CONCERTO FOR NOHKAN AND ORCHESTRA

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ABSTRACT

The original musical score of the Concerto for Nohkan and Orchestra, a seventeenminute concerto for a soloist of the Japanese *nohkan* flute with a Western symphonic orchestra, is provided. Although the nohkan plays an important role in two of Japan's traditional theatrical genres, noh and kabuki, the instrument is not often used in the genre known as gendai hougaku (new compositions for traditional Japanese instruments), and this is the first known concerto for nohkan with Western orchestra. The accompanying essay introduces the nohkan, and goes on to detail how the composer dealt with various notational and compositional challenges the nohkan presents. Foremost, the nohkan is an instrument of uncertain tuning, the exact pitches of which will vary greatly from one instrument to another. This causes notational problems when notating for the instrument on a Western staff, as well as compositional challenges when combining the instrument with Western instruments of absolute pitch. The composer's solutions to these challenges are explained and contrasted with solutions employed by other composers who have written for the instrument in a contemporary context. In dealing with these challenges, a variety of techniques were employed, some based on the works of 20th century composers who experimented with unmetered material for large ensemble, chiefly Alan Hovhaness and Iannis Xenakis. Finally, as the nohkan plays a mainly rhythmic role in its traditional genres, this work is also in large part rhythmically conceived, and so comparisons are made to other works that are based around the rhythmic relationships of orchestra and soloist.

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PART I CRITICAL ESSAY

Chapter 1. Introduction

One of the first things I was told, when I began my formal training on the small Japanese flute known as a *nohkan*, ¹ is that it is played as if it were a percussion instrument. This would prove to be only one of the unusual characteristics that set the nohkan apart from other Japanese flutes, and from flutes of the world in general. Designed so that it does not conform to any scale and to overblow at unpredictable intervals, with each individual instrument having its own unique tuning, the nohkan poses a number of challenges even to composers who are accustomed to composing for other Japanese instruments.

I first had the opportunity to try playing a nohkan in 2011, in conjunction with a production of a *kabuki* play at the University of Hawai'i's Kennedy Theatre, using an instrument in the collection of the university. To help advise the UH students with the musical aspects of the production, the Theatre Department had invited a percussion specialist from Japan, as well as a local percussionist, Kenny Endo, who is also trained in Japanese genres. Although both of these performers were trained in percussion, both had also trained to some degree on the nohkan, as is often the case with percussionists trained in the Japanese theatrical genres. However, time constraints prohibited them from teaching me any more than was necessary for the production at hand.

At the end of 2013, I was awarded the Crown Prince Akihito Scholarship by the State of Hawai'i, a scholarship that allowed for two years of study abroad in Japan. Thanks to this scholarship, I began my study in September of 2014 at the Institute for Traditional Music in the Modern Age (*gendai-hougaku kenkyuu-jo*, 現代邦樂研究所), an independent institute affiliated

¹ Throughout the paper I will use the "Modified Hepburn" system for rendering Japanese words in roman characters. As usual, exceptions are made for place names with standardized spellings (for example, Tokyo instead of $T\bar{o}ky\bar{o}$), and people's names if the person has established a preferred spelling (e.g. Nishikawa Kohei instead of Nishikawa Kōhei). Japanese names are written in Japanese order (family name then personal name) with the family name in all capitals the first time that name appears, and standard first-letter capitalization thereafter, and always in all capitals in bibliographic citations. I have also decided to make an exception for the spelling of noh, the name of a theatre genre, as this too is well established in English; and by extension also for nohkan, literally "noh flute." Given how often the word nohkan is used, it will not be italicized beyond its first appearance. All other Japanese words will be italicized at all times.

with Senzoku Academy College of Music (*Senzoku Gakuen Ongaku Daigaku*, 洗足学園音楽大学). Here, I was able to take instruction on the nohkan and other Japanese flutes from NISHIKAWA Kohei (西川浩平), a performer of traditional Japanese transverse flutes, trained in traditional genres, and who now concertizes as a performer of contemporary music for these traditional instruments. Nishikawa is also a dedicated educator and teaches traditional flute performance in both traditional and contemporary genres, and publishes academic papers and teaching materials regarding traditional Japanese flute education.² Much of the information in this paper regarding the nohkan's traditional playing technique and its role in traditional genres comes from my lessons with Nishikawa, corroborated where possible by references to published works—but the amount of writing about the nohkan in English-language scholarly publications is very small. In fact, based on the extant historical documents that we have available to us, much more is known about the performance history of *noh*, and specifically about the texts read by the actors, than about the development of the musical aspects of *noh*.

This dissertation presents the score of an original work titled simply *Concerto for Nohkan and Orchestra*, a single-movement seventeen-minute composition for a soloist of the nohkan accompanied by a Western (European) style symphony orchestra. This is not the first work to include both *nohkan* and orchestral forces, but it is the first that I am aware of that features nohkan as the only Japanese instrument with orchestra, and the first that is constructed to specifically feature the nohkan player as a soloist throughout the work.

The various unusual properties of the nohkan are discussed at length in Chapter 2 Section I, but the primary challenge to composers is the tuning: the nohkan's tuning is designed not to be

² For example, NISHIKAWA Kohei 西川浩平, 歌舞伎音楽を知る:一歩入ればそこは江戸 (Knowing kabuki music: one step from Edo) (Tokyo: Yamaha Music Media ヤマハミュージックメディア, 2009). Or, YOSHIZAWA Minoru 吉沢 実 and others, *Let's Play Instruments!* プレイヤーに指導と演奏 (Let's play instruments! Guidance and performances for players). (Tokyo: Kyōiku Geijutsu-sha 教育芸術社, 2012), textbook with CD and DVD components.

In this vein, I co-authored a paper with Nishikawa (not connected with this dissertation) which addresses problems in, and suggests techniques for, the teaching of traditional genres to contemporary students. NISHIKAWA Kohei and John Chow Seymour, "Notes on Japanese transverse flute education: studying characteristic Japanese expressions through lessons with an American student," *Senzoku Ronsou* 洗足論叢 44 (2016): 59-75.

compatible with any standard scale—Japanese or Western—and can fairly be called "microtonal" in comparison to other instruments of either culture. Moreover, each instrument has its own unique tuning; no two instruments are out of tune in quite the same way, making it impossible for a composer to predict what pitches will be available on any given performer's instrument. Nohkan players do not correct for these unusual tunings; they do not force the instrument's pitches back into a standard tuning system, even when playing with other instruments of absolute pitch. In the traditional genres, nohkan performers learn their parts by learning the fingerings, and allow these fingerings to produce different pitches depending on the instrument they happen to be holding.

That the nohkan is played "as if it were a percussion instrument," as claimed above, is a matter of the attitude of the performer to the instrument and not of the instrument itself. Over the course of our lessons, Nishikawa was fond of reminding me that the *noh* theatre in which the instrument originated was originally an entertainment by and for the *samurai*, and as such the flute must be played with a kind of forcefulness and controlled aggression befitting a disciplined warrior. Moreover, in the context of *noh*, the nohkan performs alongside three actual percussion instruments. This quartet of three drums and one flute is called the *shibyoushi* (四拍子), which can be literally translated as "four beats" but in this case has the meaning of "four rhythmic performers."

All of these unusual traits demand some creative problem-solving on the part of the composer, both in terms of how to notate for this instrument and how to compose for it. The solutions I devised for notation are presented in Chapter 2 Section II, and are compared and contrasted with the solutions employed by other composers of contemporary music for the nohkan. The specific strategies I employed to compose for this instrument, especially alongside a standard-tuning Western orchestra, are discussed throughout Chapter 3; in general, though, the central philosophy was to compose for the nohkan as an instrument of relative pitch primarily interested in conveying rhythm.

³ Indeed, the same characters are used to mean a four-beat meter in other contexts, including the earlier *gagaku* genre.

The nohkan does not seem to play a large role in the world of *gendai hougaku*—the term that refers to new compositions for traditional Japanese instruments, sometimes also in combination with non-Japanese instruments. Another Japanese transverse flute, the *shinobue*, seems to be called for far more often in *gendai hougaku* compositions. However, the music for the *kabuki* theatre requires a flutist to be proficient in both flutes, and indeed many *shinobue* players I have met have also learned to play the nohkan. So, while performers are available, composers of contemporary music have largely stayed away from the nohkan. Without any real information from *gendai hougaku* composers themselves about their choices, my guess is that, while the instrument may be well understood by trained flutists, it would remain an unapproachable mystery to any composer who did not come from a background in *noh* or *kabuki*. Composers of *gendai hougaku* can choose to embrace modern equal temperament or to call for traditional Japanese intonation, both of which are viable options on the other Japanese instruments used in *gendai hougaku*, such as the *shakuhachi* (vertical flute), *biwa*, *shamisen*, or *koto* (plucked-string instruments). However, regardless of the choice, the nohkan will match neither of these tunings.

Nonetheless, in many ways, the nohkan presents opportunities that would appeal to composers of 20th- and 21st-Century music. The challenges it poses invite the composer to concentrate on aspects of musical construction other than harmony, which, of course, many composers have been doing since the early twentieth century anyway even without the inclusion of a nohkan. Compositions that are primarily concerned with aspects of music such as texture, density, rhythm, and timbre, rather than harmony, are established mainstays in the world of art music composition. With this in mind, Chapter 4, the conclusion, discusses some compositions

⁴ It is more likely that the intonation would be implied by the use of Japanese modes, rather than stated in the score. When the ensemble at the *gendai hougaku kenkyuu-jo* prepared Kineya Seihō's *Trio* for performance, we noticed that it was entirely in Japanese modes and decided to use a Japanese tuning, which involved lowering certain pitches compared to equal temperament. By contrast, when preparing John Neptune's *Going to Town*, we found that his chromatic harmonies and modulations only really worked in equal temperament. KINEYA Seihō 杵屋正邦, *Shamisen · koto · shinobue sanjūsōkyoku* 三絃 · 箏 · 篠笛三重奏曲 (Shamisen/koto/shinobue trio) (by the composer, 1947); John Kaizan Neptune, *Machi he* 町へ (Going to town) (Kaizan Music, 1985).

that bear resemblance to the Concerto for Nohkan and Orchestra, to contextualize this work among others that employ similar techniques.

Chapter 2. The Nohkan and the Challenges it Poses

I. Tuning

The nohkan is constructed in such a way that the pitches it produces do not conform to any standard scale (Japanese or Western) and which moreover will be different from nohkan to nohkan. Much of the tuning irregularities are caused by an unusual aspect of the flute's construction: the inner diameter of the instrument narrows to the right of the sounding hole and widens again to the left of the first finger hole. This thinner area is referred to as a "throat" (nodo). No one seems to know why the instrument is built this way or why such a sound was adopted by the performers of noh theatre. William Malm gives a guess which seems likely to me as well; given the similarities between the nohkan and the ryūteki flute, used in the gagaku genre from the era that immediately preceded the emergence of noh, it seems likely that someone may have tried to repair a broken ryūteki by inserting a tube in the instrument's neck, only to find that this altered the instrument's tuning. Malm, however, rightly points out that there is no historical evidence for this at all.⁵

Having seven finger holes, the nohkan allows the player access to eight "natural" fingerings: one with all holes closed, and those which result from opening one finger hole at a time from right (the "low end" of the flute) to left (the "high end"), ending with the fingering in which all holes are open. Each of these eight fingerings can be blown to produce that fingering's fundamental pitch, or overblown to produce the first harmonic partial. Most varieties of flute which do not have a *nodo* can be overblown at the octave, that is, an octave is created between any given fingering's fundamental pitch and first partial. This is typically the way flutists achieve their instrument's second octave: the higher octave is composed of the first partials of the low-octave fingerings. On a nohkan, however, due to the *nodo* the interval produced when the instrument is overblown changes depending on the fingering. This can be demonstrated by comparing the fundamental and first partial of each of the nohkan's natural fingerings. This will show that the instrument overblows at an interval larger than an octave (around a major or minor

⁵William Malm, *Traditional Japanese Music and Musical Instruments*, New Revised ed. (Tokyo: Kodansha International Ltd., 2000), 134.

ninth) at its low end, but that this interval contracts as more holes are opened, and the instrument will overblow at an interval smaller than an octave (around a major or minor seventh) with all of the holes open.

Somewhere in the middle of this series, then, there will be a fingering that overblows at approximately an octave, which I will refer to as the "crossover point," i.e., the point where the instrument crosses over from overblowing at an interval larger than an octave to overblowing at an interval smaller than an octave. The crossover point varies from nohkan to nohkan and cannot be predicted.

Figure 1 compares the resulting pitches of common fingerings on four different nohkan. Each staff shows a pair of notes for each fingering: the approximate pitches produced when blowing the fundamental and first partial on that fingering.⁶ In addition to the eight natural fingerings, there are several standard "forked" fingerings—those which have one or more covered holes lower on the flute than one or more open holes—which are used in the traditional repertoire. Other forked fingerings are possible, as are a number of fingerings involving half-holes, but Figure 1 only shows those which are taken from the traditional repertoire—i.e., those with which the nohkan player will already be familiar. The Concerto only uses fingerings from the traditional repertoire and does not call for any extended or invented fingerings. In some cases, only certain fingerings were tested on certain flutes (as explained further below); fingerings for which no data is available are simply left blank and these omissions are discussed below.

