crot.), Piano (Pno.), and Tape. The tempo markings are ♩ = 55, ♩ = 82.5, and ♩ = 55. The key signature has two flats. The time signature is 4/4. The piano part continues with its complex rhythmic pattern. The tape part features notes with dynamic markings of *f*. The crotales part is labeled 'Drums' and has a 2/2 time signature. The clarinet and alto flute parts have triplet markings.

**B**

45 50

C Fl. *f*

A Fl. *f*

B. Cl.

Perc. *mf*

Pno.

Tape

*w/ delay* *f* *mf* *f* *mf* *f* *mf* *f* *mf* *f* *mf*

*cassette recorded piano* *w/ delay*



55

C Fl.

A Fl.

B. Cl.

Perc.

Synth. *patch 2 + dist. + delay resonance (3) cutoff (2)*

Pno.

Tape

*f* *mp* *f* *f* *f* *f* *f* *f* *f* *f* *f*

*(etc.)*

60

C Fl.

A Fl.

B. Cl.

Perc.

Synth.

Pno.

Tape



65

70

C Fl.

A Fl.

B. Cl.

Crotales

Perc.

Synth.

Pno.

Tape

75

C. Fl.

A. Fl.

B. Cl.

Crot.

Synth.

Pno.

Tape



80

85

$\text{♩} = 46.6$

C. Fl.

A. Fl.

B. Cl.

Perc.

Synth.

Pno.

Tape

90 95

C Fl.

A Fl.

B. Cl.

Crot. Crotales

Synth. *mp* *pitch bend approx 1/8 tone*

Pno.

Tape



100 105 110

C Fl.

A Fl.

B. Cl.

Crot. *soft mallets*  
*pp*  
Mansion Drums

Synth. *no bend* *p.b. 1/8 m.* *no p.b.*

Pno.

**C**

♩ = 70

115

C. Fl. *p* *mf*

A. Fl. *p* *mf*

B. Cl. *p*

Perc. *mp*

Pno.

120

B. Cl. *f*

Perc. *balance cymbal trem with ensemble*  
*f smooth accents on cymbal*

Pno. *ff*

125

C. Fl. *f*

A. Fl. *f*

B. Cl.

Perc.

Synth. *patch 3 + delay*

Pno.



130

C Fl.

A Fl.

B. Cl.

Perc.

Synth.

Pno.



135

140

C Fl.

A Fl.

B. Cl.

Perc.

Synth.

Pno.

*CHANGE TO DIFFERENT CYMBAL*

*kick stays loud, moderate cresc + dim in cymbal trem*

*cutoff : 2 5 2*

145

C. Fl. *f*

A. Fl. *f*

B. Cl.

Perc. *mf*

Synth. *cutoff : 2* 5 2 *cutoff : 2* 6

Pno. *f*

Measures 145-149.



150

C. Fl. *f*

A. Fl. *f*

B. Cl. *brutalissimo* *ff* low C multiphonic

Perc. *soft mallet, ff* *concert bass drum, brutalissimo* sticks

Synth. *ADD DIST.* *gradually add cluster* p.b. ----- 10

Pno. *brutalissimo*

Measures 150-154.

155 D 160

C Fl. *mf* *p*

A Fl.

B. Cl. *mf* *p*

Perc. TAM OR CYMBAL *fff* *pp*

Synth. *mf* *p*

Pno. *mf* *p*

Tape *synth*

C Fl.

A Fl.

B. Cl. *mf* *p*

Pno. *mf* *p*

Tape *chorus effect on synth chord gradually increases*

165

C Fl.

A Fl.

B. Cl. *mf* *p*

Perc. triangle

Pno. *mf* *p*

Tape *heavy chorus effect*

B. Cl. *mf* *p*

Pno. *mf* *p*

Tape



C. Fl. *pp*

A. Fl. *pp*

B. Cl. *mf*

Pno. *mf*

Tape



**E**

C. Fl. *mp*

A. Fl. *mp*

B. Cl. *mf*

Pno. *mf* *p*

gradual reduction of chorus effect through m. 171

Tape

Musical score for measures 170-180. The score includes parts for C. Fl., A. Fl., B. Cl., Pno., and Tape. The C. Fl. and A. Fl. parts feature long, sustained notes with dynamic markings of *pp* and *mp*. The B. Cl. and Pno. parts feature a dense, rhythmic pattern of sixteenth notes with a dynamic marking of *mf*. The Pno. part also includes a dynamic marking of *p* and a *f* marking. The Tape part consists of a complex, layered texture of notes.

Musical score for measures 175-185. The score includes parts for C. Fl., A. Fl., B. Cl., Perc., Synth., Pno., and Tape. The C. Fl., A. Fl., and B. Cl. parts feature long, sustained notes with dynamic markings of *p* and *mf*. The Perc. part includes a *cymbal bow* marking and a dynamic marking of *mp*. The Synth. part includes a *patch 4 + dist + delay mod wheel @ max* marking and a *gradually move mod wheel to zero making pitch clear* marking. The Pno. part features a complex, layered texture of notes. The Tape part consists of a complex, layered texture of notes.

190 195 200

C Fl. *p* *mf* *p* *mf* *p*

A Fl. *p* *mf* *p* *mf* *p*

B. Cl. *p* *mf* *p* *mf* *p*

Perc. *make isolated high partial, hold until end*

Synth. *mod wheel @ zero*

Pno.

