SYNCRETISMS FOR WIND QUINTET AND PERCUSSION: A STUDY IN COMBINING

ORGANIZATIONAL PRINCPLES FROM SOUTHEAST ASIA WITH

WESTERN STYLISTIC ELEMENTS

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PART I

CRITICAL ESSAY

CHAPTER 1

INTRODUCTION

Intent and Goals for the Project

It has always seemed to me that a large part of learning the art of composition involves developing one's aesthetic instincts. As we listen to more and more music, we learn what we find to be aesthetically successful and what we find to be uninteresting. Exactly how this takes place — consciously, subconsciously, or somewhere in between — is a complicated issue best left to another project. In any case, this process is especially relevant to a project involving cross-cultural comparisons because it is one source of acculturation: we will develop different aesthetic instincts depending on the models we have to learn from. Even when we create something that is self-consciously new in some way, the resulting new style is still usually heavily built upon the norms of our cultural history. This process is one way of "accounting for" the sometimes very large differences between the musics of different cultures.

In the 20th century, composers (generally from the Western world, with some exceptions) made an effort to become aware of every aesthetic preference handed down to them through their musical history, and in many cases experimented with (if not insisted upon) working against these preferences in a sort of aesthetic *coups-d'état*. Regardless of how successful this may have been, it produced several generations of composers trained to be especially cognizant of their own aesthetic instincts, where these instincts came from, and how they are employed in music. It is my goal in this project to use this cultivated aesthetic awareness in an attempt to understand the aesthetic values of another culture — actually a group of cultures, from all over Southeast

Asia. Specifically, I identify a set of organizational techniques found in repertories from Southeast Asia and employ them in an original composition.

I address each of these techniques one at a time in Chapter Two, starting the discussion of each with a description of it as it occurs in music from Southeast Asia. These descriptions are based on the work of scholars who have had extensive first-hand experience with the music of these cultures. I draw on their work to summarize the academic community's current understanding of each organizational technique. The language I use in these summaries is intentionally general so that they can accurately describe each phenomenon as it might appear in a variety of Southeast Asian repertories, and in my own composition. For example, I don't describe the specific, named colotomic patterns of Central Javanese music, but I do describe colotomic organization in a way general enough so that it can apply to repertories from Java, Malaysia, Thailand, and even Korea.

After the general description of each organizational technique, I describe the way in which I utilized it in my own composition, *Syncretisms*. This often includes discussion of how I wrestled with the challenge of presenting each technique to a Western audience, the solutions found and the compromises made in response to this challenge, and critical writing about the differences between Western and Southeast Asian music in general.

Emphasis on Organization

The idea that organization is a key source of music's communicative power has been a mainstay of Western theoretical discourse for centuries. Some even argue that it's the only essential aspect of music, but I disagree. If music is "humanly organized sound" as Blacking famously stated, then a complete analysis of music from any culture would include an

examination of all three of those elements: the sounds, their organization, and the humans who chose and organized them (if not the specific individuals then at least the cultural context).[1] Still, this project focuses mostly on the second of these, the organization.

It's not difficult for western audiences to be made aware of foreign *sounds*; in fact, when presented with music from a foreign culture, western audiences are often dazzled by what might be called 'surface elements,' such as the timbres of the instruments, the melodic intervals, rhythmic patterns, harmonic language, melodic phrasing, or tuning system. I thought it would be interesting and fruitful, then, to look beyond these surface elements and focus on the techniques that go into *organizing* these sounds, and to create a piece of music that showcases those techniques in a western concert setting.

With this in mind, I tried as much as possible to employ familiar "sounds" in order to place emphasis on foreign organizational techniques. To begin with, the composition is for classical Western instruments with no "extended techniques" such that the timbres and tuning will already be familiar to a Western audience. Other more specific strategies will be discussed as they come up in the main body of the paper.

That said, the division between "sound" and "organization" is not exactly clear and even somewhat artificial. In identifying each organizational technique, care was taken such that none relies on techniques from the "sound" category; the techniques as I describe them here create relationships that could be employed, theoretically, to organize sounds of any tuning system, any timbre, and any rhythmic, melodic, or harmonic language, giving the impression that "sound" and "organization" are conceptually independent. While this is not universally accepted, this

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[1] John Blacking, *How Musical is Man?* (Seattle: University of Washington Press, 1973), 5.

conceptual model is a useful one to adopt for this project as it facilitates the method of general rather than specific description; that method, in turn, is central to achieving the goal of presenting foreign organizational approaches because it allows me to compose using new organizational techniques while freeing me from having to mimic Southeast Asian elements from the "sound" category.

Divorcing these organizational techniques from the instruments, tunings, melodies, and rhythms with which they were created was not always easy, as it involved synthesizing many scholarly accounts of music from a wide variety of Southeast Asian repertories. Applying the techniques in my own composition was just as challenging. However, this project provided me with the opportunity to learn new schemes by which sound can be organized in compelling and engaging ways that I might use in my own compositional work, techniques I may not have devised without this study.

Scope of the Repertory of Study

It was convenient to group the organizational techniques into three categories according to what kind of relationships they governed. From most local to most global those categories are: relationships within any one musician's part, relationships between the various musicians' parts, and relationships between sections of music. These categories are briefly introduced in this paragraph, but are discussed in detail in Chapter Two. The material in any one musician's part is related through the use of motives unique to that instrument. All of the musicians playing a melodic role play the same melody, at the same time, but interpreted in a way that depends heavily on each instrument's idiomatic character. These variations on the same melody converge at certain regular points of harmonic coordination, and diverge between these points, leaving

harmonies to chance. Time is divided into a hierarchy of lengths, with distinct audible events

marking the passage of each length. Sectioning is achieved through changes of tempo and

instrumentation, and in some cultures, these two devices create sections that alternate between a

sparse and a dense texture. Other sectioning devices include changes of melody, of mode, and of

time-markers, the presence or absence of a periodic beat, and of the frequency of the points of

harmonic coordination. Throughout, much of the music's interest springs from an interplay

between coordinated and discoordinated material.

The organizational techniques I listed above were described (by scholars with first-hand

experience) in music from Thailand, Cambodia, Myanmar, Malaysia, and parts of Indonesia, and

to a lesser extent also in music from Japan, Korea, and Vietnam. The set of techniques above do

not describe all the music in any of these countries but each of the countries listed is home to at

least one repertory that displays at least some of the above techniques. It should be noted that

political boundaries in Southeast Asia do not necessarily match cultural ones, and that the

number of distinct cultures whose music exhibits some of these properties is far greater than the

number of countries listed. Not all of the repertories are current; in Indonesia the various

gamelan ensembles remain popular and new compositions are still being composed for them, but

in Thailand, Cambodia, and other places, traditional music is now mostly the domain of

preservationists. Music that features some of the organizational techniques I deal with in this

project is speculated to have existed as far back as the early 19th century and may well be much

older.

Because of this, the geographic and chronological boundaries of the music I'm studying

can't be expressed easily with an existing label. "Southeast Asian music" is much too broad and

includes plenty of repertories that have noticeably different properties than the ones I describe

here. The term "Southeast Asian Court music" is sometimes used to generalize about music of this type, and while it is (or was, in most cases) often a luxury of the various courts and aristocrats, there are plenty of repertories performed by (for example) fieldworkers or other non-royalty which exhibit the same properties that the term seems a gross misnomer. In the lack of a satisfying existing term, rather than coin one I simply use the term "repertory of study" to refer in general to the music relevant to this project.

Far from a universal language, music turns out to be a very culture-specific phenomenon, and as I found out in this project it takes a lot of patient study and careful listening to become sensitive to the expressive devices of a foreign culture's music. However, as Alan Lomax put it,

> ...once I got the hang of the music, once I began to hear the nuances of feeling and humanity amid the blare of strange sounds, there began an interest that turned into liking...[2]

I have found similarly pleasing results from my study of Southeast Asian music, and I want to present what I've learned not only in an analytical paper but also as a composition for Western audiences. This composition is *Syncretisms*, an original work for wind quintet with marimba and other percussion. The piece combines compositional techniques I learned from studying Southeast Asian music with elements of my own, largely Western-influenced style.

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[2] Alan Lomax, *Selected Writings,* ed. Ronald D. Cohen (New York: Routledge, 2003), 107.

CHAPTER 2

ORGANIZATIONAL TECHNIQUES

This chapter examines each of the organizational techniques identified, from those of the smallest scope (within a single musician's part) to those of the largest scale (the overall form). Emphasis is placed on how each technique is employed in my own music.

The work is in eight sections and is scored for chamber wind quintet (flute, oboe, clarinet, horn, and bassoon) with marimba, and an optional second percussion part consisting of glockenspiel and orchestral chimes. The first (measures 1-27) is characterized by primarily aperiodic rhythms, while the remaining sections are mostly periodic. The second through fifth sections (measures 28-59, 60-91, 92-123, and 124-154) each present a statement of the same 32-bar melody. The last three sections each present versions of that same melody that are condensed in length according to procedures which will be discussed later in conjunction with one of the organizational techniques. The first of these three sections (measures 155-171) presents the melody at roughly half its original length, and both of the final two sections (172-179 and 180-188) present it in roughly half that length again (see Appendix).

Relationships Within Any One Musician's Part: Idiomatic Style

It has been observed that within the repertory of study, many instruments play the same melody at once, each in its own idiomatic style.[3] One consequence of an adherence to idiomatic styles is that all the material within any one musician's part is related. In some way or another, each instrument (or group if parts are doubled) has its own identity in the texture. A variety of devices are used to create these identities and to differentiate them, such as register, density of material, timbre, and most of all gesture. In my composition, I exaggerated this property by creating an artificial "idiomatic style" for each of my instruments. This section will describe the identifying devices found in the repertory of study, and discusses the ways I used each in my own music, or explains why I chose not to use a given technique.

These stylistic identities are different from the roles we speak of in Western music, such as "melody" or "accompaniment." In fact, the two are different parameters: as will be discussed later, "roles" like melody and accompaniment are found in Southeast Asian music as well.[4] It is among the instruments playing the melodic "role" that different "identities" emerge.

Register and Density

In the various Indonesian gamelans, there is usually a system of stratification via register and density together: the higher-pitched instruments play a more dense part and the lowest pitched instruments play a very sparse part, with several unique strata in between.[5] Each instrument plays only at its characteristic density level, and most instruments have a narrow

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[3] David Morton, *The Traditional Music of Thailand* (Berkeley: University of California Press, 1976), 21; also Michael Tenzer, *Balinese Music* (Berkeley: Periplus Editions, 1991), 45-46.

[4] Patricia Matusky and Tan Sooi Beng, *The Music of Malaysia: The Classical, Folk, and Syncretic Traditions*, (Hampshire: Ashgate Publishing Limited, 2004), 11.

[5] Michael Tenzer, *Balinese Music* (Berkeley: Periplus Editions, 1991), 41-42.

range (1-2 octaves) which of course means they play at a very specific register; thus, each instrument has its own density and register which characterize its idiomatic playing style and define its identity.