⁶ It is sometimes possible to blow a second harmonic partial on some fingerings on some nohkan, but this is not considered a standard technique. The Concerto for Nohkan and Orchestra does not call for any such extended pitches.

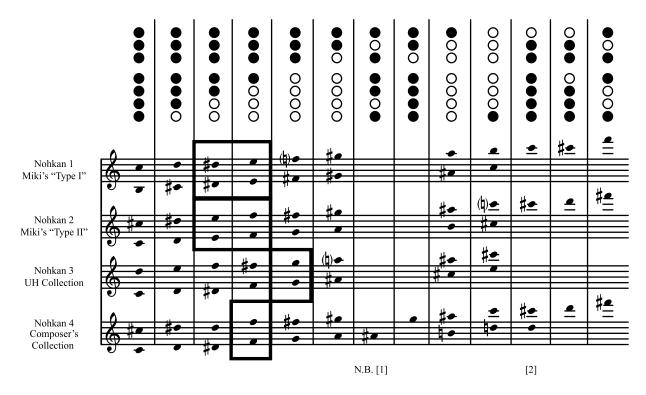


Figure 1 – comparison of the intonation of four nohkan

- N.B. [1] These forked fingerings are used in traditional nohkan playing, but the first is only ever used in its low (fundamental) version and the second only in its high (first partial) version.
 - [2] Miki gives pitches here only for the first partial and not the fundamental, though the fundamental is also used in traditional playing.

The information in the first two staves comes from MIKI Minoru's *Composing for Japanese Instruments*. Miki writes that there are two main categories of nohkan, one slightly higher than the other, and he gives approximate pitches for each of these varieties. My own experience has been that while some nohkan are indeed higher than others, the variety of intonation in nohkan is so wide that they do not fall into two categories as neatly as Miki's writing would suggest. Miki labels the lower version simply "Type I," and the higher, "Type II." In the course of my lessons, Nishikawa revealed to me that he was the one who advised Miki on

⁷ MIKI Minoru 三木稔, *Composing for Japanese Instruments*, trans. Marty Regan, ed. Philip Flavin, Eastman Studies in Music (Rochester: University of Rochester Press, 2008), 26.

the nohkan section of *Composing for Japanese Instruments*, and that the Type I instrument is Nishikawa's own. He mentioned that he was not sure what nohkan was the basis for Miki's Type II instrument. It appears to me that Miki simply raised every pitch of the Type I chart up a half step to create the Type II chart. While I don't doubt that there are such higher-pitched nohkan, I find it unlikely that there would be an actual instrument exactly a half-step above another instrument on every fingering. Since Miki had stated that some nohkan are roughly a half step higher than others, it makes sense that he would want his chart to reflect this. However, it is my opinion that this gives the impression that nohkan are more standardized than they actually are. One reason for my inclusion of Figure 1 is to show that there is greater variety in nohkan tuning than Miki's work would imply.

In any case, Miki cautions that all the pitches are approximate. He gives pitches for the eight natural fingerings as well as three auxiliary fingerings, but there are other forked fingerings used in the nohkan's traditional repertoire for which Miki does not include any data (these will be discussed further below).

The data in the third and fourth staves come from my own observations. The first of these two instruments is a nohkan in the collection of the University of Hawai'i which I was given permission to use in 2011 in conjunction with the aforementioned production of *kabuki* at the University of Hawai'i's Kennedy Theatre.⁸ Although this was well before I began this dissertation, even at the time I was curious about the instrument and wrote down the approximate pitches produced by the eight natural fingerings (I would not become aware of the typical forked fingerings until my study in Japan several years later).

The fourth staff shows the data for the instrument I currently own, which I purchased in Japan. The three fingerings measured here that are not found in the other flutes are all fingerings used in traditional nohkan playing which Miki does not mention and of which I had not yet learned when recording the flute in the university collection.

⁸ Although this was before I had received formal training on the nohkan, I was able to produce sound and mimic the playing of a nohkan on a recording. I learned later that the fingerings I had devised on my own were not correct, and that, with the flute I was playing, the correct fingerings would not have produced pitches that match the pitches in the recording.

Figure 1 also shows the crossover point of each instrument, indicated by a bold rectangle around the fingerings that overblow at approximately an octave. The variety in location of these crossover points can be seen clearly in this figure. ⁹

With such variety between nohkan, then, a composer cannot predict what pitches will or will not be available when writing for the instrument. Of course, this can be seen as part of the unique character of the nohkan. As Miki writes, "Skilled $n\bar{o}kan$ players can match the pitches of other instruments through lip and finger manipulation. However ... if melodic content is to be prioritized, other flutes such as the *shinobue*, rather than the $n\bar{o}kan$, should be used." In other words, when composing for nohkan, the composer would do well to embrace the instrument's unusual tuning rather than expect the player to achieve specific pitches.

II. Notation

i. Pitch

Even if the composer understands the nature of the instrument, there remains the problem of how to notate for nohkan in Western staff notation. Traditional nohkan performance in the *noh* and *kabuki* theatres involves the playing of certain set patterns of fingerings, and what little notation does exist (as most traditional transmission was oral) tends to give only the names of these set patterns and not any specific pitch or rhythm information. I had decided early on in the compositional process not to use any of these traditional patterns in my music, save for one (more about this decision in Chapter 3), so this kind of notation will not be relevant to the present project.

Of course, there are existing works for nohkan written in Western staff notation, by composers such as Miki and his contemporaries, including a well-known and often performed work titled Sattō (颯踏) by NAGASAWA Katsutoshi (長沢勝俊). Sattō, for one performer

⁹ Malm gives the curious statement "...the basic fingerings of the seven holes produce pitches near D,E,G,A, A-sharp, B, and C-sharp." However, he does not make clear which of the eight natural fingerings these seven pitches apply to, nor whether these indicated the low or high version of the fingerings; ultimately, I had to omit his observations from Figure 1. William Malm, *Traditional Japanese Music and Musical Instruments*, New Revised ed. (Tokyo: Kodansha International Ltd., 2000), 133.

¹⁰ MIKI Minoru 三木稔, Composing for Japanese Instruments, trans. Marty Regan, ed. Philip Flavin, Eastman Studies in Music (Rochester: University of Rochester Press, 2008), 26.

playing alternately on nohkan and *shinobue* plus two percussionists playing a variety of traditional Japanese percussion instruments, was written in 1975. Around a decade earlier, in 1967, Miki had composed *Two Eclogues* for the same personnel, though it seems it is not performed very often and I am not aware of any recorded version. ¹² Both of these scores have the nohkan part notated on the Western staff with approximate pitches. As part of our lessons, Nishikawa guided me through interpreting these pieces. Neither score contains any indication of which notes are meant to be played on which fingerings, and so each performer must decide on a system for assigning fingerings to the pitches in the score. This might be done by working out which fingerings on his or her nohkan will best approximate the pitches in the score, but as exact pitch is never the goal with the nohkan, it may be better to work out fingerings that allow the player to produce the melodic contour of the indicated line as easily as possible. This is especially important in works like Miki's, which use more pitches per octave than there are discrete fingerings on the nohkan (and certainly more than appear in his fingering chart in Composing for Japanese Instruments). This implies that he may have expected the performer to employ half-holes or non-traditional forked fingerings. As half-holes can be difficult to execute in fast passages (on any flute), the player may be inclined to find fingering assignments that allow the pitches involved in fast material to fall on natural fingerings, even if the resulting pitches don't approximate those in the score very closely. Of course, the *Eclogues* were written decades before Composing for Japanese Instruments, so it makes sense that Miki's notation was not yet systematized. Without intending any disrespect, it may well be that at this early stage in his career Miki did not understand the nohkan very well yet.

This style of notation, with approximate pitches to which each player must assign fingerings on his or her own, is the *de facto* standard in works for nohkan in Western staff notation. Even so, I find it unsatisfying for my purposes. In the nohkan's traditional repertories, it is the fingerings that are taught, and the sounding pitches will be different from nohkan to nohkan. As a composer who also plays the nohkan, when I compose material for this instrument

¹¹ NAGASAWA Katsutoshi 長沢勝俊, *Sattō* 颯踏, 1975, score (reproduction from holograph), Sinclair Library, University of Hawai'i at Mānoa, Honolulu.

¹² MIKI Minoru 三木稔, Futatsu no bokka 二つの牧歌 (Two eclogues), (by the composer, 1966).

I am naturally thinking in terms of the fingerings, much like players would when learning the traditional repertoire. The intended fingerings, rather than the approximate pitches, are what I want to be able to communicate to the performer.

Sometime in the 20th century there emerged a convention, in nohkan and *shinobue* education, to label the eight non-forked fingerings available on both flutes with the numbers zero through seven, with the Chinese version of the number indicating the fundamental ("low octave") and the Arabic version indicating the first partial ("high octave"). ¹³ Beyond this, non-numeric symbols have come into use for a few standard forked fingerings. Figure 2 shows all of these symbols and the fingerings they represent. Nishikawa assured me that, although these symbols are a recent development and do not originate from any historical notation, they will be understood by any nohkan performer.

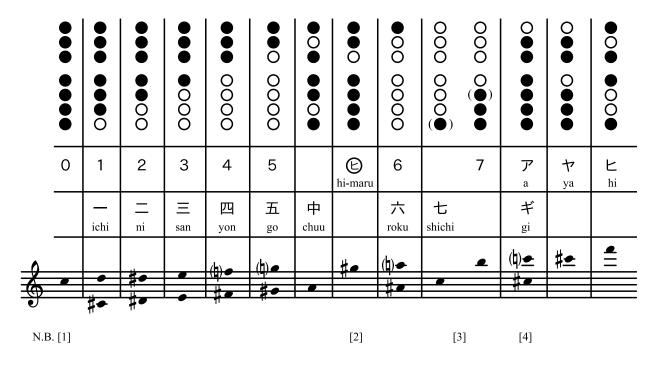


Figure 2 – fingering chart and symbols employed in the Concerto

¹³I have not been able to find any scholarly information about the development of this system, even so much as how old it is. Nishikawa related to me that he thought it is probably from the early 20th Century, but he was not certain. A study of the development of Japanese transverse flute notation after the end of the Edo period would be a much appreciated undertaking.

- N.B. [1] Note that the fundamental of the lowest possible note, with all holes closed, should theoretically be represented by the Chinese character for zero (零) but in practice this note is not used, has no standard character, and has not been included in the chart.
- [2] "hi-maru" literally means "hi circle", i.e., the character hi in a circle. The hi character has no specific meaning, and this fingering is not related to the non-circled hi fingering.
- [3] These two fingerings are considered low and high versions of the "same" fingering, (and, accordingly, are assigned the Chinese and Arabic numerals for "seven," respectively), and were represented as the same fingering in Figure 1. In practice, however, two or three fingers of the right hand are added when playing the high version to make it speak more easily. These modifications are represented here in Figure 2.
- [4] The symbols used for the hi, ya, and $a (, \forall , \text{ and } \mathcal{T})$ fingerings are likely not intended to be the names of these fingerings but were originally the syllables in the mnemonic device for the phrase in which they most commonly occur, hi-ya-a-hi. More about this phrase in chapter 3.

Therefore, part of my solution to the problem of notation is to print these fingering symbols above or below each note on the staff. There is no standard way of combining these fingering symbols with Western staff notation (they usually appear on their own, in Japanese-style notation with characters arranged in vertical columns read from top to bottom). I experimented with putting these symbols above the staff, below it, and also with having the symbols switch between above and below depending on the direction of the stem of the note to which they are attached (always on the stem side, or always on the notehead side). After consulting with several nohkan players, it was found that placing the symbols in a single line below the staff was the easiest to read.

This system has the advantage of communicating to the performer the fingerings I had in mind when creating the nohkan part. Performers can learn the nohkan part to the Concerto in a similar manner to the way in which they would learn traditional nohkan material: by learning to play the indicated fingerings in the indicated rhythms, with no regard for the resulting pitch. I feel strongly that the development of a system which downplays the importance of pitch notation

in favor of fingering symbols would be to the benefit of the community of nohkan performers and would improve the viability of the nohkan for use in *gendai hougaku* compositions.

However, this does make it more difficult for a conductor, or anyone studying the score, to understand exactly what the nohkan part will sound like. Thus there remains the problem of which pitches to associate with each fingering. At first, I experimented with a system with as few accidentals as possible. The rationale for this was that accidentals are unlikely to approximate the actual pitch of any given nohkan any better than the so-called 'white notes', and would only create extra visual clutter on the page. It was Nishikawa who advised me otherwise, pointing out that in the case of a concerto, the score will be used not only by the nohkan performer but also by the conductor, who would benefit from having at least some idea of the what to expect from the nohkan part. He showed me the (unpublished, handwritten) score to *Ten* Nights, Ten Dreams (夢十夜) by HIROSE Ryōhei (廣瀨量平), a work for an ensemble of Japanese instruments, in which the (brief) nohkan part was written not only with approximate pitches but also with x-shaped noteheads to emphasize that the pitches are only approximate. 14 In the case of that piece, both the score and the nohkan part for the performer were in xnoteheads. When trying this in my own notation, I found the x-noteheads to be difficult to read, especially for the nohkan player but also for the conductor. With this in mind, I have decided instead to use standard noteheads in both the part and the score, and have indicated in the performance notes that the conductor will need to be aware that the pitches produced by the nohkan will not match those printed in the score. The fingerings are also notated in the score: even though they would have no meaning to most conductors, including them in the score communicates the idea that the fingerings, and not the pitches, are the essential information here and that the notated pitches are a loose approximation at best.