Tape *mf*



205 210 215

C Fl. *mf* *p* *mf* *p* *mf* *p* *mf*

A Fl. *mf* *p* *mf* *p* *mf* *p* *mf*

B. Cl. *p* *mf* *ff* *p* *mf* *ff* *p* *mf* *ff* *p* *mf* *ff* *(to Bb Clarinet)*

Synth. *cutoff (3)*

Pno.

Tape

**G**  $\text{♩} = 55$

220 225

C Fl. *p* *mf* *p* *mf* *p* *mf*

A Fl. *p* *mf* *p* *mf* *p* *mf*

Synth. *patch 1 + delay + arpeggiator* *cutoff (0) via mod wheel*

Pno.

Tape *high pass filter gradually leaves higher partials only* *filter sweep continues, eventually leaving high frequency white noise*  
*tremolo voice sample* *(tremolo speed slows w/ tempo change)*  
*tremolo voice + synth sample*



$\text{♩} = 82.5$   $\text{♩} = 55$   $\text{♩} = 82.5$   $\text{♩} = 55$   $\text{♩} = 82.5$

230

C Fl. *f*

A Fl. *f*

Synth. 0 5 0 5

Pno. *f*

Tape *(tremolo speed follows tempo changes)*

♩ = 55 12:8♯ 12:8♯ 12:8♯

235 ♩ = 82.5 ♩ = 55 ♩ = 82.5

C. Fl.

A. Fl.

Crot.

Synth.

Pno.

Tape

0 6 3



♩ = 55 240 ♩ = 82.5 ♩ = 55 ♩ = 82.5

C. Fl.

A. Fl.

Crot.

Synth.

Pno.

Tape

6



H

♩ = 55

♩ = 82.5 <sup>245</sup>

C Fl.

A Fl.

Crot.

Synth.

Pno.

Tape

12:8<sup>3</sup>

32nd note tremolos (no change in speed)

hold notes continuously throughout - some ties omitted for clarity

hold sust. pedal until sound dies



C Fl.

A Fl.

Crot.

Synth.



250

C Fl.

A Fl.

B. Cl.

Crot.

Synth.

C Fl.

A Fl.

Crot.

Synth.

cymbal roll on edge, smooth, no audible attacks  
Drums

255

C Fl.

A Fl.

Perc.

Synth.

f

f

260

C Fl.

A Fl.

Perc.

Synth.

p

f

p

C Fl.

A Fl.

B. Cl.

Perc.

Synth.

f

f

pp

To Cl.

265

C. Fl.

A. Fl.

Clarinet in B $\flat$

Cl.

Perc.

Synth.

Pno.

*p* *f* *pp*

cutoff (6)

*f*

C. Fl.

A. Fl.

Cl.

Perc.

Synth.

Pno.

*p* *f*

2 4 3

270

C. Fl.

A. Fl.

Cl.

Perc.

Synth.

Pno.

*f* *f* *f*

7

275

Musical score for measures 275-277. The score includes parts for C. Fl., A. Fl., Cl., Perc., Synth., and Pno. The C. Fl. part features a continuous sixteenth-note pattern with a dynamic marking of *f*. The A. Fl. part has a similar pattern with a dynamic marking of *f*. The Cl. part has a similar pattern with a dynamic marking of *f*. The Perc. part has a dynamic marking of *pp* and a dynamic marking of *mf*. The Synth. part has a dynamic marking of *3* and a dynamic marking of *6*. The Pno. part is silent.



Musical score for measures 278-280. The score includes parts for C. Fl., A. Fl., Cl., Perc., Synth., and Pno. The C. Fl. part features a continuous sixteenth-note pattern with a dynamic marking of *f*. The A. Fl. part has a similar pattern with a dynamic marking of *f*. The Cl. part has a similar pattern with a dynamic marking of *f*. The Perc. part has a dynamic marking of *3*. The Synth. part has a dynamic marking of *3*. The Pno. part is silent.



280

Musical score for measures 280-282. The score includes parts for C. Fl., A. Fl., Cl., Perc., Synth., and Pno. The C. Fl. part features a continuous sixteenth-note pattern with a dynamic marking of *f*. The A. Fl. part has a similar pattern with a dynamic marking of *f*. The Cl. part has a similar pattern with a dynamic marking of *f*. The Perc. part is silent. The Synth. part is silent. The Pno. part is silent.

*dim. w/ accelerando*

C Fl.  
A Fl.  
Cl.  
Synth.  
Pno.

285

A Fl.  
Cl.  
Perc.  
Synth.  
Pno.

*soft mallets on skins and cymbals, w/ piano*  
*mp*  
*w/ drums*

290

C Fl.  
A Fl.  
Cl.  
Perc.  
Synth.  
Pno.

*tam*

295 300

C Fl. *mp* *p*

A Fl. *mp* *p*

Cl. *mp* *p* w/ crotales

Perc. *mp* 3 To Crot. Bowed Crotales w/ clarinet

Synth.

Pno. w/ winds w/ flutes *mp*



w/ crotales 305 310 315

C Fl. w/ crotales

A Fl. w/ crotales

Cl.

Crot. w/ alto flute w/ c flute

Synth. (3) 0

Pno. *p*

Tape pitch shifted song with tremolo and high pass filter at 1300 Hz, approximate harmony *ppp*