This system was not imitated in my own piece. At times, the bassoon and horn have parts slightly less dense than the melody (just a few quarter notes per bar) and in the same section the woodwinds might have many more notes than the melody, with their sixteenth notes and trills, but all of these instruments often play at other densities as well. Moreover, the marimba's material ranges from very sparse to very dense. Overall, then, density as a mechanism for giving each instrument an idiomatic identity is not as prominent in my composition as it is in the music of the gamelans. There are two reasons I chose not to employ this system. First, other models seemed more intriguing, for example, the textures found in cultures such as the Thai and Khmer in which more than one version of the melody is heard at roughly the same density level and register at the same time. These seemed more foreign and thus represented a more interesting technique to explore. The other reason has to do with timbre and is described immediately below:

Timbre

In the timbrally heterophonic, all-metallophone gamelans, timbre does not define a unique identity for any of the instruments. The ensemble called for in *Syncretisms* has a wide variety of timbres and is therefore much closer in makeup to some of the Thai, Khmer, or Burmese ensembles that have a mix of wooden and metal percussion, flutes and reed winds, and bowed strings (and in the case of the Burmese, pitched drums). Accordingly, I felt no need to employ the strict density stratification described above. Also, some of my instruments were

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given similar stylistic identities because their timbres would keep them separate to the listener; for example, the flute and clarinet feature somewhat similar "synthetic idioms."

Gesture

David Morton, in his book on the music of Thai cultures, describes each instrument's idiomatic style mostly by describing a set of characteristic gestures each instrument tends to play. A certain xylophone-like instrument tends to ornament the melody with grace-note gestures and a rolling technique; another, a pitched metallophone, plays in octaves or "broken octaves" (the upper note a quarter-beat after the lower); the various wind instruments have their own turns and ornaments with which they vary the melody, and so on.[6] Though I have not found such a thorough description of idiomatic style for the repertories of other Southeast Asian cultures, from my own listening experience it would seem that this kind of identifying device can be heard in other cultures as well, different though their instruments, ensembles, and repertoire may be. In any case, the artificial idiomatic styles I created for my instruments are also achieved mostly through limiting each to certain gestures.

For me, this was a conscious compositional technique that I undertook just for this piece – in other words, should I ever write another piece in this style I could choose completely different gestures for the same instruments. I found that the imposition of these restraints allowed me to consider familiar instruments in new ways. However, I should point out that this application of gestural limitations is not part of the compositional process in Southeast Asia, at least not on a piece-by-piece basis. While playing styles in Southeast Asia do change over the years and some are newer or less traditional than others, it does not seem to be the case that the

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[6] David Morton, *The Traditional Music of Thailand* (Berkeley: University of California Press, 1976), 44-100.

gestural styles are assigned anew with each composition. Fruitful as it was, creating new gestural styles was necessary because I was not working in a culture in which they preexist.

Implementation

Below, I describe the idiomatic style I created for each of the instruments in the ensemble, with examples of the gestures associated with each. My harmonic language will be described in more detail later, but for now, I should point out that it often includes melodic intervals of major seconds and perfect fourths, and less often, minor thirds.

Flute

The flute tends to utilize its middle register and only parts of its lower and upper registers. It has three characteristic gestures: the first is a trill, always a whole step, usually of one or two beats. The second gesture is seen below, but sometimes shifted agogically from what is shown. The first note of each of the slurred groups is almost always the melody note, so the lower neighbor – always a whole step – can be seen as an ornament.

Example 1

The third is an upward whole-tone scale, usually in sixteenth notes, starting on an offbeat and culminating on a downbeat. This often leads directly to either of the previously described gestures, as in the example below.

Example 2

Oboe

The oboe is one of the two instruments called upon to play the melody in one of the slow sections (the sectioning of the piece will be discussed later). In the first slow section, it presents an unornamented version of the melody. If there is a slight stylistic difference between the oboe's version of this melody and how the melody appears during the fast sections, it is that the oboe more often avoids moving from one note to another on main beats, especially on downbeats.

In the fast sections, the oboe has three main gestures. The first is a decaying series of staccato eighth notes, usually all on the same pitch, as illustrated below:

Example 3

The second is an ascending pair of notes in which the first note is tenuto, and the second note is shorter and lighter, as illustrated below. The melody note is often the second note, meaning that the first tone can be thought of as an ornament to it.

Example 4

The third is a whole-step gesture similar to the flute's, but rhythmically distinct, as shown below.

Example 5

Clarinet

The clarinet has similar gestures to the flute, but most often plays these in its lower octaves. The ascending whole-tone scale gesture is the same, and like the flute's, often culminates in a trill. In general, the clarinet tends to hold its trills longer than the flute, often for three or four beats.

The clarinet's unique gesture is a series of eighth notes, melodically made up of only major seconds and perfect fourths, and generally falling and rising all within the staff, as shown in the below example. Sometimes pairs of sixteenth notes are inserted.

Example 6

Horn

The horn tends to play long, sustained tones lasting two to six beats. The structure of my composition in terms of roles (such as melody and accompaniment) will be discussed later, but the horn usually has either a very direct version of the melody, or a line built from elements of the accompaniment part.

Bassoon

When not playing the melody or accompanying the marimba in a slow section, the
bassoon plays an abstraction of the melody with very few notes (usually 2-3 per bar) or a similar
part based on material from the accompaniment, or a part based on both sources, all in a punchy
staccato style. A few typical bars of this character of the bassoon part are shown below:

Example 7

Marimba

The marimba has several signature gestures. The first is rolled dyads (usually in octaves)
or triads, which often start slowly and reach full roll speed after one or two beats. Changes in
roll speed such as this were used so frequently that new symbols were created to notate them:
one indicating that the roll's speed starts slowly and increases over the length of the note to
which it is applied, and another indicating that the roll starts fast and becomes slower. These are
described in more detail in the score to the piece. An example is shown below:

Example 8

Second, the marimba makes good use of its ability to play wide grace-note gestures with ease,
and applies such figures to a variety of rhythms:

Example 9

The third is a series of sixteenth notes alternating between two pitches, leading to a heavily accented note in a different register, as below:

Example 10

The fourth gesture is a series of sixteenth note patterns featuring groups of major seconds interspersed with minor thirds or perfect fourths, such as the following;

Example 11

Lastly, when it plays the role of melody in the second slow section, the marimba anticipates a melody note with an eighth note of the same pitch. When chained together, this creates a series of eighth note anticipations. An example from the slow section is shown below:

Example 12

More often than the other instruments, the marimba has material not made from its idiomatic gestures, generally made of eighth notes or eighth-note triplets in some melodic configuration.

Despite calling for a four-mallet technique, there are very few gestures with more than two simultaneous notes. The four-mallet technique is used instead to give the marimbist more agility and the ability to play wide melodic leaps very quickly.

Percussion

The remaining percussion instruments do not play a melodic role, and their material will be discussed later.

Motivic Composition

I have always enjoyed composing motivically, and especially developing a piece's motives in compelling ways. However, the gestures I describe above do not play that role; they remain constant and act as identifying devices for each instrument. Instead, development is performed on the piece's long, slow melody: while the motives themselves do not change, they are recombined to create new melodic variations every time the melody is repeated. This technique is new to me; it provides me with another strategy for composing motivically in addition to those gleaned from studying the works of Western composers.

Relationships Between the Various Musicians' Parts: Rhythmic Pulse, Colotomic Technique, Skeletal Pitches and Coordination vs. Discoordination

Rhythmic Pulse

While the idea is not at all foreign to Western listeners, the presence of a rhythmic pulse should be recognized here as one way in which various musicians' simultaneous parts are related. Sometimes these beats are audibly marked with a time-keeping instrument as in many Indonesian ensembles, but other times they are inferred from the periodic nature of the melodic

or drum parts. [7] Of course, it is not difficult to find examples of Southeast Asian musicians playing "outside" a beat structure that the rest of their ensemble is observing, and many pieces contain sections of music that have a rhythmic pulse greatly modified by tempo fluctuations, or no pulse at all. There are also some cases in which the time between these beats is very long, up to five seconds in some Korean pieces (twelve beats per minute!), which admittedly stretches our concept of "beat."[8] Thus, while it is not always in effect, there is no piece in the repertory of study that does not have a rhythmic pulse of some tempo or another for at least part of its duration.

I mention this organizational technique first because it is useful for describing the next aspect of cross-part relation, the colotomic technique.[9]

Colotomic Technique

Famed ethnomusicologist Jaap Kunst coined the term "Colotomic" to describe a technique of marking the passage of time in music with a hierarchy of audible markers. Although Kunst was working with the Indonesian gamelans, techniques similar to the one he observed are found all over Southeast Asia. This is also the only musical concept for which I can include Japanese and Korean ensembles in the repertory of study: while their concepts of organization of parts in an ensemble and of overall form are different from those in Southeast Asia, their music does feature colotomic devices for marking time.

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[7] Michael Tenzer, *Balinese Music*, (Berkeley: Periplus Editions, 1991), 43.
[8] These pieces generally fall into the *a-ak* genre and its offshoots. See Sheen Dae-Cheol, "Musical Stasis and Dynamism in Two Living Korean Court Rites," in *A Search in Asia for a New Theory of Music,* ed. José S. Buenconsejo (Quezon City: University of the Philippines, 2003), 229-245.
[9] While nothing about the colotomic technique I am about to describe necessitates a rhythmic pulse, I have never heard for myself nor read accounts of any colotomic Southeast Asian music that did not also have a pulse, at least in its colotomic sections.