There are cases in which the interval between two adjacent pitches might be smaller than a half-step, such that microtonal accidentals might come into use. However, I could find no precedent for the use of microtonal accidentals in the existing literature for nohkan on the Western staff, and decided not to employ them in the Concerto.

¹⁴ HIROSE Ryōhei 廣瀨量平, *Yume jūban* 夢十夜 (Ten nights, ten dreams) (by the composer, 1973). The English version of the title also appears on the score and is presumably the composer's own translation.

With no way to predict what kind of nohkan might be playing this work—nor desire to dictate that a specific nohkan be used—and thus no way to approximate pitches with any accuracy, I decided to use the system found in *Composing for Japanese Instruments* (of the "Type I" flute, which Miki himself uses in the remainder of his examples). As no standard exists for approximating nohkan pitches, and there is no reason to choose any one nohkan's tuning as "more standard" than that of any other nohkan, I have decided simply to defer to the most prominent published precedent, and use the tuning published by Miki.

For the instruments of the orchestra, I have, per normal procedure, employed enharmonic spellings in an attempt to make difficult chromatic material as easy as possible to read. This was not done in the nohkan part; instead, all accidentals are spelled with sharps, just as in Miki's fingering chart. I am aware that Miki himself may not have intended his chart to be used in this way; after all, in the *Eclougues*, he uses enharmonic respellings of the same pitch, which I assume are meant to be the same fingering (although it is difficult to know for certain what he intended, with no performance notes). Still, the rationale for using only sharps is that the performer might learn to associate one notated pitch with its associated fingering, and also that employing enharmonic spellings might make it look as if the pitch, rather than the fingering, were the goal of the notation.

Figure 2 shows the assignments of pitches to fingerings used throughout the Concerto. For the Arabic numerals, full-width (*zenkaku*) versions of these characters, available in Japanese fonts, are used. In the case of standard forked fingerings not found in Miki's chart, I interpolated the pitch; for example, the fingering *hi-maru* is between fingerings 5 (G-natural) and 6 (A-natural) in pitch, and so is written as a G-sharp. The "seven" fingering below the break (七) and the "zero" fingering just above it (0) are shown by Miki to produce the same pitch; I can confirm that this is the case on some nohkan. However, on the instrument in my possession and on others I have tried, the seven actually produces a slightly higher pitch than the zero despite being below the break. Even so, in the interest of following Miki's convention, I have notated these both as C-natural and used the fingering indication below the staff to differentiate them.

¹⁵ MIKI Minoru 三木稔, Composing for Japanese Instruments, trans. Marty Regan, ed. Philip Flavin, Eastman Studies in Music (Rochester: University of Rochester Press, 2008), 26-34.

ii. Ornamentation

Ornamentation is expected in the traditional nohkan genres. Nishikawa has informed me that both of the terms yubi-asobi (指遊び, "finger play") and yubi-uchi (指打步, "finger taps") are acceptable and more or less interchangeable when referring to the kind of ornamentation that nohkan players are trained to use. Where to ornament, and which ornaments to insert, vary from school to school and even performer to performer; in my lessons, Nishikawa was very reluctant to teach me specific yubi-asobi, instead encouraging me to develop my own style. Creative use of yubi-asobi, then, is not only an important part of nohkan playing but moreover one of the skills I expect the soloist will want to show off in this concerto setting. To allow the soloist this freedom, then, ornaments have generally not been notated in the score, and a note to the performer in the preface to the score explains that he or she is encouraged to insert his or her own.

An exception is made for one very typical and characteristic yubi-asobi, a series of grace notes connecting fingering 2 to fingering 5 (in the first partial only; never \Box to Ξ in the fundamental.) The 2 to 5 gesture comes up often in the traditional repertoire and is almost always ornamented, but the style of ornamentation can differ greatly from player to player. There are several places where I wanted this characteristic sound (i.e., I wanted to take away the performer's option to leave the 2 to 5 gesture unornamented), but I did not want to force the performer to play the ornament in any specific way, so the solution I devised, seen in Figure 3, is to give fingerings for 2 and 5, but not for the intervening grace notes. A note to the soloist in the preface to the score makes it clear that there may actually be fewer or more grace notes inserted depending on his or her own style of performing this ornament.



Figure 3 – notation for the 2-5 ornament

iii. Articulation

No tonguing is used in traditional nohkan playing, and I do not call for it in the Concerto. However, this does not mean that adjacent notes will be unarticulated or "slurred" in the Western stylistic sense. In keeping with the idea of the nohkan as an instrument to be played percussively, the beginning of every note will be sharply emphasized with the breath. (This may even lead to the pitch of many notes being higher at the moment of attack and dropping noticeably shortly thereafter—more reason why I don't want to emphasize pitch in my notation). This is the usual mode of articulation on the nohkan, even when playing in unmetered music or more lyrical passages. It is for these reasons that slurs are generally not indicated even though tonguing is not intended: because tonguing would not be expected on this instrument anyway, and because the breath articulation will mean that the notes will not ultimately sound slurred.

That said, a few passages do include slurs, normally connecting no more than two notes; these are the places where I intended the player to breath-accent accent only the first note in a group. These are rare and most often connect a grace note to its base note, but are also seen in a few passages with rapid sixteenth notes.

iv. Dynamics

The expectation of consistent use of breath accent is also why no dynamics are indicated in the nohkan part, save for a single *forte* mark at the beginning of the piece. The instrument is expected to be played with the same controlled aggression throughout the concerto. Higher notes will naturally—perhaps even uncontrollably—be louder; this does not need to be indicated in the score.

Conceiving of a concerto as an opportunity for the soloist to show off his or her ability, I understand that soloists of Western instruments will expect opportunities to demonstrate how well they can play at all dynamics, and playing softly is challenging and impressive when done skillfully (especially on some wind instruments, where maintaining a good tone and accurate pitch can be difficult at soft dynamics). Playing the nohkan softly, however, only makes the instrument sound ineffective and uncharacteristic, and is not impressive (the player will still not be matching any predefined pitch and there is no characteristic timbre to maintain at soft dynamics). I might be more interested in exploring these sensitive and uncharacteristic sounds

as an extended technique in a more intimate setting like a chamber piece or a solo, but found no use for them in this work for a concert hall.

Just as in the nohkan's traditional genres, in which the drums, singers, and plucked strings have a greater dynamic range than the nohkan, in the Concerto I rely on the orchestra's potential for dynamic contrast to keep the piece from becoming tiresome on the ears. Indeed, the work does make use of dynamic contrast to ensure variety, but these contrasts tend to take place at the local level, and there is no extended "quiet section" at the largest scale mainly because the nohkan is not expected to ever play quietly (the large-scale organization of the work is discussed in Chapter 3 Section III).

v. Timbre

Again because of the consistent use of the breath accent on every note, the timbre produced on the nohkan is typically the same across the range of the instrument and regardless of the nature or tempo of the music being played. It is possible to play the instrument with a variety of soft, unfocused, deliberately "breathy" timbres, and also to apply a mild vibrato, but unlike certain other Japanese flutes (*shakuhachi* in particular), these are not a major component of the nohkan's typical playing style. (Where vibrato is used, it is effected by a slight shake of the head, rather than with the breath or by moving the body of the instrument.) I am aware of recordings in which nohkan players choose to apply a breathy timbre (very rare) and/or vibrato (more common) on certain notes but these effects are not scripted into the traditional pieces and the decision to employ them is up the individual player. Similarly, the player of the Concerto is invited to use these effects, or to choose not to, as part of his or her interpretation of the work, but these are never specifically called for.

Chapter 3. The Concerto for Nohkan and Orchestra

I. Instrumentation and Orchestration

i. No use of relative-pitched percussion

In the music of the *noh* theatre, the nohkan plays with a group of three different drums, all instruments of indeterminate pitch. This is one strategy for dealing with the nohkan's unpredictable tuning. However, I decided early in the conception of the Concerto not to use any percussion and instead write for the orchestra in such a way that it takes on the role of an entirely rhythmic accompanist. The orchestra is often treated as an instrument of relative pitch, much as the nohkan itself is treated in the traditional repertoire. It was felt that this would make the work an interesting one to both audience and performers, and would also be an interesting and challenging undertaking for myself as a composer. Late in the composition of the work, I decided that some passages would benefit from punctuation by percussive instruments, and added in parts for timpani, glockenspiel, and xylophone—all instruments of specified pitch, like the rest of the orchestra.

This paper does refer to the orchestra's material as "accompanimental" (as in the above paragraph). This is typical when discussing concertos but not so when referring to the traditional noh quartet; the drums are not accompaniment to a nohkan soloist; rather, all four members work as equal partners to create the desired musical material. This choice of language is indicative of a decision that informed the composition of this work form the beginning: like most concertos, this work is an opportunity for its soloist to show off his or her technical and expressive abilities, and the orchestra's part is there to create an accompanimental backdrop that is in turns contrasting or supporting.

ii. Composing for orchestra as if it were of relative pitch

In the final version of the work, the main strategy employed for turning an orchestra full of absolute-pitch instruments into an ensemble of relative pitch was to write in dissonant verticalities in similar motion. The orchestra's first three phrases are examples of the variety this

kind of writing can take. In mm. 1-9, the orchestra imitates each of the nohkan's previous phrases, not in unison but in dense and largely dissonant verticalities. Within these, the lines move not strictly in parallel but in similar motion, so the "harmony" of the vertical collection changes with each note of the motive. I cannot be sure what pitches will emerge when the nohkan soloist plays the initial phrase at m. 1, and could not possibly imitate those pitches exactly in the orchestra; but with this "dissonances in similar motion" technique, the contour and rhythm of the motif can be preserved and the orchestra functions essentially as a single instrument of relative pitch.

A variety of other orchestrational techniques, unique to certain sections of music, are discussed in the remaining sections of chapter three in the section to which each is most relevant. This concept of "dissonances in similar motion", however, is used throughout the work and will reappear in many of those sections, and so it is discussed more thoroughly here.

The internal composition of these vertical collections can be varied to allow for more variety. The verticalities are not of uniform dissonance, for example. In general, I find that an alternation between relatively consonant and relatively dissonant harmonies to be more interesting than a succession of only dissonances or of only consonances. With this in mind, the third chord in the orchestra's first phrase is less dissonant than the others in that phrase. This verticality, made up of pitch classes B, C-sharp, E, and F-sharp, contains no half steps or tritones, which cannot be said of the other three chords in this phrase. Similarly at a larger scale, the entire second orchestral phrase (mm. 5-6) is far less dissonant than the two phrases on either side of it.

The voicing and voice-leading within the verticalities can also be varied. The second phrase, for example, also contrasts from its neighbors in that, while still not strictly parallel, is made up of more parallel motion overall than the other two phrases. The third phrase is the most dense of any of the three, not only in dissonance (in that it has more distinct pitch classes simultaneously and more dissonant combinations), but also in voicing, with more relatively low pitches voiced more closely together.

Combined with the obvious differences in instrumentation and register between these first three phrases, this variety in the way the dissonances are voiced adds for more timbral

variety in the work, and the intention is that this helps keep the dissonant cluster writing from becoming tedious to the ear. All of these various characteristics were not regulated according to any kind of system but were chosen by ear to achieve the kind of pleasing variety I wanted to achieve.

Although the nohkan's pitch contribution to any verticality cannot be predicted, close attention was still paid to the way the cluster writing combined with the nohkan. Primarily, when the nohkan is playing in unison with some number of parts in the orchestra, the verticalities tend to be more dissonant. I found that, if the orchestra's harmonies were too consonant, it made the nohkan sound like it was out of tune; as if it were supposed to have joined in the harmony. Whereas, dissonant verticalities made it clear that the nohkan's unusual tunings were not making the harmony any more dissonant that it would have been otherwise; regardless of whether the nohkan's pitch happens to line up with the orchestra's equal-temperament system or falls outside of it, the effect of combining the nohkan with an already dissonant collection is simply to increase the perceived dissonance. In order to maintain what I felt was a sufficient contrast of consonance and dissonance, then, I often took the opportunity to compose less dissonant material when the nohkan is not in rhythmic unison with the orchestra—even if it is playing simultaneously. Comparing Figure 4 and Figure 5 – nohkan and accompaniment in rhythmic unison(below) provides an example. In Figure 4 (mm. 357-358), the first violins are imitating the nohkan's line three eighth notes later, while the other strings have an accompanimental figure. The lines overlap, but because they are rhythmically distinct, I found that I was able to compose relatively consonant harmonies here (in this case, for the most part spelling a major seventh chord). This contrasts with the rhythmic unison found in horns, trumpets, and nohkan in Figure 5 (mm. 284-288): here, almost every verticality has either a tritone or half-step.