A General Description

The colotomic technique is based on grouping beats into a "colotomic unit" and audibly marking the passage of that unit in time. In other words, in a piece for which the colotomic unit is n beats long, a certain event is heard on every nth beat. For the sake of explanation, I'll call that event "A." Another event, "B" usually divides the colotomic unit in half, or sometimes into four. Further subdivisions occur, dividing each half into its own halves or quarters with event "C," and so on. Each of these audible events is distinct and each marks subdivisions only at its specific level. In this way, a hierarchy is formed in which event A marks the whole colotomic unit, event B marks the first subdivision, event C marks the second level, and so on. Figure 1 is an illustration of a generic colotomy that happens to have sixteen beats.

a. One possible colotomic unit, each level of subdivision shown on a different line:

```
• • • • • • • • • • • • • • • A
• • • • • • • B • • • • • • • •
• • • C • • • • • • • C • • • •
• D • • • D • • • D • • • D • •
```

b. The same, all on one line:

```
• D • C • D • B • D • C • D • A
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Figure 1 – Generic Diagram of a sixteen-beat colotomic unit, showing one possible arrangement of colotomic markers.

Note that the "A" event is considered to occur on the last beat of the colotomic unit (in this case on the 16th beat). This is not only traditional, but justifiable in that, in most cases, the

very first colotomic unit of a colotomic section of music does not begin with the "A" maker, and the last colotomic unit ends with one.[10]

Specific Examples from Southeast Asia

Colotomic Unit Length
The length of the colotomic unit could be anywhere from eight beats in some of the shorter Khmer or Malaysian forms to 256 beats in the longest of Balinese forms. In the colotomic sections of my composition, I use a colotomic unit of 128 beats, divided for the convenience of the players into 32 measures of four beats each.

Instrumentation
Any type of audible event could be used to mark the passage of the whole unit or its subdivisions, but the concept of hierarchy is essential. Event "A" marks the largest time span (the colotomic unit itself) and should be more audibly prominent than event "B," "B" more prominent than "C," and so on. In Indonesia and in many Malaysian ensembles the entire colotomy is created with gongs of various sizes; the "A" event is a single stroke of the largest, lowest-pitched gong, "B" a slightly smaller but still quite large gong, and "C" a significantly smaller gong.

Thai, Khmer, and Japanese ensembles use a variety of drums in addition to gongs, and some Korean ensembles use drums plus a wide range of other percussive noisemakers such as

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[10] In their book "The Music of Malaysia," Matusky and Beng suggest that it is philosophically important that the "A" event is equally the end of one unit and the beginning of the next, but even the colotomic sections of the Malaysian music they analyze do not begin with the "A" marker. Maceda offers a different philosophical approach, in which it is necessary to conceive of the "A" marker as occurring on the last beat of the colotomic unit. See Patricia Matusky and Tan Sooi Beng, *The Music of Malaysia: The Classical, Folk, and Syncretic Traditions*, (Hampshire: Ashgate Publishing Limited, 2004), and José Maceda, "The Structure of Principal Court Musics of East and Southeast Asia," *Asian Music* Vol. 32, No. 2 (Spring/Summer 2001): 145-178.

woodblocks, clappers, scrapers, and rattles.[11] While gongs are usually struck once to mark their beat, the cultures using drums often feature a distinct rhythm that can last several beats. In these cases it can often be shown that the beats are grouped into measures, such that the drums' rhythms each mark an entire measure. In any case, the principle of hierarchy still stands; the "A" marker is a certain distinct rhythm, possibly accompanied by several noisemakers, the "B" marker is a rhythm that is less dense, less complicated, shorter, accompanied by less noisemakers, or so on.

The audible markers in my composition are of both types; the "A," "B," and "C" markers are distinct rhythmic figures, but rather than being given to drums, they are worked into the melodic parts of any or all of the instruments already playing. If the optional percussion part is played, then single strikes of orchestral bells and chimes are also heard, for smaller subdivisions or sometimes to accent the main beat of the longer rhythmic marker.

Subdividing the Colotomic Unit

While the generic example above had four levels of subdivision of the colotomic unit, and each a division by half, the number of levels and the type of subdivision varies between pieces, ensembles, and cultures.

There are also examples, mostly from Malaysian ensembles, in which the division of the colotomic unit is not regular. For example, assuming the same 16-beat unit mentioned above, one of the smaller gongs might play on the eighth, twelfth, fourteenth and fifteenth beats, as

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[11] Terry E. Miller and Sam-Ang Sam, "The Classical Musics of Cambodia and Thailand: a Study of Distinctions," *Ethnomusicology*, Vol. 39, No. 2 (Spring-Summer, 1995): 235-236; José Maceda, "The Structure of Principal Court Musics of East and Southeast Asia," *Asian Music* Vol. 32, No. 2 (Spring/Summer 2001): 153-154; and John Levy, *Korean Court Music* (Compact Disc Liner Notes), (Lyrichord LYRCD 7206), 1-2.

shown in figure two. [12] In other words, the level of subdivision gets deeper toward the end of the unit.

•••••••B•••B•BBA

Figure 2 – example of a sixteen-beat colotomic unit with irregular subdivisions.

Irregularities even arise in the music of the Indonesian gamelans. The Javanese seem fond of occasionally leaving out one marker, usually at or during the first quarter of the colotomic unit.[13] I experimented with irregular subdivisions in my composition but ultimately decided that regular subdivisions, each a division by half, were the most aesthetically successful.

Repeating the Unit
　　　　Southeast Asian ensembles make many repetitions of a colotomic unit during the course of a performance. The melody can be longer than the colotomic unit that supports it (in which case the colotomic unit is repeated until the melody is complete) or equal to it (in which case the melody and colotomic unit are repeated together).[14] Some Japanese and especially Korean compositions state only one, very slow colotomic unit. The number of beats is actually very low considering how long the compositions are, as each beat can last several seconds. *Syncretisms* has seven colotomic units, each one exactly as long as the melody.

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[12] Patricia Matusky and Tan Sooi Beng, *The Music of Malaysia: The Classical, Folk, and Syncretic Traditions*, (Hampshire: Ashgate Publishing Limited, 2004), 27-28.   Figure 2 is modeled after, but does not exactly reproduce, a transcription found here.

[13] Jaap Kunst, *Music in Java*, 3rd ed. vol. 1, ed. E. L. Heins (The Hague: Nijhoff, 1979), 108.

[14] I am not aware of any examples of the theoretical third case, in which a short melody is repeated until the end of a longer colotomic unit is finally reached.

Colotomic Hierarchies in my Composition

The audible markers in *Syncretisms* are a little different in each section, but all are motivically related. The "A" marker, which spans the 31st and 32nd measures of each colotomic unit, is a single motive split between two groups of instruments.

Example 14 - Colotomic Marker "A"

The instrumentation changes each time, but in general, Group One is the group of instruments already playing and Group Two is made up of the instruments that are otherwise sitting out, and only enter to play this motive.

The "B" marker is almost the same as the "A" marker, but is missing the final two notes. It spans the 15th and 16th measures of each colotomic unit.

Example 15 - Colotomic Marker "B"

The "C" marker, found in the 7th and again in 23rd bar of each colotomic unit, is the Group 1 motive of the above examples, with no Group 2.

Example 16 - Colotomic Marker "C"

A full description of each section in *Syncretisms* will come a little later in the paper, but for now it suffices to mention that there are slower, more sparse sections interspersed with faster, more dense sections. The sparse sections have audible markers only down to the "C" level, as described above. If the optional percussion part is played, then the dense sections have "D" markers, a single note on a glockenspiel, on beat one of measures 4, 12, 20, and 28 of the colotomic unit. The downbeats in between these — those of measures 8, 16, 24 and 32, or the "A," "B," and "C" markers — are accented with a single stroke of the orchestral chimes, in addition to the motivic markers described above.

The pitches on which all of these motives, and the single chime or glockenspiel strokes, are played depends on the harmony of the measure in which each one occurs, which is the subject of the next section of this paper.

Skeletal Pitches

The colotomic technique extends beyond marking the passage of time to have an affect on pitch as well. It is difficult to sum up this technique briefly, as it is currently the subject of some debate among musicologists. For now, I will begin with a description that has been shown to have at least some validity.

When varying a melody, there are certain pitches that are considered 'essential' to that melody and cannot be changed, while the material between these pitches can be varied in both pitch and rhythm. In other words, when creating a variation on a given melody, a musician can play anything at all so long as the essential pitches are not changed (and, according to some sources, as long as the general mood and character of the melody is also respected.)[15]

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[15] David Morton, *The Traditional Music of Thailand* (Berkeley: University of California Press, 1976), 186.

This is related to the colotomic technique because these pitches, like the colotomic markers, occur on beats numbered with powers of 2. Whether or not they also form a hierarchy, like the colotomic markers do, is one issue currently debated.[16] Another deals with precedence, both historical and compositional: are the essential (or, often, 'skeletal') pitches reduced from existing melodies or are melodies built up from existing skeletal pitches?[17] Exceptions to this system of skeletal pitches — that is, moments when musicians choose not to play the skeletal pitch at the right time but in which the melody is not said to have lost its identity as a result — are rather common and form a third problem in the analysis of these melodies.

I decided to take a stance on these issues based mostly on a combination of my aesthetic instincts and the aesthetic instincts I was beginning to develop as the result of immersive listening to recorded examples of Southeast Asian music. In my own work, the skeletal pitches do not form any kind of hierarchy. I decided upon them first and built my melody around them. There are eight per colotmic unit, and the ones that appear at the end of every quarter (in measures 8, 16, 24 and 32) are adhered to strictly while the ones between them (in measures 4, 12, 20 and 28) are frequently displaced in time, not coordinated between parts, or skipped altogether.

Brinner's analysis of interaction between musicians during performances of certain genres of Central Javanese music includes a detailed look at one kind of moment when not all of the musicians reach the skeletal pitch at the same time. One musician within the ensemble is said to 'lead' other performers to the next skeletal pitch by playing a melodic line that approaches

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[16] Maceda presents arguments for a hierarchical organization in "The Structure of Principal Court Musics of East and Southeast Asia," *Asian Music* Vol. 32, No. 2 (Spring/Summer 2001): 145-178.

[17] Parts of Chapter Three and most of Chapter Four of Sumarsam's book "Gamelan" discuss the precise nature of the term Javanese terms *Gendhing*, *Balungan,* and *Lagu* (all related to the idea of structural pitches) and their relationship to the melodies of the gamelan repertoire.

the pitch but does not actually reach it, leaving it for other musicians to finish.[18] What Brinner is describing here is the social organization of a Central Javanese performance. Ideally, the musicians know all of the "melodies" (i.e. sequences of structural pitches, but not necessarily the material between them) in the repertoire of their ensemble, and the player of a certain instrument or sometimes a singer can decide which piece to perform simply by beginning to play or sing it, without verbally announcing it to the other musicians. This leader can then guide the other musicians to each skeletal pitch by giving purely musical cues.[19] The social organization of *Syncretisms*, however, is the typical one for a western chamber piece: the players read from their parts, and may also follow a conductor who does not play and gives only visual cues.

I was faced, then, with an interesting compositional question: should I imitate this musical phenomenon in my written-out parts — have one voice lead to a pitch that only other voices sound — even though I'm not emulating the social organization with which it is intimately connected? I decided against it, but I understand that it easily could have gone the other way. After all, if these gestures are aesthetically pleasing then there's no need to "excuse" them as being due only to the piece's social organization. Implicit in the question is a deeper and unanswerable one about "why" Central Javanese (or any) music is the way it is. Are these gestures created "because" they're useful for keeping the ensemble organized, or is the performance organized the way it is "because" it allows for the creation of those gestures?