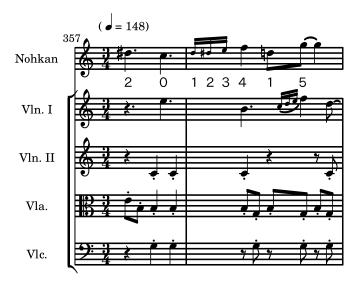


Figure 4 – nohkan over relatively consonant harmonies

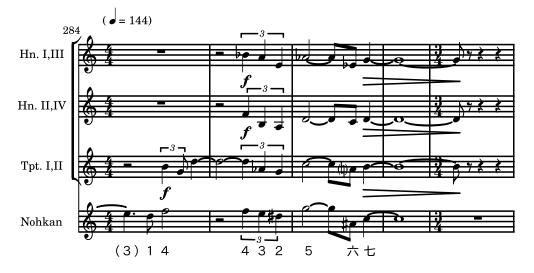


Figure 5 – nohkan and accompaniment in rhythmic unison

This approach to nohkan writing recalls the nohkan's role in the music of the *kabuki* theatre, where it sometimes finds itself playing along with *shamisen* and/or vocalists who play or sing in traditional Japanese modes to which the nohkan's tuning does not match. In the *kabuki* music I studied in my lessons with Nishikawa, the nohkan was often playing in an unmetered fashion, or in a different meter than the *shamisen* and vocalists. In other words, the nohkan's potential for dissonance is handled by placing it, in some way, in a different conceptual layer. Of course, both in those traditional genres and in combination with Western orchestra, the nohkan's distinctive timbre and tuning also help separate it from the absolute pitch instruments with which is it heard.

II. Motivic material

i. No use of stock phrases from the traditional repertoire

As I learned it in my lessons with Nishikawa, the nohkan's material in the traditional music for the *noh* and *kabuki* theatres is made up mainly of stock phrases, reused from work to work, recombined in various ways. These phrases have names, and I have seen notation for *noh* and *kabuki* music which consists only of the names of these phrases, sometimes with the number of times each should be repeated. I was told that memorizing these phrases is an important part of learning to be a player of traditional nohkan genres, so central is their role to the structure of those genres. Some of the phrases involve all four of the players in the *shibyoushi* and at other times the drums and nohkan are asked to play separate phrases, separately or at the same time.

It would have been possible to create a concerto for nohkan and orchestra by, essentially, "arranging" the traditional drum phrases for orchestra and letting the soloist play the traditional nohkan phrases as usual. Such a work may be an interesting compositional undertaking, however, I decided early on in the compositional process for this work not to follow this model and morever not to use these traditional phrases at all. There were three main reasons for this decision: first, I was more interested in composing my own material. Second, after only two years of education on the instrument, and only about half of that focusing on traditional genres, I frankly did not feel knowledgeable enough to make use of the phrases in such a way that nohkan players (or audiences familiar with the traditional genres) would appreciate. Lastly, as I had mentioned, from an early stage I had imagined this work as Western concerto in the sense that it is an opportunity for the nohkan soloist to show off his or her technical skill, and any nohkan player wishing to demonstrate his or her skill in playing the traditional phrases can do so by performing the traditional repertoire; I would prefer my role as a composer to be to offer the player a new challenge.

¹⁶ A discussion of these phrases and the norms of their usage can be found in works such as: Richard Emmert, "The *Maigoto* of *Nô*: A Musical Analysis of the *Chu-no-Mai*," *Yearbook for Traditional Music* Vol. 15, East Asian Musics (1983): 5-13; and William Malm, *Traditional Japanese Music and Musical Instruments*, New Revised ed. (Tokyo: Kodansha International Ltd., 2000), 142-143.

It had also occurred to me to allow the orchestra—but not the nohkan—to play arranged versions of the nohkan's traditional phrases. I was intrigued by the idea of hearing some of the nohkan's more well-known phrases orchestrated with the dissonances-in-similar-motion technique described above. Ultimately I felt that this would confuse the orchestra's role as a stand-in for the percussion of the traditional genres, and the mixture of newly composed phrases on the nohkan with traditional nohkan phrases in the orchestra would add further confusion.

ii. An exception is made for the *hi-ya-a-hi* phrase

Later in the compositional process I decided to make an exception and include two statements of what I consider to be the nohkan's most famous phrase, a phrase referred to not by any name but by the mnemonic syllables for its four notes: 'hi-ya-a-hi'. I have never seen a piece of music for nohkan, in any traditional repertoire or in the contemporary corpus, that did not include this phrase. It is in each of the *gendai hougaku* works I mentioned earlier (Sattō, *Two Eclougues*, and *Ten Nights, Ten Dreams*). It simply did not feel right to omit it.

A transcription of the phrase can be seen in Figure 6; specifically, this is how it appears in mm. 487-490 of the Concerto. Execution of the phrase is physically demanding of the performer, requiring lung capacity and embouchure strength to sustain the highest three notes on the instrument. Moreover, the final *hi*—the highest, most difficult note to achieve on the nohkan—is usually sustained the longest. This is why I have placed a fermata over part of the final *hi* in this phrase; the soloist can adjust the length according to his or her stamina.



Figure 6 – the hi-ya-a-hi phrase

On any flute of which I am aware, blowing more forcefully will cause the pitch to go sharp, and blowing more gently will cause it go flat. On flutes intended to be of absolute pitch, in both the Western and Japanese traditions, the performer is expected to adjust with the embouchure to counteract these changes and maintain the correct pitch. This is not the case in

the nohkan performing tradition, in which many small dips and rises in pitch can be heard throughout normal performance. This will be especially noticeable when a nohkan player performs either of the *hi* notes in the *hi-ya-a-hi* phrase. Each of these notes will be accented with a strong breath at the beginning and end, and will fall in pitch in the middle, by around a half step, while the player extends the note. I have never seen this change in pitch notated, in traditional or contemporary works, so I chose to uphold this convention and have not notated it—at the risk of confusing a conductor unfamiliar with nohkan performance tradition.

iii. The three main motives

The three main motives are presented in the opening measures, each one being performed by the nohkan first and then imitated by the orchestra. In keeping with the idea of using both the nohkan and the orchestra as instruments of relative pitch, only the contour of each motif is considered essential to the motive's identity. The fingerings (on the nohkan) and the pitches, clusters, etc. (in the orchestra) used to perform the motives are different almost every time the motives are heard. The variety in their presentation is demonstrated in Figure 7, which shows the initial presentation of each motif (named simply "A," "B," and "C") alongside two of its later variations.



Figure 7 – the three main phrases and variations

The motives do not have any associations outside the music (they do not represent any extramusical concepts), nor do they have any associations within the music; they do not, for example, represent different areas of the form or contrasting moods. Instead, the form of the piece and the identity of each of its sections are defined via the rhythmic relationships between the orchestra and the soloist, a topic which is discussed in the immediately following section of this paper. These main motives are heard in every section, modified according to the rhythmic relationship in that section, and modified also simply for the sake of variety. Many sections do also have their own local motives; these are discussed below as they become relevant. However, in addition to these I wanted some motivic material to be used throughout the entire work and had originally experimented with using only one such motive, but found that the piece was improved with the introduction of more variety, so I developed a set of three motives instead.

III. Rhythmic relationships that define the form of the work

Early on in my nohkan education, Nishikawa informed me that there are three potential ways the nohkan part will relate to the parts of the other performers, in both the *noh* and *kabuki* music traditions. Either all performers will be observing the same periodic beat structure, there will be no beat structure and the events happen relative to each other without reference to any underlying beat, or all performers will observe the same periodic beat structure together *except* the nohkan player, who will be playing either seemingly nonpulsed music or playing according to his or her own beat that does not match the beat of the remaining ensemble. If we refer to the musical material which observes a periodic beat as "pulsed" and that which does not as "nonpulsed," then the three options found in the traditional repertoires are shown in Figure 8.

<u>Nohkan</u>	<u>Others</u>
pulsed	pulsed
nonpulsed	nonpulsed
nonpulsed	pulsed

Figure 8 – rhythmic relationships in the traditional noh repertoire

I asked Nishikawa if the hypothetical fourth case was ever heard in the traditional repertoire; if the nohkan was ever keeping time while the others played nonpulsed music. He responded that he knew of no such example in the traditional repertoire. However, I have decided to employ this relationship in the Concerto, in addition to the other three.

These rhythmic relationships define the structure of the piece on the largest scale; each of the piece's five main sections employs a different rhythmic relationship between the nohkan and the orchestra. Figure 9 shows a summary of these sections as defined by their rhythmic relationships. The chart uses the wording "seemingly nonpulsed" because the material is rarely literally written without a meter; instead, the metered material is written in such a way that it should seem as if no underlying beat structure is in effect, at least to someone not following the score (more about this technique appears in the subsections below).

Sec.	Rhythmic Relationship	m.	Comments
A	Orchestra: seemingly nonpulsed Nohkan: seemingly nonpulsed	10 24	A.1 Introductory statements of the three main motives A.2 The texture thickens as various layers begin to overlap A.3 The first cadenza-like section: slow, with mostly legato material
			This section of music is discussed in section III-i
			minor climax: the accompaniment suddenly plays in rhythmic unison with the nohkan on the final phrase (m.40)
В	Orchestra: pulsed	42	This section is of music is discussed in section III-ii
	sometimes pursed,		minor climax: shortly after the nohkan locks into metred patterns, the orchestra suddenly becomes seemingly unmetered (m. 117)
C	Orchestra: seemingly nonpulsed Nohkan: pulsed	117	This section of music is discussed in section III-iii
			major climax: as the orchestra fades away, the nohkan's material becomes faster, and comes to a stop after an especially difficult passage
D	Orchestra: pulsed Nohkan: pulsed	208	D.1 The orchestra has metered material while the nohkan rests minor climax: the nohkan reenters (m. 252)
		258	D.2 The orchestra is metered and the nohkan part respects the same meter major climax: after gradually becoming busier and slightly faster, there
		401	D.3 The second cadenza-like section: fast, with aggressive rhythmic material
			This section of music is discussed in section III-iv
田	Orchestra: seemingly nonpulsed	489	This section of music is discussed in section III-i
			final climax: the piece ends with the nohkan's statements of the main motives, followed by the 'hi-ya-a-hi' phrase

 $Figure \ 9-major \ sections \ of \ the \ Concerto$

There are four types of rhythmic relationships but five main sections; the nonpulsed-nonpulsed relationship is used in both the first and last sections. Within each section, there are brief moments where a different rhythmic relationship is employed, which create a moment of surprise or of pleasant contrast. Such moments are discussed in the subsections below.

i. Strategies for composing seemingly nonpulsed music in all parts

In the traditional genres, the strategy for allowing four performers (in the case of *noh*) or more (in the case of *kabuki*) to play unmetered music—without a conductor—is to have every performer learn not only his or her own part but also at least some basic information about everyone else's parts.¹⁷ Indeed, in my own limited experience, although I have not studied the physical methods of playing the drums in the *noh* ensemble, I did have to learn to recognize the drums' patterns by ear in order to coordinate my own playing with them. Obviously, this is not a working method with which orchestral players will be familiar and was not used in the Concerto.

Instead, to achieve an unmetered, or at least seemingly nonpulsed, texture for orchestra, I borrowed techniques from two 20th Century composers: Alan Hovhaness' *senza misura* technique, used in the Concerto's section "A," and Iannis Xenakis' stochastic techniques, used here in sections "C" and "E." My usage of each these two techniques is discussed in turn, below.

Several of Alan Hovhaness' works employ a strategy for composing a "melody plus sound cloud" texture, used especially often in his Symphony No. 19, *Vishnu*. Hovhaness gives any number of the orchestra's members a phrase with the indication *senza misura*; the phrases are to be repeated until the conductor signals the transition to the next *senza misura* block. Not all of the performers have the same phrase, and simultaneous phrases are often of differing lengths, leading the phrases to repeat at varying rates. (In the case of Symphony No. 19, almost the entire

¹⁷ This is how Nishikawa trained me, and this teaching method is corroborated by writing such as: Mariko ANNO, "*Nōkan* (*Nō* flute) and Oral Transmission: Cohesion and Musicality through Mnemonics," *Asian Theatre Journal* Vol. 27, No. 1 (SPRING 2010): 130-148.

work is made up of *senza misura* blocks.¹⁸) At each subsequent cue, the performers reading each line of music are instructed to either continue repeating their current phrase, change to a new phrase, or stop. The indications to repeat a phrase until the next cue, as well as those to continue or stop, are not available in the standard Italian-derived musical lexicon, and so side-by-side Japanese and English indications are used. This takes up a lot of space on the page, and so to save space the indication to "repeat until cue" is given only the first time a given part has a phrase to repeat; this also follows Hovhaness' precedent.

I find Hovhaness' technique for noting these *senza misura* sections easier to follow than, for example, Witold Lutosławski's method for notating essentially the same kind of semialeatoric mechanism. Lutosławski, for example in the aleatoric sections throughout his third symphony, uses special symbols to indicate where the conductor should show a beat, and explains in footnotes which of these visual cues pertain to which players; players who continue their patterns are instructed to ignore certain cues. ¹⁹ By contrast, in Hovhaness' system, and likewise in the one I employed in the Concerto, a cue is given at every barline and pertains to all players, even if the instruction for some players at that cue might be simply to continue their pattern.

Hovhaness' own use of this technique is focused on creating "sound cloud" textures, sometimes also with a single melody, but most often with no main melody. The individual parts making up his sound clouds are often quite melodic, but there are so many at once that the overall impression is of a dense block of sound. In my own writing, I decided to add voices little by little, giving the impression of multiple simultaneous nonpulsed melodies at first (cues 13-17), which build into more cloud-like textures as this section progresses (from cue 18 until meter returns at measure 23). Shifting the orchestration from mostly woodwinds at cue 18 to mostly strings at cue 21 not only effects a timbral change but also increases the overall density, as each staff in the strings indicates an entire section of players, all playing at his or her own tempo. To

¹⁸ Arnold Rosner, "An Analytical Survey of the Music of Alan Hovhaness" (Ph.D. diss., State University of New York at Buffalo, 1972), 232-250.

¹⁹ Witold Lutosławski, Symphony No.3 (Chester Music, 1984).

²⁰ Arnold Rosner, "An Analytical Survey of the Music of Alan Hovhaness" (Ph.D. diss., State University of New York at Buffalo, 1972), 214-223.

ensure that this is understood, the indication "not together" is given in English and Japanese above any *tutti* string part in the *senza misura* section.

For most of this section, one soloist (nohkan from cues 12-17, first trombone at cues 19-21, nohkan again at cue 22), plays the notated melody at his or her own tempo and the conductor will give each subsequent cue when the soloist reaches the appropriate point in the melody. At cue 18, however, there is no main melody controlling the pacing of the section, so there is an indication for the conductor to allow the texture to continue for three to four seconds before giving the next cue. Giving a time duration (or a range) follows Hovhaness' precedent.

To achieve a finer, faster control over the density of a sound cloud, I also borrowed a technique from Iannis Xenakis. Xenakis' techniques for stochastic writing allow the composer to control the density of the events in the sound cloud—i.e., how many different events are happening within in an arbitrary span of time—in a much more direct way than Hovhaness' senza misura blocks. Moreover, since the notation is entirely metered, the composer can allow the density or for that matter the dynamics, range, or other such properties to change over time, or even from beat to beat, and can allow different blocks of stochastic material to overlap or to stop and start independently of each other.

Most of Section "E" is written with this kind of stochastic writing. It may be difficult to discern what is going on in passages such as this from looking only at the score, so Figure 10 gives a reduction of the contents of the first measures of this section.

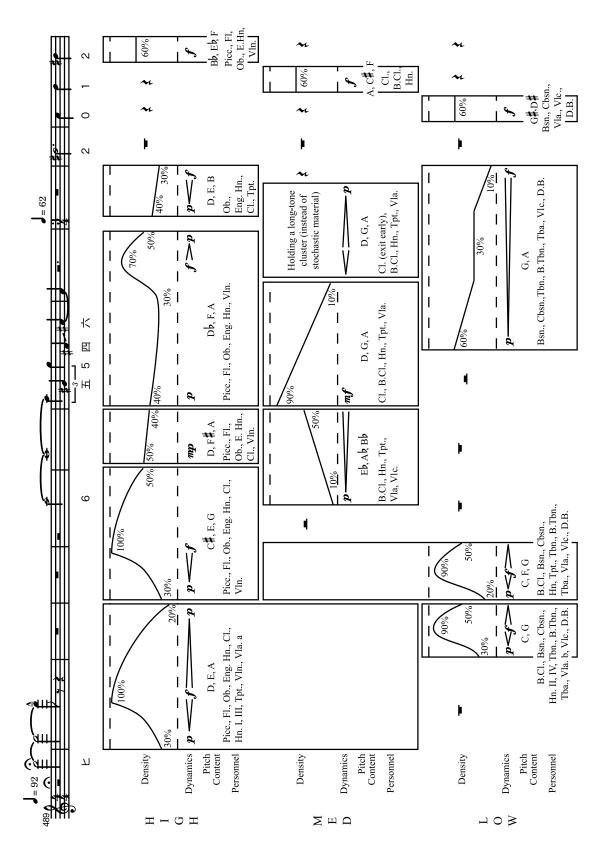


Figure 10 – stochastic blocks in section "E"

The three layers of "High," Mid," and "Low" refer in very general ways to the ranges available in the orchestra; they are general categories without strict boundaries, and do sometimes overlap, and so the score itself is the best source for understanding exactly what ranges these entail. Blocks that cover more than one range include notes in both of those ranges, such as the very first block on the left of the chart that covers both the high and mid ranges.

In Figure 10, the various blocks are not divided by instrument family; instead, each of the blocks (high, mid, low) tends to have representatives from each of the three broad instrument categories (woodwinds, brass, and strings). This kind of scoring is unique to section "E," from which the example in Figure 10 was taken. The stochastic clouds in section "C," to be discussed later (in subsection iii), are grouped much more by family.

The "Density" component of the graph estimates how many events are heard per beat at any given time; percentages approximating the density are given at the start and end of each block, and at high or low points in between. An explanation of what these percentages mean is tied into the way in which I created the stochastic material, and is presented here.

In each stochastic cloud, I allowed there to be lines of music subdividing the beat into three (eighth-note triplets), four (sixteenths), or five (sixteenth quintuplets), and in some cases also additional lines with eighth notes preceded by grace notes, which I thought would add to the chaotic and nonpulsed nature of the sound cloud. "100%," then, refers to a situation in which all players have a note in every possible slot in whichever subdivision they are performing, downbeats excluded. (All of the subdivisions have the potential for a note on the downbeat, so to avoid excessively emphasizing the downbeat and accidentally implying a meter, only the sixteenths and eighth-grace subdivisions were allowed to have a note on the downbeat). "0%" would indicate that all personnel are resting. While there may be more than one player assigned a given subdivision, their parts will not be the same (even at "100%" they will have different pitches). In this way I could create stochastic material for any number of performers that is not too difficult to rehearse.

The "Dynamics" section in Figure 10 shows the general shape of the block as a whole; actual dynamic indications for any single instrument may vary to achieve balance and to aid readability. In the measures seen in Figure 10, more dense sections are generally louder, but this

is not always the case (for example, in the block in the lower right of the chart, the "low" instruments crescendo while becoming *less* dense).

The "Pitch Content" area shows a list of pitch classes; each note in each instrument's part in that block was chosen semi-randomly from this list. I say "semi-randomly" in that I actually chose by hand in a way that made each instrument's line as playable and readable as possible.

The "Personnel" section lists which members of the orchestra are given material in each block. In order to achieve greater variety of density, I have followed Xenakis' example (for example in *Pithoprkta*) and split each section of strings into two subsections labeled "a" and "b", for example, Vln. IIa and IIb.²¹ This division only occurs on pages of the score on which stochastic writing occurs.

Of special interest may be the final measure of Figure 10, in which the orchestra changes blocks along with each note of the nohkan, as if it is coloring each of the nohkan's notes. The nohkan is playing on-the-beat here to facilitate this writing.

Finally, the first cadenza-like section, within section "A" (at m. 24) is also meant to sound nonpulsed. However, I wanted the orchestra to punctuate various moments within the cadenza, which was most easily achieved if the entire section was actually in metered notation, unlike a true cadenza (thus the nohkan is labeled *alla cadenza* here).

ii. Strategies for composing with pulsed orchestra and seemingly nonpulsed soloist

In general, my strategy here was to write out the nohkan part in strictly metered notation in such a way that its material did not line up very clearly with the underlying pulse of the orchestra's material. Figure 11, showing mm. 70-73, gives an especially clear example.

²¹ Iannis Xenakis, *Pithoprakta* (London: Boosey & Hawkes, 1967). Score. This piece was composed in 1956 but not published until 1967.



Figure 11 - seemingly nonpulsed nohkan over pulsed accompaniment

The underlying pulse of the orchestral part is usually not stated quite so obviously as in the double basses' eighth-note figure seen here, although this oscillating-eighths figure does return in a few other places. Of more interest is the statement of motif "A" in the violas and cellos (another example of "dissonances in similar motion"), which fits neatly into two bars of 4/4 time, changing from one verticality to another in unison, only on the beat. The second half of the example has those same instruments begin playing figures in eighth-note syncopation, joined by other forces not shown in the example. The nohkan part with its statement of the "B" motif, by contrast, enters off the beat and contains triplets, grace notes, and (briefly) divisions at the sixteenth level, all of which help to make the nohkan line sound as if it were not in the same eighth-note and 4/4 rhythmic grid as the remainder of the accompaniment. This is not as off-the-beat as it could have been—quintuplets or other more complicated subdivisions could have been employed—but I found that this was sufficient to communicate the sense that the nohkan was in its own layer and not entirely playing "with" the strings without making the line unreasonably difficult for the soloist.

This rhythmic relationship, in which the nohkan sounds nonpulsed while the orchestra has a clear periodic pulse, only appears in section "B" of the Concerto (see Figure 9). I had originally intended for the entirety of section "B" to have this relationship, and the climax at the end of the section would see the nohkan suddenly become strictly pulsed at the same moment that the orchestra suddenly dissolves into a nonpulsed stochastic sound cloud (see subsection i, above). Later in the compositional process I had the idea that section "B" might be more dramatic if the nohkan were going in-and-out of aligning to the orchestra's beat structure. The section's climax still works in much the same way in its current version; just a short time after it

seems the nohkan has locked into its rhythmic, repeated phrases (around m. 94), the orchestra begins a "drive" or "build" made up of interlocking eighth-note material (m.103), grows in forces (at m. 109), and reaches the apex of this growth at m.116, where its texture changes into seemingly nonpulsed stochastic writing, ushering in section "C."

iii. Strategies for composing with a pulsed nohkan and seemingly nonpulsed orchestra

All the techniques for creating seemingly nonpulsed orchestra material that were discussed in subsection i (above) are employed again here. To make the distinction between this rhythmic relationship (pulsed nohkan with nonpulsed orchestra) and the rhythmic relationship used in sections "A" and "E" (all parts nonpulsed), I made the nohkan material especially rhythmic in this section. Indeed, the nohkan is the only instrument audibly keeping a beat. (Likewise, while the choices of meter and barring in other sections tend to respect the orchestral material, in this section the notated meter is tied to the nohkan part.)

With this in mind, the nohkan's material is made up almost entirely of the first six motives seen in Figure 12, with occasional interruption by the seventh motif shown in that same figure.

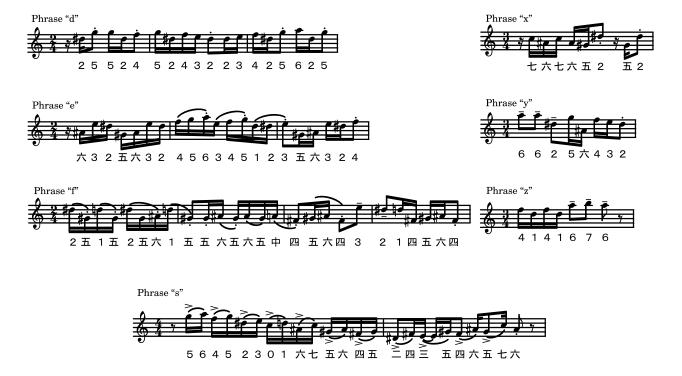


Figure 12 – pulsed nohkan phrases in section "C"

In this section the nohkan's material is made up of any one of the longer phrases, (labeled "d," "e," and "f" to avoid confusion with the main motives labeled "A," "B," and "C," introduced in section II of this chapter), followed by any one of the shorter phrases, ("x," "y," or "z"). In this way, alternating strictly between long and short, the phrases are combined in unpredictable ways throughout the section. Again, a semi-random method was used here to determine the order of the phrases; i.e., I chose the order by hand to create the kind of variety I was looking for.

This steady stream of recombinable phrases is interrupted three times, in the first two cases by the other phrase in Figure 12 (labeled "s" for "special"); this occurs at m. 142 and again at m.159. The full measure rest at m. 158, right before the second interruption, is to give the soloist a brief rest during this physically demanding section.

The third break in the series of recombinable phrases occurs at the end of the section, beginning at m. 203, when the nohkan has an especially difficult and impressive four-bar figure that forms the climax of this section. Before this, the orchestra plays an especially dense stochastic cloud (m.191) which then fades away into rests allowing the soloist to play the final flourish unaccompanied.

Much of the orchestra's part is made up of the stochastic material described earlier, or other meterless writing like the sustained tones at m. 123 or m.145, which change in pitch content and orchestration slowly over the course of their duration, or the series of woodwind lines that rise and fall starting in m. 183. Of special interest may one of the few statements of the main motives in this section, occurring in the brass in mm. 137-147. The first three notes of this statement of the four-note "A" motif are shown in Figure 13 (the fourth note of the motif occurs in the bars following the example).