Knowing that there is never a clear resolution to aesthetic problems like these, I went with my instincts. Ideally, it shouldn't matter whether these instincts were more informed by my western aesthetic preferences or the aesthetic preferences I had absorbed during the course of this

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[18] Benjamin Brinner. *Knowing Music, Making Music: Javanese Gamelan and the Theory of Musical Competence and interaction.* (Chicago: The University of Chicago Press, 1995), 217
[19] Benjamin Brinner. *Knowing Music, Making Music: Javanese Gamelan and the Theory of Musical Competence and interaction.* (Chicago: The University of Chicago Press, 1995), 214, 245-46.

project. Either way the result would be the desired combination of Western and Southeast Asian compositional techniques.

To create another such combination, I decided to use predetermined harmonies at the skeletal points instead of single pitches. The presence of these skeletal pitches in Southeast Asian music has the interesting consequence of creating an interplay between coordination (at the skeletal pitches) and discoordination (during the spans between skeletal pitches) between parts. This is true harmonically as well as rhythmically, and in my music, I was able to exaggerate this difference between harmonic coordination and discoordination by employing tertian harmonies at the structural points but leaving the intervening harmonies to be determined incidentally by the paths of multiple independent melodic lines.

The four most important harmonic points of each colotomic unit are:

      mm. 7-8, a minor

      mm. 15-16, f-sharp minor

      mm. 23-24, d-sharp major

      mm. 31-32, c minor

The harmonies listed above are often colored with additional notes, usually a major or minor seventh or a minor sixth above the root.. The harmonies between these points are less likely to be tertian.

Coordination vs. Discoordination as a Main Dramatic Device

As I mentioned in the previous section, it has often been said that there is no "vertical" harmonic thinking in the creation of the music of the repertory of study; that harmonies are the

incidental results of multiple independent horizontal melodic lines. This is sometimes even cited

as the main difference between Western and Asian music.

While there is some truth to this, from studying this music I have come to believe that the

musicians are at least aware of when they are vertically coordinated (rhythmically and

harmonically) and when they are not, as well as the degree of this coordination or

discoordination. The tension-and-release this creates seems to be an integral part of the dramatic

energy of this music. Though he doesn't use the terms "coordination" and "discoordination,"

Morton's poetic description of Thai music paints a similar picture:

> The music "breathes" by contracting to one pitch, then expanding to a
> wide variety of pitches, then contracting again to another structural pitch, and so
> on throughout.[20]

In *Syncretisms*, I decided to exaggerate the differences between coordinated and

discoordinated material. My coordinated moments — occurring every eight bars at the "A," "B,"

and "C" colotomic markers — are both rhythmically and harmonically coordinated. All of the

instruments playing at these points play the same motive and "work together" to spell tertian

chords. Between these points, each instrument's part is dominated by its own idiomatic motives

(discussed above), and they work independently, creating harmonies by chance.

To use the term "working independently" is to exaggerate. Brinner describes that Central

Javanese musicians are never simply ignoring each other and leaving the result to chance; they're

working together the create an aesthetically desirable amount of discoordination.[21] My

composition, of course, is a piece of composed music for Western-trained performers who expect

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[20] David Morton, *The Traditional Music of Thailand* (Berkeley: University of California Press, 1976), 21.
[21] Benjamin Brinner. *Knowing Music, Making Music: Javanese Gamelan and the Theory of Musical Competence and interaction*. (Chicago: The University of Chicago Press, 1995), 259-260.

to follow a written part but who are not expected to be skilled at improvisation — let alone in a harmonic and motivic language that is largely unique to this composition, and certainly not if they have to pay attention to how coordinated their ensemble is while improvising. Instead, I made it my job to control the amount and character of discoordination while composing.

It was an intricate compositional challenge to create a satisfyingly discoordinated heterophonic texture. To believe simply that the instincts about western counterpoint and voice leading I've been cultivating over the years became, for this project, guides as to what *not* to do is actually too easy an answer to this challenge, partly because a complete avoidance of coordination turned out to be rather dull, and partly because each voice in the Southeast Asian musics I am studying still retains an integrity of its own, just as voices in a western contrapuntal or chorale texture do. In fact, in order to give each voice a style familiar to Western ears, as I intended to do as part of the premise for this project, I sometimes employed melodic gestures that are familiar to Westerners from harmonically coordinated writing, and placed them alternately in more coordinated or less coordinated situations.[22]

For example, in measures 127-128, the oboe has two gestures that intentionally sound something like appoggiaturas. (This is one of the oboe's idiomatic identifiers, as described above.) When the emphasized B-flat on the strong beat resolves upwards to the C, it sounds like a resolution because of the implied F-major chord here. If the oboe part were heard alone, the same gesture a few beats later could be heard the same way, as D resolving upwards to E. But taken in context, the E is harmonized with G and A-flat, and doesn't much sound like a resolution. The first gesture was a sort of 'teaser,' intended to lead the ear into expecting this

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[22] For more detailed accounts of carefully crafted discoordination in Southeast Asian repertories, see Benjamin Brinner, "Freedom and Formulaity in the 'Suling' Playing of Bapak Tarnopangrawit" *Asian Music* Vol. 24, No. 2 (Spring/Summer 1993): 1-37; and "Competence and Interaction in the Performance of *Pathetan* in Central Java." PhD diss, University of California, Berkeley, 1985.

recurring idiomatic gesture in the oboe part to behave like an upward resolution. As it turns out, it sometimes does and sometimes does not behave this way, and this turned out to be a more intriguing way to create the effect of discoordination than a texture that had no resolutions at all.

To make things interesting and a little less predictable, I also inserted some moments of rhythmic (but not necessarily harmonic) coordination at points other than the colotomic markers. In measure 143, for example, the accented eighth note tied to a dotted quarter in the second half of the measure is played together by three of the five instruments playing in this section. These moments are always motivically distinct from the colotomic marker motives so that no confusion should arise as to the piece's form.

That "coordination vs. discoordination" is a major force in Southeast Asian music is an attitude I arrived at myself based mostly on listening analysis. While evidence supporting this view can be found in the writing of other scholars, some of those writers have found other ways of framing the issue. Matusky, writing specifically of certain performance practices in parts of Malaysia, describes an interplay between long, vibrato-less notes ("dead" notes) which are broken up with swift flurries of melodic figures.[23] I was not able to locate any recordings of music that featured this particular technique, and I did not feel comfortable emulating it just from a written description, so I did not include anything like it in *Syncretisms*. In any case, it seems like it might be a notably different organization from that observed in the melodies in the repertory of study for this thesis: it sounds from the description that the unornamented material (the "dead" notes) is longer in proportion than the complicated material (the melodic flurries). This is the opposite proportion from the music I have been studying, which features long

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[23] Patricia Matusky and Tan Sooi Beng, *The Music of Malaysia: The Classical, Folk, and Syncretic Traditions*, (Hampshire: Ashgate Publishing Limited, 2004), 233.

complicated sections (the "discoordinated" sections) broken up with only brief points of relative simplicity (the skeletal pitches).

Maceda, examining more or less the same aspects of Southeast Asian music that I did, rather elegantly sums them up in a related but noticeably different way. He writes of an interplay between melody and drone, the latter to be understood not only as held notes but as any cyclic, repeating material, such as the colotomic material described above. This allows him to write of two competing concepts of time, one linear and ever-changing ("melody"), the other cyclical and repeating ("drone"). I find this framing of the issue to be valid, and compelling in its philosophical implications; but as pleased as I am to have come across it, I am equally pleased that my own conclusions are a little different. Perhaps the understanding of coordination vs. discoordination as a main dynamic of Southeast Asian music is uniquely a composer's perspective, or at any rate this composer's perspective. In the end, I suppose I am especially drawn to this understanding of Southeast Asian music because I have found it to be fruitful ground for the creation of my own music.

Relationships Between Sections of Music: Sectioning,

Dramatic Development, and Overall Form

The largest-scale Southeast Asian organizational techniques were perhaps the hardest to reconcile with my Western aesthetic sense. Designing a form that would be compelling to Western audiences, true to Southeast Asian aesthetic ideas, and that would allow me to showcase some of the more uniquely Southeast Asian sectioning devices proved to be quite a compositional challenge.

Sectioning

I use the term "Sectioning" to refer to the methods used to differentiate one section of music from another (and by "section" I mean a large span of music comprising at least one if not many colotomic units). I could describe each section of *Syncretisms* one at a time, but in keeping with my methodological understanding of organization as "the relationships between things" it seems more important to discuss the differences between the sections, specifically the devices used to alert the listener that one section has ended and another has begun.

Some sectioning techniques found in the repertory of study are unique to Southeast Asia in that they involve other Southeast Asian organizational devices, such as skeletal pitches or the colotomic technique. Others, such as changes of tempo or personnel, are also found in Western composition, but are used in very specific ways that form an important part of the aesthetic character of Southeast Asian music.

Changes in Tempo and Instrumentation: Sparse vs. Dense sections

Thai and Khmer compositions, at least those in the repertory of study, tend to feature sections with a vocalist alternating with purely instrumental sections.[24] In the vocal sections, the instrumental accompaniment to the vocal line is minimal; usually just percussion and occasionally also a bowed string instrument.[25] The Khmer even halve the frequency of their structure-defining finger cymbals (described above) during vocal sections so that the vocal line is impeded as little as possible.[26] In my own listening, I've found that the actual tempo also tends

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[24] David Morton, *The Traditional Music of Thailand* (Berkeley: University of California Press, 1976), 186.

[25] David Morton, *The Traditional Music of Thailand* (Berkeley: University of California Press, 1976), 217.

[26] Terry E. Miller and Sam-Ang Sam, "The Classical Musics of Cambodia and Thailand: a Study of Distinctions," *Ethnomusicology*, Vol. 39, No. 2 (Spring-Summer, 1995): 236.

to slow a little during vocal sections and pick up again during the instrumental sections, although I've found no corroboration for this in scholarly analysis.

In *Syncretisms* I did not want to use a vocalist because I wanted to place emphasis on the foreign organizational techniques and so did not want to complicate the interpretation of the piece with extramusical associations (the meaning of the text that would have been sung). However, I felt that this alternation of sparse and dense sections was essential to the aesthetic design of the Thai and Khmer repertories. In my opinion, it is a large-scale equivalent of the "breathing" that Morton described (above) wherein the texture expanded from one pitch to many and back to one; at this level, the music expands from one melody at a time to many versions of the same melody and back down to one. To facilitate this in my work (without an actual vocalist) I created sparse "vocal" sections in which the "sung" melody is played by an instrumental soloist.

Four sections, then, make up the main body of *Syncretisms*: two in the "vocal" style and two in the instrumental. The oboe takes the first vocal melody, (mm. 28-59) and, as the vocalist in a Thai or Khmer piece rests during the instrumental section, it rests in the following ensemble section (mm. 60-91), participating only in the "A" and "B" colotomic marker motives. The third colotomic unit is once again a vocal-like section; this time, the marimba has the melody (mm. 92-123). And, once again, the soloist rests throughout the fourth section while everyone else plays (mm. 124-154).