Figure 13 – nonpulsed orchestral statement of a main phrase

The brass (minus horns) play this line "together," but not in rhythmic unison. The presentation is a variation on the "dissonances in similar motion" technique that I mentioned earlier; here, the entrances of the various instruments making up the dissonant verticality are staggered to further erode any sense of beat in the orchestra part. I wanted a statement of one of the main motives to occur in the orchestra (as the nohkan part will be limited to the phrases shown Figure 12), but I also wanted the contrast between the relentlessly rhythmicized nohkan part and the seemingly nonpulsed orchestra material to be as great as possible, so I decided on this rhythmically staggered presentation of the motif.

iv. Strategies for composing fully pulsed music in all parts

No special notational strategies are needed to compose conventionally metered music, of course. To highlight the contrast with the various nonpulsed sections, the character of these fully metered sections tends toward staccato over legato or long-tone material. I did also make a few decisions to try and tie the material in this section to that of the other sections. For example, because three of the other sections ("A," "C," and "E") feature stochastic writing, I developed a kind of "pulsed stochastic writing" for use in section "D." Unlike in the true stochastic writing of those sections, the density in this pulsed material remains constant. The only available subdivision is the eighth note; on any given eighth note each part either has or does not have a note (usually staccato). The result is a cloud-like texture that nonetheless conforms to the underlying eighth note pulse of the section. Figure 14 illustrates a brief burst of "pulsed stochastic writing" that occurs in the woodwinds at m. 276.



Figure 14 – pulsed stochastic block

The nohkan's material consists generally of statements of the three main motives in variation. Unlike in sections "A," "B," or "E," in which the nohkan was written to sound as if it were in a different conceptual layer of music and not entirely playing along with the accompaniment, in section "D" I took many opportunities to have the soloist and accompaniment combine in interesting ways. Specifically, accompanimental imitation of the nohkan's lines can be heard in various forms. In the passage shown in Figure 15, from mm. 261-263, clarinets and violins respond to the nohkan by following each of the nohkan's notes with a falling gesture. The nohkan's line leaves a rest between each note to allow this to happen. This technique is heard again in mm. 281-283.



Figure 15 – orchestral imitation of the nohkan line (1)

The imitation is more direct in the passage shown in Figure 16, from mm. 300-305. Here, the nohkan's statement of the "B" motif is broken up, and each fragment is imitated in in dissonant combinations of trilling clarinets, contrabassoon, horns, and pizzicato double bass, joined later by pizzicato cellos. (The final notes of the motif are not imitated and were omitted from Figure 16.) As an added point of interest, the double bass and the first clarinet, as well as the cellos once they enter, accompany both the nohkan and the imitators.



Figure 16 – orchestral imitation of the nohkan line (2)

More often than these complicated imitation schemes, the orchestra simply plays in rhythmic unison with the nohkan, again in the "dissonances in similar motion" voicing. Figure 5, introduced earlier, shows mm. 283-287. Here, the trumpets first imitate the nohkan's line (the end of motif "B"), then join the horns in playing along with the nohkan in rhythmic unison in a statement of motif "C."

For the most part, throughout section "D" one texture flows into the next, either by using the same forces, or having one texture or melodic phrase overlap the previous. The passage at mm. 301-313 (which happens to comprise a single page in this printing of the score) shows this very clearly. The first four measures (mm. 301-304) are the end of the imitation passage shown earlier in Figure 16. The last three notes of the nohkan's statement of that motif are heard in the next measures, but a new accompaniment texture has entered: the same strings that had been involved in the imitation are now playing, pizzicato, a texture with syncopated, interlocking eighth notes, joined by the flutes and oboes playing the kind of "pulsed stochastic" block explained earlier. Before that block ends, the nohkan enters with its next phrase in m. 308 (a

statement of the "s" motif from section "C," discussed earlier), and the brass enter a drawn-out statement of motif "A" in m. 310. The nohkan continues even after the strings and woodwinds have stopped, the brass continues even after the nohkan has stopped, and before the brass have stopped the xylophone enters (in imitation of the nohkan's previous phrase). Figure 17 shows a simplification of the overlapping in this passage.

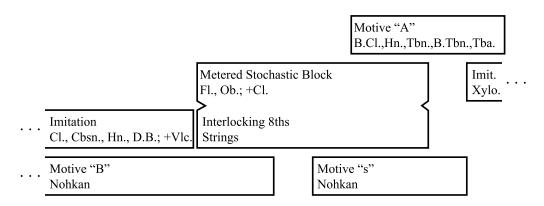


Figure 17 – overlapping textures mm. 303-314

This kind of overlapping of various textures continues throughout the section in order to maintain energy and forward momentum. However, I found it was also exciting to have this flow suddenly interrupted, and decided to create an "interruption" motif to do so. This single-measure motif in the nohkan and trombones is shown in Figure 18.

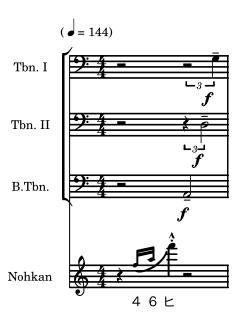


Figure 18 – the "interruption" motif in section "D"

Note that the rest on beat one is a rest in all parts of the entire ensemble, bringing whatever patterns were going on previously to an abrupt stop. This motif occurs nine times throughout section "D," becoming more frequent as the section progresses. It is appears exactly as above in all of its instances save for the eighth, in which the xylophone jokingly plays what is usually the trombones' material, at *piano* instead of *fortissimo*. This is meant to be a surprise, and is immediately followed by the ninth statement, in which the trombones return bolstered by low reeds and joined by the nohkan soloist.

One more texture found in the orchestra deserves special attention here as it is the only one to occur in more than one section. In both sections that feature pulsed writing in the orchestra, "B" and "D," I include a texture made of a series of short, *marcato* dissonances, *forte* or *fortissimo*, in rhythmic unison throughout the ensemble but not in a predictable pattern. Occasionally a 3/8 measure is introduced during which some instrument capable of a pitch bend makes a slide upward over the course of the three eighth notes and into the chord on the next downbeat. An example from late in section "D," mm. 323-327, is shown in Figure 19.

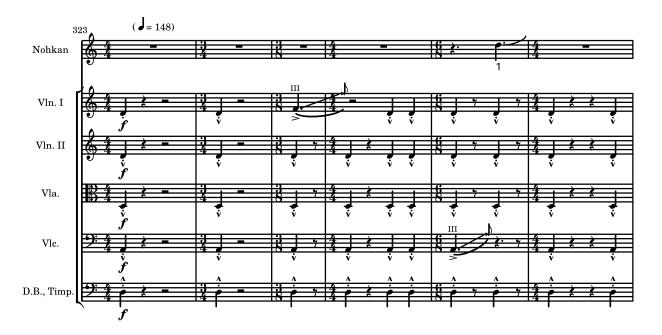


Figure 19 – recurring rhythmic motif in pulsed sections

In this case, the 3/8 sliding portions are given first to the violins, then twice in a row in a measure of 6/8 to the cellos and then nohkan. This nohkan fingering was chosen specifically because it allows the player to slide upwards easily (sliding the entire right hand off of the holes is recommended, although I am open to the possibility of the performer using another method which they find more comfortable).

This occurs five times in the work; at the very beginning of Section "B" (mm. 42-51) and once more later in that section (mm. 87-95); and three times in section "D" (mm. 266-272, 321-338, and 478-486). Notably, the nohkan does not participate in the texture in either of the Section "B" appearances, as the nohkan is meant to be not playing along with its accompaniment in this section. It joins in during all three of the section "D" appearances, where the nohkan is expected to coordinate with the accompaniment.

An earlier draft of the work began with this material as well, before the initial statements of the motives, but this was found to be less interesting than the current "cold opening" which introduces the audience to the sound of the nohkan immediately. The occurrences of this motif have no formal significance; they occur only in the sections in which the orchestra is pulsed, and serve, like the "interruption" measure in Figure 18, to create contrast with the otherwise constantly flowing and overlapping textures throughout those sections.

IV. Language

Very little Japanese language is found in the score, for reasons that will be discussed shortly. However, I did want there to be an official Japanese translation of the title of the work. In English the title is simply *Concerto for Nohkan and Orchestra*, but a literal translation of the Japanese version would be "concerto for nohkan and Western orchestra." (The Japanese title is 能管と西洋交響楽団のための協奏曲, romanized as "nohkan to seiyō kōkyō gakudan no tame no kyōsō kyoku"). The reason for this difference is simply one of context. Musicians in the English-speaking world will likely expect the term "orchestra" to refer to the "Western" European-style symphony orchestra, but Japanese speakers will know that this is a work of gendai hougaku (現代邦楽), literally "modern era native music" but generally translated as "new music for traditional Japanese instruments." A gendai hougaku work may well be a concerto for a Japanese instrument with an ensemble of other Japanese instruments, so the characters seiyō ("Western style') were added before kōkyō gakudan ("symphony orchestra"). As a foreigner approaching Japan and becoming active in gendai hougaku circles, ²² I felt that it would be a gesture of respect for me to treat the inclusion of a Western orchestra as the exception rather than the norm.

I have also included a Japanization of my name on the score. To aid Japanese speakers who don't read English comfortably in recognizing and remembering my name, and because I have established a standard spelling and pronunciation of my name with Japanese characters, I have included it at the head of the score alongside my native spelling.

Beyond this, I decided to use Japanese and English as little as possible for style markings throughout the score. Instead, style and tempo markings employ only standard Italian-derived musical terms such as *moderato* or *cadenza*. Japanese performers will be as familiar with these terms as any other orchestral players, and I felt that it would be best to rely on these terms, which have become internationally standard in "Classical" music circles. Metronome markings are used for tempo indications throughout, as these will also be universally understood. However, one particular twentieth-century technique, the use of unmetered repeating phrases in mm. 13-22,

²² This is not my first composition for Japanese instruments. Previous works include Dosei (*Saturn*) (2016) and Namima (*On the Waves*) (2016), both for *hougaku* quartet, *Miyakobushi Etude* (2015) for two shinobue, and *Halogen Moon* (2010) for *hougaku* trio; all unpublished.

requires some explanation for which there are no standard Italian-derived terms. In this case, instructions are given in both English and in Japanese, as discussed in detail above (Section III Subsection i).

Chapter 4. Conclusion

My M.M. Thesis in composition explored the various ways in which a wide variety of genres from across East and Southeast Asia use a contrast between what I then termed "coordinated" and "discoordinated" musical textures, and the composition included in that project was created specifically to demonstrate the way(s) this contrast could be employed in a piece of music for Western instruments without making any specific reference to any Asian genre. This kind of writing has played a part in many of my compositions since then. The current work, the Concerto for Nohkan and Orchestra, is not primarily about this contrast, and at the largest scale the organizational scheme based on four rhythmic relationships (see Chapter 3 Section III) marks a departure from my earlier work on various forms of coordinated-discoordinated writing.

At a more local level, however, the idea that interest can be created in music by alternating between more coordinated and less coordinated writing is still in play, even in the Concerto, and can arise within in any of the four rhythmic relationships. Figure 20 shows a reduction of a passage (mm. 295-299) from Section "D," the section in which both orchestra and soloist have strongly pulsed material, although in this example the nohkan is resting. The orchestra's rhythmically unison quarter note dissonances break into two groups which hocket with each other for a few beats before realigning. The texture alternates between a more coordinated and less coordinated state, all while observing the same underlying rhythmic pulse. Figure 4 (Chapter 3 Section I) shows another example from section "D;" there, the trumpets are at first in overlapping imitation with the nohkan (less coordinated), then trumpets, horns, and nohkan come together in rhythmic unison for a statement, in dissonant verticalities, of one of the piece's main phrases (more coordinated).

²³ John Seymour, "Syncretisms for woodwind quintet and percussion: A study in combining organizational principles from Southeast Asian music with Western stylistic elements" (M.M. thesis, University of North Texas, 2008).



Figure 20 – coordination vs. discoordination while fully pulsed

This local alternation between more and less coordinated states can be heard in the sections in which all parts are meant to sound nonpulsed, as well. Figure 10 (Chapter 3 Section III) shows how the stochastic blocks, which bore no relation to the nohkan's material up to this point, suddenly line up with the nohkan's notes in the last measure of that figure (m. 499). The meter that might have been suggested by these three quarter notes is then obscured by a tempo change in the next measure, to retain the feeling that all parts are nonpulsed in this section. The climax to section "A," discussed earlier, is another example of this principle at work: the last phrase of this section is not only the first phrase in the piece in which both nohkan and orchestra are pulsed together, but is also in rhythmic unison. The nohkan will go in and out of adhering to the orchestra's meter in the following section (section "B"), but even when pulsed, it will not be in rhythmic unison with the orchestra again until much later in the piece, in section "D." Of course, that the nohkan alternates between pulsed and nonpulsed material throughout section "B" (while the orchestra remains pulsed) is perhaps already an example of increasing and decreasing coordination between parts.