I decided to take some liberty with the accompaniments to the vocal lines. Just as my skeletal pitches are actually skeletal harmonies, the accompaniments to the vocal sections are harmonic rather than merely percussive. Although the skeletal harmonies are tertian chords, the harmonic language between these points is usually not tertian. This is once again in keeping with the idea that the music breathes between stable and unstable material. As mentioned above,

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to create a feeling of discoordination, dissonances were sometimes resolved in satisfying or unsatisfying ways (or not at all). In particular, the harmonies don't drive toward the tertian chords at the skeletal points so much as stumble upon them. The result is a backdrop of ever-shifting harmonies which only occasionally relate to the melodic line in front of them.

Changes of Colotomy

In many colotomic compositions from many cultures, the colotomic unit is repeated over and over, while the pattern of markers within it remains the same each time (though the melody may be varied in different ways). In this kind of writing, sectioning can be achieved by changing the colotomic unit; either by changing the pattern of markers within it or by changing its length. This is more common with short colotomic units, especially in music accompanying the theatre, in which each short one-unit composition is repeated over and over until the action on stage requires a change of music.[27] However, very long colotomic units can also be repeated, especially in Indonesian repertories; and here, too, a change of colotomic pattern is used as a sectioning device.[28]

In *Syncretisms* I employed a small difference in colotomic pattern between the sparse and dense sections. As mentioned above, the dense sections have more layers of subdivision than the sparse ones. This is similar to the practice of the Khmer, mentioned above, in which the effective tempo of the finger cymbals is halved in the vocal sections. While this is not exactly the same as removing a layer of subdivision, the effect — less frequent colotomic markers — is essentially the same.

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[27] Patricia Matusky and Tan Sooi Beng, *The Music of Malaysia: The Classical, Folk, and Syncretic Traditions*, (Hampshire: Ashgate Publishing Limited, 2004), 31.
[28] Michael Tenzer, *Balinese Music* (Berkeley: Periplus Editions, 1991), 53.

Other Sectioning Devices: Changes of Melody and of Mode

A change of melody — with or without a change of colotomic pattern — can signal a section change. I chose not to employ any changes of melody in my composition — partly because I felt that I had a whole composition's worth of interesting ways to vary the one and only melody used in the piece, but also to draw attention to other organizational techniques. Sectioning by change-of-melody is a technique with which any western listener will be familiar, so by removing it from my composition I can place more emphasis on the other, more foreign organizational aspects. I think limiting all the variations to a single melody will also help Western audiences to process the dense textures in which many variations of that melody are heard at once: by the end of the piece if not sooner, the listener should be very familiar with the main melody. Similarly, I also decided not to implement sectioning via change-of-mode, another concept already familiar to Western audiences that also happens to be used in Southeast Asia.[29]

A Special Type of Tempo and Colotomy Change: the Thai *Thao* Form

The Thao form in Theory

Although it's found only in some compositions from one particular Southeast Asian culture, I found the *Thao* form from Thailand an excellent choice to incorporate into my own music because it takes advantage of — even calls attention to — some of the other organizational techniques I've already described. After both the vocal and instrumental versions of a melody are initially presented, they are then presented again in a "condensed" form in which the tempo does not change but in which the space between the skeletal pitches is reduced by half. If they

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[29] There is an interesting technique of mode change employed in some Southeast Asian cultures, and even though it does play a role in the organization of musical material, it is particular to the modes of the cultures employing it — which, as discussed in the introduction, I'm not employing in this work. In any case, it doesn't play the central organizing role that "modulation" does in Western music.

were originally sixteen beats apart, the same sequence of skeletal pitches would now occur only eight beats apart. The same process is applied again, which would make the same skeletal pitches occur only four beats apart. There are usually exactly three levels. [30]

With each compression, the colotomic markers (which in this genre form a short unit with open and closed finger cymbals and a small gong) also occur twice as frequently. This gives the impression of a doubling of tempo, but the speed of each instrument's idiomatic motives is unchanged throughout. For example, if we think of one Thai instrument's characteristic rhythm as a "dotted-eighth, sixteenth" in western parlance, this does *not* become a "dotted-sixteenth, thirty-second" rhythm at the next compression level. For this reason, the tempo is said to remain the same. It is only the rate of the colotomic markers and of the skeletal pitches that doubles.

The term "density level" is sometimes used to describe the changes between these three presentations of the melody. I find that this is too easily confused with textural density, which, as I have described, is also an important parameter in Southeast Asian music. The term "tempo" is also sometimes used, but while the actual B.P.M. tempo may increase slightly as the composition goes on, this is a different process from the one at work in *Thao* form. When it comes down to it, we have no preexisting term in English for this concept, this "frequency of structurally important points," probably because we have no such concept in our music. For the rest of this paper, I will use the term "compression level" to describe this parameter: he higher the compression level, the shorter the space between skeletal pitches.

The idea that a melody could be presented in more than one of these levels is not unique to Thailand, but it is distinctly characteristic of Thai music that the three levels are strung

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[30] David Morton, *The Traditional Music of Thailand* (Berkeley: University of California Press, 1976), 182-185, 216.

together to form a single composition.[31] Also, it usually involves a preexisting and commonly known melody from elsewhere in the repertoire, which in its original version is actually the middle of the three levels. The challenge to the composer of a *Thao* piece, then, is to create both an expanded and a condensed version of the known melody. The three versions are then played in sequence from expanded to normal to condensed.[32]

Implementation in Syncretisms

In this composition, I consider the "main" version of the melody to be the most expanded version, at 32 measures. Four repetitions of this melody occupy the main body of the composition (mm. 28-154), after which a version condensed by one level is heard, 16 bars long, in which the skeletal harmonies, together with the motivic colotomic markers, occur every four bars (mm. 155 – 170). The piece ends with two statements of the melody at its highest compression, each only eight bars, with two bars between skeletal harmonies. This change of compression level is used as a sectioning device even when the personnel doesn't change. An interesting consequence of the rather long colotomic markers in *Syncretisms* is revealed when the melody is treated to these compressions. The "C" marker occupies around three beats, and the "A" marker a full seven and a half — over a measure and a half long. When these markers occur only two measures apart in the highest compression sections, there would be almost no room to hear the condensed version of the melody between them unless I modified them in come way; so for practical purposes, the "A" and "B" markers were reduced in length to that of the "C" marker.

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[31] Terry E. Miller and Sam-Ang Sam, "The Classical Musics of Cambodia and Thailand: a Study of Distinctions," *Ethnomusicology*, Vol. 39, No. 2 (Spring-Summer, 1995): 236.

[32] This form reportedly started as a kind of friendly competition between groups of musicians. At first, only the Extended version was played, and the rival musicians had to guess what the known melody was from its extended version. Then the whole *Thao* form was played from extended to condensed. David Morton, *The Traditional Music of Thailand* (Berkeley: University of California Press, 1976), 182-185.

I found the compositional challenge of compressing a melody in this way to be captivating and wholly different from the ways in which we compress musical material in the West, such as a fugal stretto. While I didn't use a preexisting melody in *Syncretisms*, I did compose the main melody and its four (non-compressed) statements in the main body of the composition before deciding to end with the compression technique; so perhaps the challenge I faced was similar to that faced by Thai composers. On the other hand, due to differences in melodic language there was no use in looking to models from the Thai repertoire for help with this challenge. To find coherent and aesthetically compelling ways of presenting my melodies in compressed form, I focused on the original qualities of the melody itself.

The four skeletal points in *Syncretisms* divide the melody into four segments. My strategy for compressing the melody was to find the most interesting or unique melodic figure in each of these segments; and when creating the compressed versions I would first of all ensure that this figure is included. In the first compression, I filled the remaining space (after the segment's signature phrase and the colotomic marker motive) with melodic material similar to, but not necessarily exactly from, the original version of the melody. In the two shortest compressions, there was usually no room for any other melodic material; so each segment's signature motive is immediately followed with the colotomic marker that ends that segment. Figure 3 shows one melodic segment as it originally appeared and at each of the compression levels, with its signature motive indicated by horizontal brackets.

a. least compressed (from the fourth colotomic unit of the piece)

b. first level of compression (from the fifth colotomic unit of the piece)

c. second level of compression (from the seventh colotomic unit of the piece)

Figure 3 – Comparison of the oboe part from the first "B" marker to the following "C" marker in three levels of compression.

The bracketed signature motive occurs in several instruments, but perhaps most clearly in the oboe — which is why this instrument was chosen for the above example.

The signature motive for the first quarter of the melody turned out to be the first two bars, an anacrusis of three quarter notes leading to an accented dotted-half note. In the last colotomic unit of the piece, only the accented dotted-half note remains. However, in the penultimate colotomic unit, — which, like the final unit, is at the highest level of compression — these two

gestures overlap (the clarinet has the accented dotted-half note and the marimba has a variation of the anacrusis.)

In the second quarter of the melody, three quarter notes a minor third apart form the signature gesture. The third quarter is discussed above. The fourth quarter has two signature gestures; the first is the one introduced in measure 51, and the second is a quietly sustained E-natural (harmonized in various ways) just before the end of the colotomic unit. In both sections at the highest compression level, only the first of these two is used.

More will be said about these compressed sections later in the paper, when their effect on the overall form is discussed.

Periodic vs. Aperiodic Material: The Southeast Asian Introductory Section

The opening section of many Southeast Asian pieces, from a variety of cultures, features extended sections of completely beat-free music, or music which hints at or suggests a steady tempo only to undermine it after a short time. Thus, when the composition finally locks into a steady tempo, the (trained) listener knows that the body of the piece has begun.

It should also be noted that the typical aperiodic introductory section is also not colotomic. The instruments that will later be used as colotomic markers are often heard in the introduction playing a very different kind of material: drums, gongs, and finger-cymbals are struck quickly at no particular tempo, and seem to be used to fill space. Thus, another aspect of this unique sectioning device is that when the colotomic marking instruments settle down into their pattern, the first colotomic unit has begun, and the piece will remain so until it ends.

To me, this is yet another example of the interplay between coordinated and discoordinated textures. A beat structure is, after all, a way of coordinating various musicians' parts. However, unlike the alternations between single pitches and multiple pitches or between

sections with one melodic line and sections with many, only very rarely do sections with and without a beat structure alternate in Southeast Asian music. It seems, for whatever reason, to be a contrast made only between the introduction and the rest of the piece.