In these ways, the contrast between more coordinated and less coordinated textures is used to create local tension and dramatic moments, but unlike the Asian genres discussed in my thesis, it is not used here to define the overall structure. It may seem as if the four rhythmic relationships addressed here describe levels of coordination between personnel, but trying to fit this theory into the rubric of coordination vs. discoordination becomes problematic. If both orchestra and soloist are seemingly nonpulsed, are they especially discoordinated, or are they coordinated in their making of an nonpulsed texture? More to the point, all of the textures

examined in the thesis—Japanese *gagaku*, Indonesian *gamelan*, Thai *piphat*, Khmer *pinpeat*, and various Malaysian genres—though they were very different in their tuning, melodies, rhythms, and instruments, were all similar in that on several levels including at least the largest level, they demonstrated an alternation between two textures, one more complex and "discoordinated" than the other. The use of these four rhythmic relationships in the Concerto cannot really be described as an alternation between two states.²⁴

While I am not aware of any works for orchestra and soloist in which the kind of rhythmic relationships discussed here define the major sections of the work, some pieces do exhibit similar contrast of the pulsed or nonpulsed nature of one or more parts. The most clear example may be Hovhaness' Symphony No. 19 *Vishnu*, which was mentioned earlier with respect to its use of Hovhaness' *senza misura* technique to create literally unmetered passages in the orchestra. While most of the piece is a series of *senza misura* blocks one after another, there are a few passages that are fully metered, with melody and accompaniment roles both respecting the same meter. But there is no combination of simultaneous pulsed and nonpulsed writing. Instead, with metered sections interspersed between long stretches of *senza misura*, the piece's largest-scale organization is one of contrast between fully pulsed and fully nonpulsed writing.

Xenakis has only a few concertos in his catalogue; his work Ais features a baritone soloist, but sounds entirely nonpulsed throughout the work.²⁵ In terms of notation, Xenakis' seemingly nonpulsed music in Ais is actually written with precise rhythms, much as I have done in the Concerto. Of more interest in the discussion of formal organization is the same composer's Troorkh, a concerto for trombone and orchestra composed in 1991.²⁶ Most of this work is similar in texture and rhythm to the earlier Ais; seemingly nonpulsed while notated with precise rhythm. However, in several sections the trombone soloist has a strict, noticeably periodic rhythm, but only while the orchestra is resting. Still, this does create a contrast between strictly

²⁴ Nor can the use of the three rhythmic relationships found in *noh* and *kabuki* music. (Recall that the relationship with pulsed nohkan and all others nonpulsed was my own addition and not found in the traditional repertoire; see Figure 8.) Moreover, in the traditional genres it would seem that these three rhythmic relationships are not used to structure the music but only to provide contrast on a local level. The music would seem to be structured, instead, around the text and action onstage. William Malm, *Traditional Japanese Music and Musical Instruments*, New Revised ed. (Tokyo: Kodansha International Ltd., 2000), 123-126, 131-132, 243-244.

²⁵ Iannis Xenakis, *Ais* (Paris: Salabert, 1981).

²⁶ Iannis Xenakis, *Troorkh* (Paris: Salabert, 1991).

pulsed passages with no accompaniment and seemingly nonpulsed passages with nonpulsed accompaniment.

TAKEMITSU Toru's well-known *November Steps*, a double concerto for soloists of Japanese instruments with Western orchestra, also sounds nonpulsed from start to finish.²⁷ There is a lengthy passage near the end of the work which has the two soloists playing literally unmetered music, not rhythmically coordinating with each other, while the orchestra rests. (I also took the opportunity to write a cadenza while the orchestra rests, at m. 450.) But Takemitsu takes his commitment to a nonpulsed texture one step further: the parts for the two soloists are written in unmetered notation throughout—even when playing at the same time as the orchestra, the parts for which are always written in metered notation (but which avoid any writing that would imply a beat, as in the Xenakis pieces described above). There are no performance notes that address this combination of simultaneous metered and unmetered notation, but presumably the soloists would need to play from the score (the slow tempo throughout the work would help make this feasible). However, the orchestra does occasionally seem to coordinate one of its gestures to some event in the part of one of the soloists; for example, a cascade of sound effects from the orchestra takes place just after an especially noticeable gesture in the shakuhachi part at rehearsal 25. It is not unusual in a concerto to have such moments that create conversation between orchestra and soloist(s), but in Takemitsu's work rare moments like these create contrast with the rest of the texture, when the orchestra and soloists seem to be disconnected; it is an example of contrast via coordination-vs.-discoordination, but not of contrast via the rhythmic relationship between the soloists and the orchestra.

Lutosławski, mentioned earlier for having used an unmetered notational technique resembling that of Hovhaness, has seven concertante works in his catalog, five of which employ his unmetered notation. Among these works, there are brief passages in which one might hear pulsed material in the soloist simultaneously with seemingly nonpulsed material in the orchestra. His *Concerto for Cello and Orchestra* provides a an especially clear example; at rehearsal mark 2, the cello soloist keeps strict time in quarter notes while various members of the orchestra enter

²⁷ TAKEMITSU Toru, *November Steps* (New York: C.F. Peters, 1967).

here and there with brief outbursts at unpredictable moments.²⁸ Such moments are rare in Lutosławski's output, however, and it is much more common to see entirely pulsed and entirely nonpulsed material alternate in broad sections, most clearly in works like *Chain II* and *Partita*, both for violin and orchestra. In both works, every other movement is written in unmetered notation.²⁹

A word ought to be said about Xenakis' and Takemitsu's treatments of their soloists in terms of pitch and harmony. The vocal part in *Ais* calls for portamento and other contemporary vocal techniques, and the trombone solo part in *Troorkh* makes frequent use of slides; both these effects take the soloist's contribution to the harmony out of the world of absolute pitch, much like the nohkan part in the work presented here. Likewise, while both of the solo instruments in *November Steps* can conform to standard Western or Japanese tunings, they are both also called upon in Takemitsu's score to perform various sliding gestures. Both composers' harmonies are so dissonant throughout the discussed works that any microtonal inflections introduced by the soloists do not, in my opinion, contribute any additional dissonance. I was also able to use this technique in some areas of the Concerto, but preferred to contrast strong dissonances with relative consonances where possible, as discussed earlier (see Chapter 3, Section I, Subsection ii).

If it is difficult to find an example of an existing work that employs the kind of pulsednonpulsed rhythmic relationships highlighted in the Concerto for Nohkan as a structuring device,
it means that there is all the more opportunity for composers to explore the possibilities
presented by thinking of music in these terms. My thesis observes that some traditional genres
that alternate between more and less coordinated material do so at regular intervals, usually a set
number of beats.³⁰ Taking inspiration from this practice, a composer could explore the
possibilities of applying this same regularity to the pulsed and unpulsed nature of an orchestra
and soloist, cycling through the four rhythmic relationships at constant time intervals. Tension
could be created by shortening the length of these cycles; dramatic moments might be brought
about by changing the order within the cycle, and so on.

²⁸ Witold Lutosławski, Concerto for Cello and Orchestra (Chester Music, 1994).

²⁹ Witold Lutosławski, *Chain II* (Chester Music, 1971), *Partita* (Chester Music, 1985).

³⁰ John Seymour, "Syncretisms for woodwind quintet and percussion: A study in combining organizational principles from Southeast Asian music with Western stylistic elements" (M.M. thesis, University of North Texas, 2008) 32-42.

The Concerto for Nohkan and Orchestra, and the discussion thus far, have largely focused on rhythmic relationships. After studying *noh* and *kabuki* music I found that this was the concept I was most interested in exploring in my own composition, but it's not the only lesson a composer could take from those traditional Japanese genres, and not the only way to combine the nohkan with absolute pitch instruments. A different composer might have studied the relationship of the *noh* and *kabuki* music to the text, stage action, or literary elements of the story, and created his or her own vocal or theatrical work based on those observations. The use of the nohkan in a separate conceptual "layer" from other performers, such as in *kabuki* (see Chapter 3, section I, subsection ii), represents another area for exploration, which I barely touched on in the Concerto. Though I took my work in a different direction, I now can't help but look back on my previous compositions and imagine adding in a nohkan part, floating around the rest of the music in its own conceptual space.

With these kinds of possibilities in mind, it is my hope that composers trained in the socalled "Western art music" tradition can find inspiration from the multitude of creative ideas found outside of that tradition. It would be a great pleasure if any of the ideas presented here, in this discussion or in the composition itself, inspire another composer to create an even more interesting work than my own.

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PART II

MUSICAL SCORE

Concerto for Nohkan and Orchestra

能管と西洋交響楽団のための協奏曲

John Seymour ジョン・セモア

2017

17' 00" C Score

Concerto for Nohkan and Orchestra

能管と西洋交響楽団のための協奏曲

2017

John Seymour セモア・ジョン

Piccolo Flutes I, II Oboes I, II English Horn Clarinets in $B^{\,\flat}$ I, II Bass Clarinet in $B^{\,\flat}$ Basoons I, II Contrabassoon

Horns in F I - IV Trumpets I, II Trombones I, II Bass Trombone Tuba

Glockenspiel., Xylo. (1 player) Timpani (2 or 3 drums)

Violins Ia, Ib, IIa, IIb Violas a, b Cellos a, b Double Basses

Programme Notes

Over half a millennium ago Japanese flute makers did something remarkable: although they had been making instruments which met exacting pitch standards for quite some time, they designed a new type of flute specifically such that it could only play out of tune. This was no accident: the strange tuning of the flute makes a haunting, otherworldly sound perfectly suited for the supernatural stories of the noh theatre from which the nohkan ("noh flute") gets its name. It seemed to me that this instrument would also be perfect for creating contemporary avant-garde music, and so I decided to compose the Concerto for Nohkan and Orchestra.

In its traditional genres, the music of the noh and later also the kabuki theatres, the nohkan sometimes plays along with the other instruments, but sometimes breaks away and plays separately, as if in its own world. This kind of writing is heard throughout the Concerto: the nohkan sometimes playing with the orchestra, sometimes against it, and sometimes ignoring it entirely. Other than this, the Concerto is an entirely contemporary work and makes no reference to the traditional noh or kabuki music. Every performance of this work will sound unique, not only because no two nohkan are tuned the same way, but also because the nohkan soloist is encouraged to put his or her mark on the performance by showing off his or her own style of ornamentation.

After the opening phrases, the orchestra and nohkan seem to struggle to find each other. The nohkan begins to lock into very rhythmic, repeated patterns, and just when it seems the orchestra and the nohkan might play the same music together, the orchestra's music disintegrates into formless clouds while the nohkan becomes faster and faster. This leads to the work's first major climax, where the orchestra fades away entirely leaving the nohkan to reach top speed with some very tricky phrases. After this, the nohkan rests, allowing the orchestra some time to indulge in lush, resonant harmonies. When the nohkan reenters, soloist and orchestra are finally playing together to the same beat, moving in and out of each other's phrases, imitating each other, and occasionally interrupting each other until the work's second large climax leads into the cadenza sections. Six cadenzas, one after another—the first two with some accompaniment from the orchestra—allow the soloist to truly show off his or her command of the nohkan. After more sound clouds from the orchestra, the piece ends with a few statements of the nohkan's signature high-pitched closing phrase.

Concerto for Nohkan and Orchestra

能管と西洋交響楽団のための協奏曲

About the nohkan

能管について

The nohkan, a traditional Japanese flute, is an instrument from which absolute pitch is not expected. In this work, the nohkan soloist will read the fingerings below the staff according to the chart below. Due to variations from nohkan to nohkan, the resulting pitches will not necessarily match those indicated in the staff. The approximate pitches are notated in the staff only as an aid to the conductor.

能管は、絶対音感が期待されない楽器である。この曲において、能管のソリストは五線譜に書かれている音符のかわりに下記の図表に従い、五線譜の下に書いてある運指の文字を読む。各能管は別の音感で調子を合わせてあるため、そこから出て来るピッチは必ず五線譜で書いているとしてもとは限らない。そのために、五線譜に記されているおおよそのピッチはあくまでも指揮者への手がかりとして書いているだけの物である。

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Ornamentation is generally not notated in the nohkan part, but the nohkan soloist is encouraged to insert ornamentation anyhere he or she sees fit. This includes the use of portamento.

In some places, the ornament below is notated. Although three notes are notated between fingerings 2 and 5, the soloist should perform this ornament in his or her usual style, which may have fewer or more notes, or different pitches.

指遊びについては、ほとんどの場合楽譜には記載されていないが能管のソリストは指遊びが適しているであろうと考えられる場所のどこにでも指遊びを入れることを勧められる。ポルタメントも用いられている可能性がある。

※譜のある部分には、下記に示した指遊びが記載されている。2と5の運指の間には音符が三つ記載されている。2と5の運指の間には音符が三つ記載されているが、ソリストは自分の通常の方法で「2から5」の指遊びを演奏すればよい。その場合、音符は三つより少なく、あるいは多く用いられる可能性があり、ピッチも異なる可能性がある。



About the senza misura sections

At measure 13, the time signature \emptyset and the indication "senza misura" are given, and the music will be unmetered until 4/4 time is resumed at measure 23. During this section, the conductor will cue only the downbeat of each measure. Players with phrases in repeat brackets will play their phrase at their own tempo without coordinating with the other players, even within the same section, as many times as is needed until the next cue is given. At each subsequent cue, each player with a repeating phrase is given the instruction to continue, to change to a new phrase, or to rest.