The introduction to *Syncretisms* is also mostly aperiodic, with some hints here and there at a beat structure. Just as in my other attempts to compose carefully controlled discoordination, I ended up using a lot of intricate notation to achieve an effect that probably comes quite naturally to trained Southeast Asian performers (who usually work with no notation at all).

Measures 1-5 and 7-10 present the opening aperiodic gestures of the piece. Although these are notated metrically for the practical purposes of ensemble coordination, the resulting sound should be aperiodic due to techniques like the feathered beams, the custom roll-speed notation in the marimba (described earlier), and the fermatas. In measures such as 2, 3, and 8, the metered notation does not imply a beat, but is instead used to notate and coordinate the length of the first few full-ensemble chords.

Both of these aperiodic gestures are followed by interjections that resemble the colotomic marker motives (mm. 6 and 11) which do, briefly, imply a beat structure. The first is abandoned immediately for another aperiodic flourish in the marimba (m. 7) but the second seems to hold for a few bars before giving way to more aperiodic music.

The material from measure 15 or 16 —the exact point at which the implied beat is fully absent is intentionally vague — through the end of the introduction in measure 27 is intended to sound as if it has no beat structure at all. The notation, however, is completely metered (for practical reasons). The first full statement of the colotomic marker motive (m. 27, in the bassoon) that brings everyone suddenly to a coordinated stop is a good example of the kind of full-ensemble event that would have been hard to coordinate if it had not been written in metered

notation. Although it might have been closer to Southeast Asian performance practice for me to allow the performers to improvise for a certain indicated duration, Western performers would not have the same kind of training nor the understanding of what to expect from a "typical" introduction section in this genre, so it seemed best to use metered notation to carefully construct a section of music that is intended to sound as if it could have been improvised.

A number of techniques were used to ensure that the meter implied by the notation is not heard in the resulting sound, such as inherently aperiodic techniques like rolls and trills. The marimba's rolls are actually a three-note pattern that varies in speed from a full roll (in "tremolo" notation) on the fast end to written-out eighth notes and eighth-note triplets on the slow end. When writing-out these slower-speed sections, care was taken not to allow any of the three notes to fall on the same part of the beat more than twice in a row, lest a beat structure be implied. When writing the horn's long tones, I tried to have them start or change on unusual parts of the beat such as the second eighth note of a triplet (m. 22) or the last sixteenth of a beat (m. 24). The flute's characteristic motive, which for the rest of the composition is always notated as two sixteenth notes and an eighth note, is here treated to rhythmic augmentation and diminution of constantly changing degree, and does not appear agogically on the same part of the beat twice in a row. Lastly, tempo further ensure that the listener's ear does not find a pulse in the resulting sound of this section.

Formal Plan and Long-Term Development

To be frank, my first impression of Southeast Asian music was that some of the melodies were interesting but that most compositions went on far too long without some kind of contrast, growth, or development. As it turns out, learning about this music — but most of all listening to as much of it as possible — allowed me to become sensitive to the subtle factors at work,

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including all of the techniques described so far in this paper. I learned to hear contrasting sections, as described above. I came to understand textures that were at first confusing and chaotic as being a constant development of melodic material. However, even with this heightened sensitivity to the norms of these cultures' musics, I am still unable to detect growth, and am left with the impression that this is not a characteristic of overall musical form in Southeast Asia.[33]

With this in mind, I wondered if using such formal models in my own work would maintain the interest of a Western audience. I considered ignoring this problem and creating a piece whose overall form was essentially Western; after all, the smaller-level organizational techniques I've described so far were more than enough to make for an interesting project in exploring Southeast Asian aesthetics. In the end, though, overall form is also an organizational technique that indicates something about aesthetic values, so I wanted to make an effort to include it somehow in my composition.

There are Western composers who have embraced static forms in their compositions, and often cite Asian influences in doing so. John Cage, whose Asian influences are mostly from the East, certainly helped pioneer the acceptance of a "flat" or at least non-climactic form in the West. Lou Harrison, a good friend of Cage's and whose music will be discussed in more detail later, showed a much stronger Southeast Asian influence and occasionally wrote pieces with a more or less "flat" overall form. Terry Riley is another composer whose music is decidedly more Southeast than East Asian influenced, and many of his pieces feature seemingly endless

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[33] However, Brinner describes an overall progression from "serious and stately" pieces to "lively... pieces of lighter character" which sometimes occurs over the course of a medley of compositions of over the course of an an entire performance event, in some performance situations in Java. See Benjamin Brinner, "At the Border of Sound and Silene: The Use and Function of Pathetan in Javanese Gamelan," *Asian Music* Vol. 21, No. 1 (Autumn 1989 – Winter 1990): 12. Because I was not able to perform fieldwork firsthand for this project, I was not able experience this phenomenon firsthand, and did not feel comfortable addressing it in the paper.

variations on a small set of motives (if not always a full melody) that begin with no introduction and end without climax.

This acceptance of such a form, and the aesthetic implicit in it, is often considered a hallmark of a so-called "West Coast" mindset, which Harrison's biographers Miller and Lieberman point out is about more than just physical location and is usually taken to mean more than just the cultural influence of the West Coast's Asian populations.[34] As subjective a classification as the West Coast / East Coast dichotomy may be, it is convenient here, because although interest in music from other cultures is usually a "West Coast" characteristic, my own mindset may well be too "East Coast" to allow my composition to end languishing in yet another unclimactic variation.

In the end, then, the form I constructed in *Syncretisms* is a compromise between cultures. While it follows Southeast Asian practices for changing instrumentation between sections, it features a far greater variety of instrumentation changes than any Southeast Asian composition would, which helps reduce the potential monotony of the typical Southeast Asian form. *Syncretisms* does feature roughly four minutes of continual melodic variation with no overall developmental direction or goal and a more or less static, alternating form; but to the end of this I appended something resembling a *thao* form — usually a composition unto itself, here just one section of my work — admittedly to create a climax for the piece.

Lastly, I employed the interaction of coordinated and discoordinated material in a way that I never found in Southeast Asian music. In terms of instrumentation, following the introduction none of the six main performers play an entire section together again until the first

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[34] Leta E. Miller and Frederic Lieberman, *Lou Harrison: Composing a World* (New York: Oxford University Press, 1998), 251-252.

compressed section (m. 155). Besides creating a feeling of full-ensemble "bookends" on either end of the piece, this also creates a thickening of the texture in the final three sections.

More drastic, however, were the textural changes in the final two sections. These sections are both at the highest compression level of the *thao* form, eight-measure reductions of what was formerly a 32-measure melody. Both feature the colotomic marker motive every other measure. To increase tension between coordinated and discoordinated material, in the first of these two sections, the material between the (highly coordinated) colotomic marker motives is more discoordinated than it has ever previously been. To achieve this, I employed a variety of beat-evading techniques such as unusual tuplets, notes that begin, change, or are accented off-the-beat, and feathered beams. I also included far more melodic half-step intervals, which add some excitement if not tension after a entire piece consisting mostly of melodic whole-steps, perfect fourths, and minor thirds (melodically, at least).

In the second of these sections, the final section of the piece, I allowed the material between the colotomic markers to be perfectly coordinated. This resulted in an exciting and effective shift, as one hears all the instruments in the ensemble playing the melody in rhythmic unison and harmonic coordination for the first time.

That the music's discoordination should reach a climax at the end of the piece is really a Western idea, and that the various musicians' parts should ever be completely coordinated perhaps even more so. Still, though Southeast Asian musicians would not have included a climax, the climax I did end up constructing was performed using Southeast Asian techniques. This was very gratifying, as I was able to compose in a way that I would not have otherwise thought of, after training myself to think in another culture's terms.

CHAPTER 3

CONCLUSION

As Part of a History of Southeast Asian Inspired Music in the West

Most Western composers whose music we usually regard as showing an Asian influence
seem to have been influenced mainly by East Asian music. Although East and Southeast Asia
share some historical roots they have grown apart culturally and, most importantly here, are now
quite different musically. Relatively few Western composers show a significant influence from
Southeast Asia, and many of these seem to focus on elements I would place in the "sound"
category described in this paper's introduction. In this section I address some works by
composers who also employ Southeast Asian organizational techniques and compare their
applications of these influences with my own.

First, I will address the possibility that some minimalist compositions share
organizational techniques with Southeast Asian music. As I mentioned earlier, Southeast Asian
music is never as literally repetitive as some of the more stereotypically minimalist works by
composers such as Steve Reich or Terry Riley (although it may sound that way to someone not
trained in its appreciation). However, much in the way that my composition exaggerates the
aspects of Southeast Asian music that I found most interesting, minimalism could be said to
exaggerate the (apparent) repetitiveness of the *gamelan*. One might also point to a similarity
between the Indonesian system of stratification by both register and density (described in

Chapter 2) to some of the Orchestral music of Philip Glass and John Adams, but this may not be a very interesting comparison for two reasons. First, this is not a uniquely Southeast Asian idea. There are many examples in Western music history — starting perhaps with the Organ music of the Baroque and continuing through the orchestral repertories of the Classical and Romantic periods — in which we hear slower-moving parts in lower registers, a melody in the middle range, and faster-moving parts in the upper reaches. Secondly, the layers are not strictly identified with instruments and don't construct idiomatic identities for them; thus the music does not exhibit what would have been a more uniquely Southeast Asian organizational technique.

Perhaps more interesting, however, is the idea that some minimalist compositions, especially those of Reich and Riley, utilize an interplay between coordination and discoordination. Reich's *Pianophase* (1967) could be seen as having periods of coordination (in which the two players are in rhythmic unison) alternating with periods of discoordination (when one player is "phasing" by gradually shifting ahead). This works on a larger level also. The two players are only fully coordinated in pitch and rhythm at a few points throughout the piece: at the beginning and end of each of the piece's three sections. Between these points, even when the two players are in rhythmic unison they are still not as coordinated in pitch as we know they will be once the phasing player has come "full circle." In fact, there may not be much to the piece other than this interplay between coordination and discoordination on all levels. I find this to be a stunning example of materializing an organizational technique in a novel surface style, something I strove for in *Syncretisms*.

There are two Western composers whose music has been consciously influenced by their studies of Indonesian music. Composer Colin McPhee spent four years in Bali studying the music there, and his most notable composition to come out of this, *Tabuh-Tabuhan* (1936),

shows a deeper understanding of the way Balinese music is organized. The First and final movements seem to be to be mostly about the Balinese surface elements, combining the naturally high-energy Balinese syncopated style with Gershwin-influenced "symphonic Jazz." The middle movement seems closer to the kind of work I did in *Syncretisms*. Aside from the literal transcription of a Balinese melody that opens the movement, McPhee utilizes a technique in which more than one variation of the same melody is heard at once. The melody to be varied is the original Balinese melody, but the variations are chromatic, and rhythmically adventurous beyond what one would hear in Bali. Throughout the movements, McPhee's harmonic language — though it employs clear tonal centers and tertian-based chords and can be quite chromatic at times — remains heavily flavored with approximations of Balinese scales. I attempted to avoid this approach in my composition in order to avoid an immediately recognizable Asian sound.

It seems that my concerns regarding form were similar to those of McPhee. In a note to accompany an edition of the score, McPhee wrote that "Balinese music never rises to an emotional climax, but it has terrific rhythmic drive and symphonic surge, and this partly influenced me in planning the form of the work."[35] In the outer movements at least, he increases the "rhythmic drive" by thickening the orchestration on some repeated sixteenth-note figures. However, he does not allow his harmonies to reach the kind of tonal climax that Western audiences might have expected. From his statement and from his music, it seems to me that he wanted to reach a climax, but was sure to do it on Balinese terms by intensifying the "rhythmic drive." As discussed earlier, I felt a similar need for a climax, and also tried to fill it on Southeast Asian terms, but I accomplished this goal by intensifying the difference between the coordinated and discoordinated material.

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[35] Colin McPhee, *Tabuh-Tabuhan* (notes accompanying the score) (New York: Associated Music Press, 1960), 3.

Lou Harrison is the other major Western composer whose Asian influences were primarily from the Southeast. It is difficult to sum up Harrison's use of Southeast Asian musical techniques because over his career he has combined them with Western music in a wide variety of ways. Early in his exploration of Javanese music Harrison seemed to stay mostly in one culture or the other. On one hand Harrison has written music for Southeast Asian instruments in a Southeast Asian style; this kind of writing is often combined with a Western instrument playing one layer of the typical stratified texture. *Main Bersama-Sama* (1978) for French horn and *gamelan* is an excellent example. The writing for the *gamelan* is entirely in the Javanese style — surface elements, organization and all — with the horn occasionally filling in the role of the *suling* (an Indonesian flute sometimes found in the *gamelan*).[36] On the other side of the coin, his *Concerto in Slendro* (1961) is entirely for Western instruments playing in idiomatic Western styles and is organized in ways that are entirely Western (Harrison likened it to a Vivaldi concerto).[37] The only Indonesian influence here is that the Western instruments play in an approximation of the Indonesian *slendro* tuning system. From these pieces and others, it seems that Harrison has a fondness for the *sound* of the Javanese ensembles, and wants to use that sound in his own compositions. He did say, after all, that "a good gamelan is the most beautiful musical ensemble on the planet."[38]

However, there are a few compositions for Western instruments (and in a fully chromatic language) in which Harrison utilizes Indonesian organizational techniques. In a general way, this is essentially the method I employ in this project, although my implementation and

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[36] Leta E. Miller and Frederic Lieberman, *Lou Harrison: Composing a World* (New York: Oxford University Press, 1998), 157-173. The authors point out that Harrison began to create subtle variations on the standard Indonesian forms, for example, one is subdivided into triple instead of the usual Javanese duple. Even so, it is my opinion that these pieces remain as experiments within the Javanese style.

[37] Leta E. Miller and Frederic Lieberman, *Lou Harrison: Composing a World* (New York: Oxford University Press, 1998), 229.

[38] Leta E. Miller and Frederic Lieberman, *Lou Harrison: Composing a World* (New York: Oxford University Press, 1998), 157.

Harrison's are noticeably different. For example, Miller and Lieberman point out how Harrison, in his Fourth Symphony, employs the idea of coordinated pitches occurring at regular points. However, between these points, Harrison does not cultivate the exaggerated sense of discoordination that I strove for, and in general throughout this work does not use coordination vs. discoordination as a main tension device. Also of importance here is that Harrison didn't intend his use of those techniques to be a showcase for foreign ideas. "I'm quite proud of this movement because using the [Javanese] behaviors works well and one wouldn't know what I had done."[39] Although this statement underscores the differences in our approaches, it's significant to this project that Harrison felt the Javanese technique "worked well," because it supports my argument that the techniques I've discussed in this paper can be successful outside a Southeast Asian context.

The composer who, in my opinion, has most thoroughly synthesized Asian organizational techniques (as well as "surface level" elements, for that matter) into his own style is Alan Hovhaness. He spent much of his life studying music from all over Asia, including the Southeast region. In his early works, the foreign elements are easy to point out — this one inspired by Armenian hymnody, that one by Indonesian textures — but by the end of his career he had so internalized these techniques, so thoroughly made them his own, that the resulting music sounds only a little bit like any Asian culture and entirely like Hovhaness. Studying Hovhaness's music, one gets the impression that he was able to employ Asian compositional techniques intuitively without the kind of deliberate process I put forth in this paper. This level of familiarity with a wide variety of the world's musics, and the accompanying level of facility with such a wide

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[39] Leta E. Miller and Frederic Lieberman, *Lou Harrison: Composing a World* (New York: Oxford University Press, 1998), 226-229.

variety of music-making techniques are long-term goals of mine toward which this project is a valuable step.

As a Method of Cross-Cultural Comparative Music Analysis

The music of the Balinese *gamelan* ensemble sounds very little like that of the Thai *piphat* ensemble, which makes it all the more interesting to note the similarities in the way the music of these ensembles is organized. In my analysis of organizational techniques in Chapter 2, I made an effort to describe each technique in a way generic enough that it could apply to all cultures in the repertory of study. This technique of generic rather than specific description is one of the keys to a method of cross-cultural analysis that I endorse.

I find that this method takes some significant cues from certain branches of Linguistics. These branches aim to identify certain properties regarding the syntactical arrangement of words in natural languages: for example, the placement of adjectives relative to the nouns they modify, the order of sentence elements such as subject, verb, and object, or the way in which negatives are expressed. These syntactical (musicians might say *structural* or *organizational*) properties are then compared to those of other natural languages. This is done in hopes of generalizing about the way in which people use language, which leads to an understanding of the *innate* human capacity for language use apart from its *localized,* culturally specific instances.

Humans have an innate capacity for music as well, and in order to understand music as something innate it would be useful to look past specific localized instances of organizational principles and find which principles are used in some form or another by multiple cultures. Because of the interest I have in this method, I focused mostly on techniques that were employed in more than one musical repertory of Southeast Asia (though there were a few exceptions that I found to be too compositionally interesting to pass up, like the *thao* form employed almost

exclusively in Thai music). However, some of these may be able to describe practices outside of Southeast Asia as well.

For example, consider the idea in which points of coordination are found amid spans of discoordination. In Southeast Asian music, this is done mostly through harmonic means and also to a lesser extent via rhythm. We could describe a similar device in, say, certain repertories of European Renaissance vocal polyphony. In that repertory it is done primarily through rhythm, while harmonies remain tightly coordinated throughout. Though these styles are noticeably different in their surface elements and also differ in some essential organizational ways, they do share at least one organizational principle.

For another example, consider a drumset player in a Western popular music band who alternates the kick and snare drums every two beats, and at the end of every four measures plays a "fill" on the toms. Clearly, we could describe an organizational principle in terms generic enough to include both this drummer's pattern and a Thai or Khmer colotomic pattern that has alternating open and closed finger cymbals and a gong every eight beats. The mathematical relationships differ, as do the instruments used, the style of the music, the performance venue, the culture of the typical audience for each, and the role each music plays in its respective culture; but none of this is as important to a cross-cultural organizational analysis as the fact that in both cases, time is marked with a hierarchy of events.

I would like to see more cross-cultural comparative work done along these lines. However, this project is focused on composition, and the descriptions of organizational techniques provided were also generic enough to apply to my own music — which sounds very different from either the *gamelan* or the *piphat* or any other Southeast Asian ensemble.

Given the current trend in academic music analysis toward a culture-heavy interpretation, and away from an analysis of structure only, I feel I should say a few words about why this project — ostensibly about music from another culture — should make so little mention of culture itself. As I stated in the introduction, if music is "humanly organized sound" then a complete analysis would include the sound, the organization, and the humans (i.e. the cultural context).[40] Why, then, am I advocating a cross-cultural comparative method that barely touches on sound and ignores cultural context?

Walser rather eloquently frames the current trend as one not against the importance of music's internal organization but rather against the idea of "absolute" music, the valuable properties of which lie entirely in its structure.[41] I can only agree. Even though this paper addresses organization only, it does *not* make claims of absoluteness in any of the music it discusses. In fact, the dissolution of the idea of absolute music frees us to make remarkable observations about organization: without the burden of having to demonstrate a self-contained, innately understandable structure in every composition, we are now free instead to identify tendencies, and to observe how strong they are and under what circumstances they present. This is done not toward the goal of providing an "interpretation" of a piece or of a repertoire but to explore humankind's innate capacity for appreciating and making music. Even so, culture does play a role in this process.

Blacking essentially posits two roles that culture plays in the understanding of music, even though he doesn't enumerate them this way himself. First, he speaks of the role music plays

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[40] As stated in the introduction, the idea of music as "Humanly Organized Sound" is courtesy of John Blacking, *How Musical is Man?* (Seattle: University of Washington Press, 1973), 5.

[41] Robert Walser, "Deep Jazz: Notes on Interiority, Race, and Criticism" in *Inventing the Psychological: Toward a Cultural History of Emotional Life in America*, ed. Joel Pfister and Nancy Schnog (New Haven: Yale University Press, 1997), 271-296.

in society and how different social arrangements can greatly influence the kind of music that a given society makes. The work of Ethnomusicologists generally addresses this kind of cultural study. The recent trend of "narrative" interpretation is also essentially rooted in this understanding of culture; its proponents (Walser, McClary, Kramer, and others) work from the idea that specific events during the time of the music's creation can have a strong and potentially observable effect on even a single piece of music.

As for the second type of cultural influence, Blacking demonstrates with several examples from his own fieldwork on the music of the Venda people of Southern Africa that the kinds of structures people will create when they organize sound into music are in part dependant upon aesthetic ideas inherited via acculturation. I alluded to this in the introduction of this paper: a musician will develop different aesthetic instincts depending on the models he or she has to learn from. To Blacking, this has consequences for the analyst. He demonstrates that he was unable to understand how the children's songs of the Venda people were related to the rest of the repertory, as they seemed to lack certain characteristics that he had been considering essential to the Venda style. To make a complicated issue all too simple here for the purposes of brevity, he found out that the pitches of any one melody did not remain the same from performance to performance, and indeed were expected to change depending on which words the singer had decided to put to them. Studying which notes were considered acceptable in which situations lead him to understand that the Children's songs, though their melodic shapes were markedly different from those in any other Venda repertory, were each based on one of several signature Venda chord progressions — as were, it turned out, much of the other Venda repertories. In other words, he had to take into account the Venda culture's expectations for what music is and how it should behave before he could provide a consistent and economical analysis. Even

though many of the melodies strongly suggested, for example, a tonal center, this and other Western concepts turned out to be analytically futile in describing what Venda typically do or do not do when making music.

Such observations lead Blacking to state that the organizational techniques people tend to employ when they make music are "produced by human minds whose working habits are, I believe, a synthesis of given, universal systems of operation and acquired, cultural patterns of expression."[42] In other words, our aesthetic influences are a product of both our innate tendencies and our acculturation. This type of cultural influence, then, which affects our aesthetic instincts, is different from the first type I mentioned which is concerned with when/where/why we make music and what we might try to "say" by making it.

A syncretic piece by Lou Harrison happens to provide an excellent example for considering this distinction. The score to *Four Coyote Stories* for *gamelan* and tenor voice features parts for the *gamelan* written in the "cipher notation" most commonly used nowadays to notate Southeast Asian music, a tenor part notated in the rhythmless style seen in modern transcriptions of medieval Western monophonic chant (black noteheads with no stems), and has a text taken from Native American mythology. One type of cultural influence would concern the circumstances in which Harrison composed the piece, and possibly those surrounding any performance of the piece; research on this type of cultural influence might ask why Harrison would write such a piece, who its intended audience was, or how they received it. The other would concern the organizational properties of the music, which stem from the original cultures Harrison is referencing: Javanese and European cultures (and if the text were to be included in the analysis, Native American). In other words, the former would concern itself with Harrison's

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[42] John Blacking, *How Musical is Man?* (Seattle: University of Washington Press, 1973), 73.

culture, the latter with the cultures that produced the organizational schemes Harrison made use of.

        I stated at the very beginning of this paper that this project is in part studies the musical aesthetic instincts typical of Southeast Asian cultures, by way of the organizational structures that those instincts lead musicians to create. It does not aim to provide "interpretations" of Southeast Asian music or find a "meaning" in it, so this project has no need to consider the first type of cultural influence.[43] The second type, however, is crucial. For this, I have relied on the fieldwork of the scholars listed in section two of the bibliography. None of them is guilty of the kind of Eurocentric or pseudo-objective analytical gaffes against which Blacking warns. Sumarsam's book on (mostly Javanese) *gamelan* music is especially commendable in the cultural respect, as it traces the changing cultural influences (Hindu, Islamic, Chinese, European) on Javanese music throughout history.[44] Not as much information is available for some cultures, however.   For example, little work can be done in Myanmar because its militaristic government is not friendly to outsiders; while in Cambodia, the Khmer Rouge did their best to murder anyone who knew anything about traditional Khmer culture. For the latter, researchers such as Sam, Miller, and Lobban are working to preserve or reconstruct what they can. In all cases, however, I have striven to include in this project the most culturally-influenced descriptions of organizational techniques current fieldwork has to offer.

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[43] Little is known about the specific cultural circumstances surrounding individual compositions in the repertory of study, but much Ethnomusicological work has been done regarding the circumstances of both past and current performances of these repertories.

[44] Sumarsam, *Gamelan: Cultural Interaction and Musical Development in Central Java* (Chicago: The University of Chicago Press, 1992).

Summary and Concluding Remarks

Based on existing, culturally informed research and on my own listening, I have identified a set of techniques for organizing sound into music that are common to many cultures in Southeast Asia and which, being independent of tuning systems or particular instruments, could be employed in the composition of new works in any genre. Perhaps the most novel of these is the idea that the music features a constant interplay between coordination and discoordination. It could be said that this principle is manifested in some of the others, such as the alternation of sparse sections (which tend to be more coordinated, even if only because there is less material overall) with dense sections (which tend to be more discoordinated). The alternation of coordination and discoordination is also seen in the technique in which the multiple melodic lines converge at certain regular points of harmonic coordination ("skeletal pitches"), and diverge between these points, leaving harmonies to chance. If this is employed, then sectioning may be achieved by means of changing the frequency of the points of coordination.

Also related to, but not dependant on, the technique of skeletal pitches the technique in which simultaneous lines each have their own version of the same melody. This heterophonic texture is in turn supported by the technique in which each individual instrument varies the melody according its own idiomatic style.

The technique of skeletal pitches is also supported by the colotomic technique, in which time is divided by a hierarchy of audible events — especially if the colotomic markers coincide

with the points of harmonic coordination.[45] And once again, if colotomy is employed then sectioning via changes to the colotomic pattern may also be employed.

Sectioning may also be achieved by changing between music that has a regular, periodic beat structure and music that does not. This may ultimately be another way of employing coordination vs. discoordination as a dramatic device; however, whereas other implementations of the coordination/discoordination principle result in an alternation of those two poles, one does not see periodic and aperiodic sections in constant, regular alternation in the repertory of study for this project. Still, using them in alternation may well be effective, and can easily be considered a technique *inspired* by the music of Southeast Asia.

After all, much of *Syncretisms* was inspired by, but not directly imitative of, the music in the repertory of study. This is significant because it implies that these organizational techniques are not necessarily the domain of Southeast Asia exclusively and can be successful in other contexts, which in turn gives us insight into our innate human musical instincts.

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[45] Although this technique does have its own term, it is somewhat disappointing. From the Greek word "colon" in this case meaning "section," the term "colotomic" merely indicates that time is divided into sections. A term that recognizes the hierarchical nature of these divisions would be more appropriate.

APPENDIX

VISUAL REPRESENTATION OF *SYNCRETISMS*

		Sec-tion	measures	character (see pg. 31)	metric organization		Instru-mentation
START	:00	Intro.	1–27	(varies)	aperiodic (see pg. 39)		Full
	:45	1	28–59	Slow, Sparse	colotomic (see pg. 18)	compression level 1 (see pg. 34)	Partial
	1:55	2	60–91	Fast, Busy			
	3:00	3	92–123	Slow, Sparse			
	4:25	4	124–154	Fast, Busy			
	5:32	5	155–171			compression level 2	Full
	6:04	6	172–179			compression level 3	
	6:20	7	180–188				
END	6:40						

TIME

60

REFERENCE LIST

Methodology: general works on analyzing music from other cultures, or comparing musics from disparate cultures.

Blacking, John. *Venda Children's Songs: A Study in Ethnomusicological Analysis.* Johannesburg: Witwatersrand University Press, 1967.

___. *How Musical is Man?* Seattle: University of Washington Press, 1973.

Funes, Donald J. and Kenneth Munson. *Musical Involvement: A Guide to Perceptive Listening.* New York: Harcourt Brace Janovich, Inc., 1975.

Lomax, Alan. *Selected Writings.* Edited by Ronald D. Cohen. New York: Routledge, 2003.

Meyer, Leonard B. *Emotion and Meaning in Music.* Chicago: University of Chicago Press, 1956.

Nketia, J.H. Kwabena. "The Problem of Meaning in African Music." *Ethnomusicology* Vol. 6, No. 1 (Jan. 1962): 1-7.

Rahn, Jay. *A Theory for All Music: Problems and solutions in the analysis of non-Western forms.* Toronto: University of Toronto Press, 1983.

Seeger, Charles. "On the Moods of a Music Logic." In *Studies in Musicology 1935-1975.* Berkeley: University of California Press, 1977.

Stone, Ruth M. *Let the Inside Be Sweet: The interpretation of music event among the Kpelle of Liberia.* Bloomington: University of Indiana Press, 1982.

Tomlinson, Gary. "The Web of Culture: A Context for Musicology." *19th-Century Music* Vol. 7, No. 3: Essays for Joseph Kerman (Apr. 3 1984): 350-362.

Walser, Robert. "Deep Jazz: Notes on Interiority, Race, and Criticism." In *Inventing the Psychological: Toward a Cultural History of Emotional Life in America*, edited by Joel Pfister and Nancy Schnog, 271-296. New Haven: Yale University Press, 1997.

East and Southeast Asian Music

Benjamin Brinner, "At the Border of Sound and Silene: The Use and Function of Pathetan in Javanese Gammelan," *Asian Music* Vol. 21, No. 1 (Autumn 1989 – Winter 1990): 1-34.

___. "The Competence and Interaction in the Performance of *Pathetan* in Central Java." PhD diss, University of California, Berkeley, 1985.

___. "Freedom and Formulaity in the 'Suling' Playing of Bapak Tarnopangrawit" *Asian Music* Vol. 24, No. 2 (Spring/Summer 1993): 1-37.

___, *Knowing Music, Making Music: Javanese Gamelan and the Theory of Musical Competence and interaction*. (Chicago: The University of Chicago Press, 1995).

Chi, Chul Young. "The Influence of Chinese Music on Korean Music." Ed.D. diss., University of Northern Colorado, 1975.

Cho, Gene Jinsiong. "Some Non-Chinese Elements in the ancient Japanese music: an analytical and comparative study." Ph.D. diss., Northwestern University, 1975.

Condit, Jonathan. *Music of the Korean Renaissance.* London: Cambridge University Press, 1984.

Dae-Cheol, Sheen. "Musical Stasis and Dynamism in Two Living Korean Court Rites." In *A Search in Asia for a New Theory of Music,* edited by José S. Buenconsejo, 229-245. Quezon City: University of the Philippines, 2003.

Hood, Mantle. *The nuclear theme as determinant of Pathet in Javanese Music.* New York: Da
     Capo Press, 1977.

Kunst, Jaap. *Music in Java*, 3rd ed. Edited by E. L. Heins. The Hague: Nijhoff, 1979.

Levy, John. *Korean Court Music* (Compact Disc Liner Notes), Lyrichord LYRCD 7206.

Maceda, José. "A Concept of Time in A Music of Southeast Asia." *Ethnomusicology* Vol. 30,
     No. 1 (Winter 1986): 11-53.

___. "The Structure of Principal Court Musics of East and Southeast Asia." *Asian Music* Vol.
     32, No. 2 (Spring/Summer 2001): 145-178.

Matusky, Patricia, and Tan Sooi Beng. *The Music of Malaysia: The Classical, Folk, and
     Syncretic Traditions.* Hampshire: Ashgate Publishing Limited, 2004.

Miller, Terry E. and Sam-Ang Sam. "The Classical Musics of Cambodia and Thailand: a Study
     of Distinctions." *Ethnomusicology*, Vol. 39, No. 2 (Spring-Summer, 1995): 229-243.

Miller, Terry E. *Traditional Music of the Lao: Kaen Playing and Mawlum Singing in Northeast
     Thailand.* Westport: Greenwood Press, 1985.

Morton, David. *The Traditional Music of Thailand.* Berkeley: University of California Press,
     1976.

Sam, Sam-Ang. "Mathematical Concepts in the Music of Cambodia." In *A Search in Asia for a
     New Theory of Music,* edited by José S. Buenconsejo, 211-228. Quezon City: University
     of the Philippines, 2003.

Schwoerer-Kohl, Gretel. "Hindu and Confucian Influences on Burmese Court Music." In *A
     Search in Asia for a New Theory of Music,* edited by José S. Buenconsejo, 193-200.
     Quezon City: University of the Philippines, 2003.

Sukehiro, Shiba. *Gagaku: Japanese Court Music* Tokyo: Kawai Music Press 1969.

Sumarsam. *Gamelan: Cultural Interaction and Musical Development in Central Java.* Chicago:
    The University of Chicago Press, 1992.

Thanh To Ngoc. "An Attempt to Seek the Structure of Four in Vietnamese Court Music." In *A
    Search in Asia for a New Theory of Music,* edited by José S. Buenconsejo, 201-209.
    Quezon City: University of the Philippines, 2003.

Tenzer, Michael: *Balinese Music*. Berkeley: Periplus Editions,1991.

Western Composers Influenced by Southeast Asian Music

Harrison, Lou. *Four Coyote Stories.* In *Music for Gamelan with Western Instruments*. Aptos,
    CA: Hermes Beard Press, 1992.

Harrison, Lou. *Main Bersama-Sama.* In *Music for Gamelan with Western Instruments*. Aptos,
    CA: Hermes Beard Press, 1992.

Miller, Leta E. and Frederic Lieberman. *Lou Harrison: Composing a World*. New York: Oxford
    University Press, 1998.

McPhee, Colin. *Tabuh-Tabuhan* (including notes by the Composer). New York: Associated
    Music Press, 1960.

Reich, Steve. *Piano Phase*. London: Universal Edition.