At cues 13 through 17, the nohkan soloist will play the indicated melody and the conductor will give cues when the soloist reaches the appropriate points in the melody. At cue 18, the conductor will wait 3 to 4 seconds before giving the next cue. From 19-21, the cues will follow Tbn. 1, and at 22, the nohkan.

senza misuraについて

13番の小節から、拍子記号は「Ø」になり、senza misuraが記載されてている。この時から、23番の小説の4/4 に戻る時まで、音楽は拍なしになる。この部分では、指揮者は各小節のダウンビートにしかキューを見せない。繰り返しのブラケット内にあるフレーズがある演奏者は、そのフレーズを次のキューまで自分のテンポで何回も演奏する。他の演奏者がたとえ同じセクションで演奏していても彼らと一緒には演奏しない。その後のキューで、それぞれの演奏者はフレーズの繰り返しを続けるのか、新しいフレーズを始めるのか、それとも止まるのかの指示を与えられる。

13番から17番までは、能管のソリストは自分のテンポでメロディーを演奏し、指揮者はソリストがこのメロディーに相応しい場所まで到達したら準キューを見せる。18番では、指揮者は3~4秒を待って次のキューを出す。19番から21番までは、Tbn.1のメロディーに従い、22番で能管のメロディーに従ってキューを見せる。

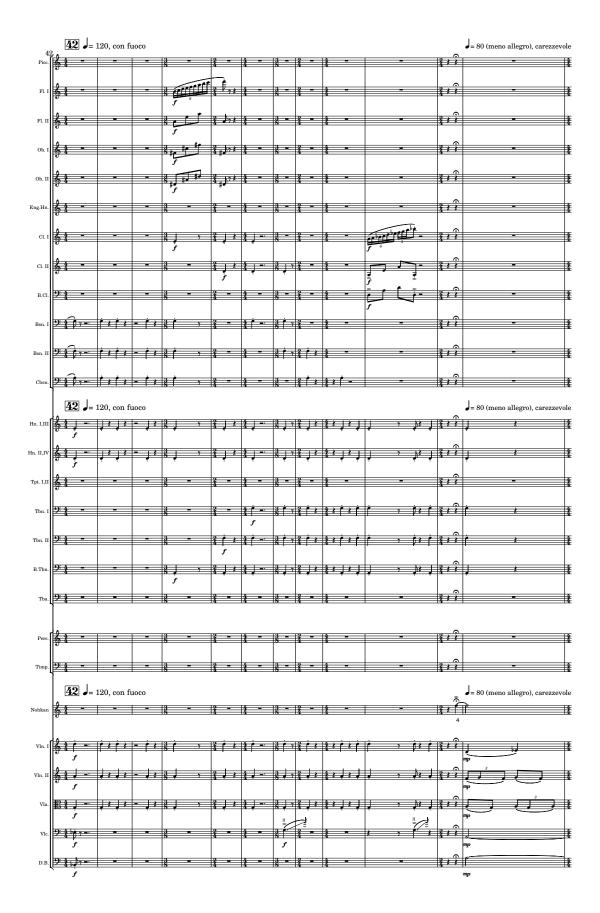




















































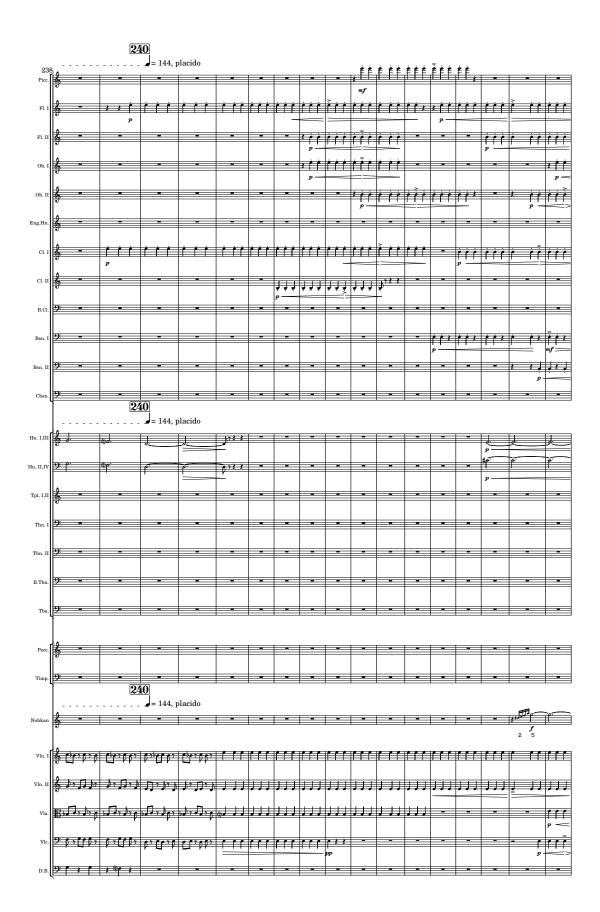
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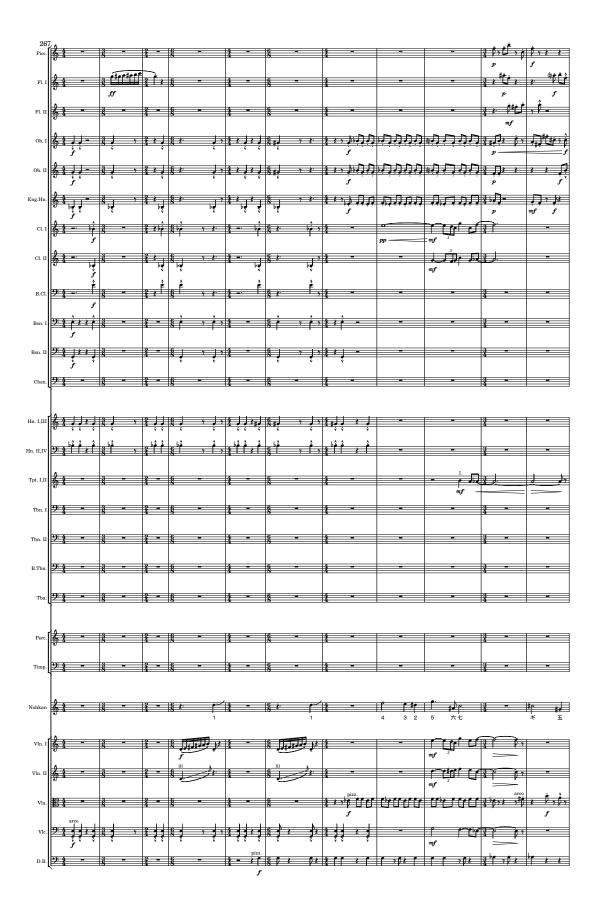




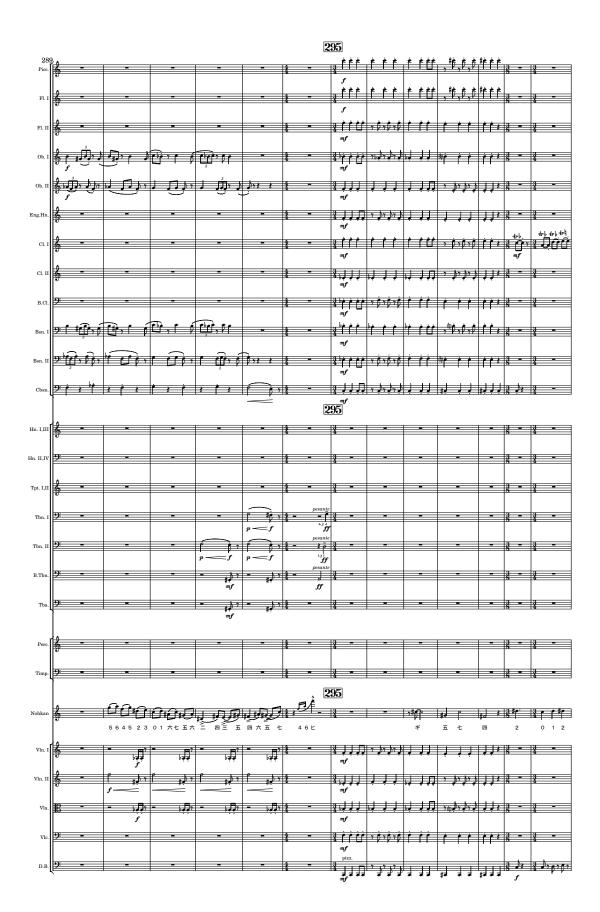






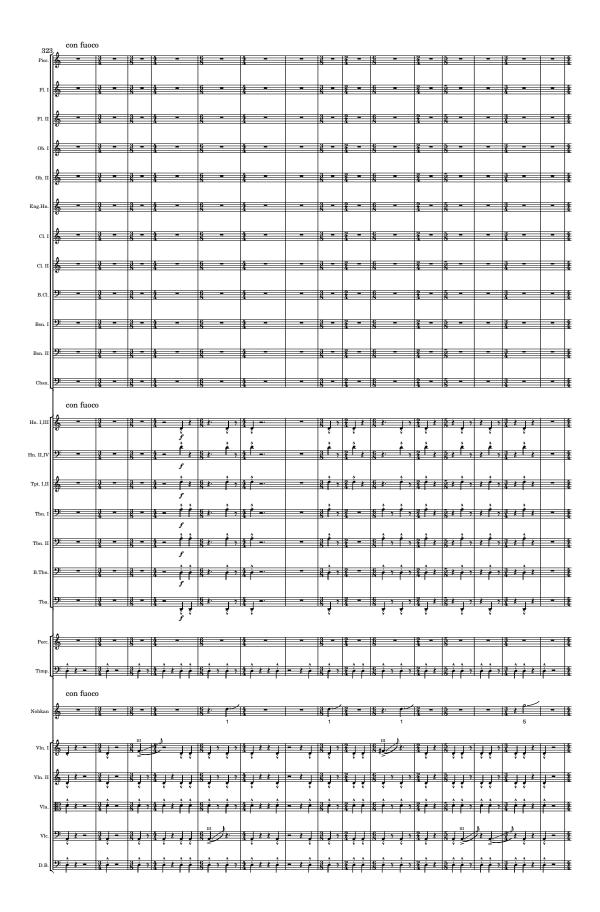


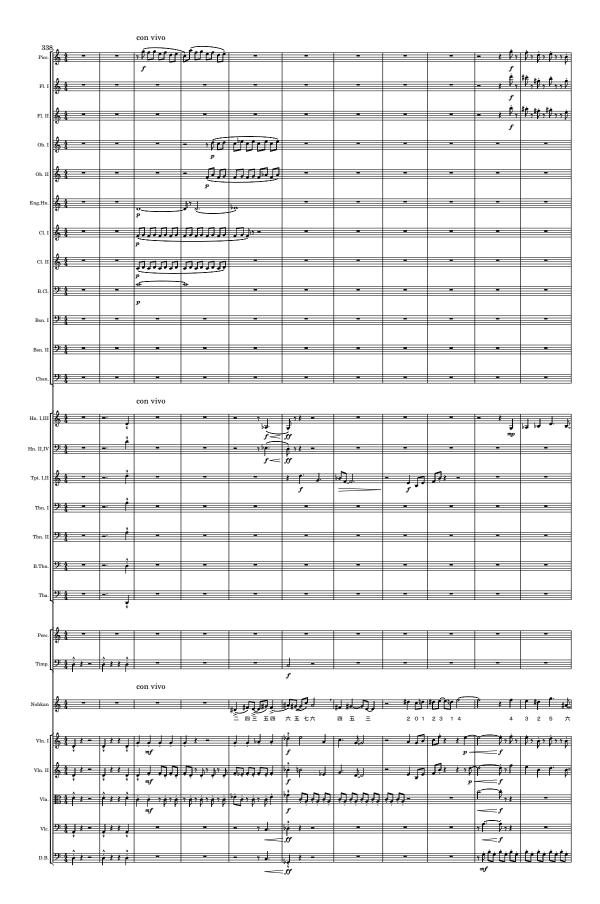


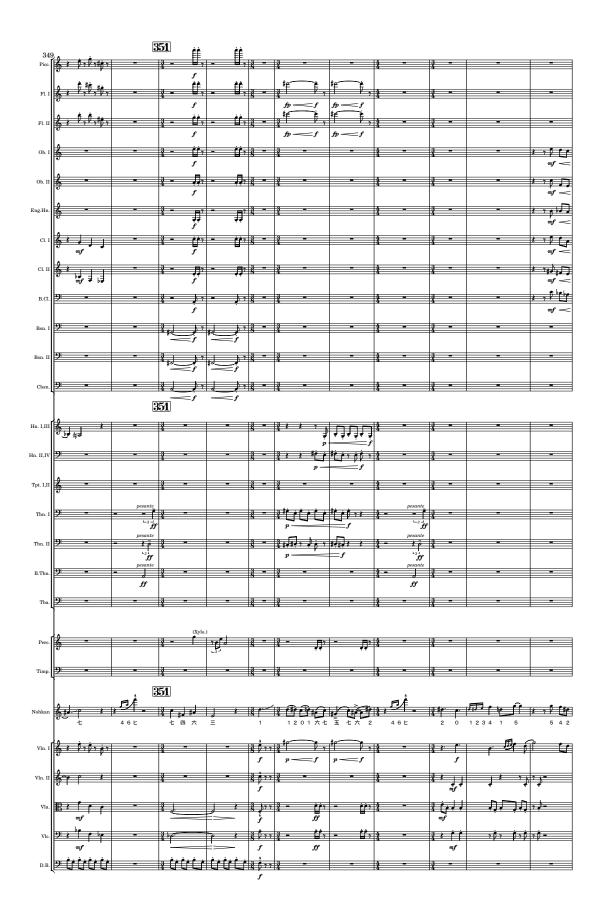


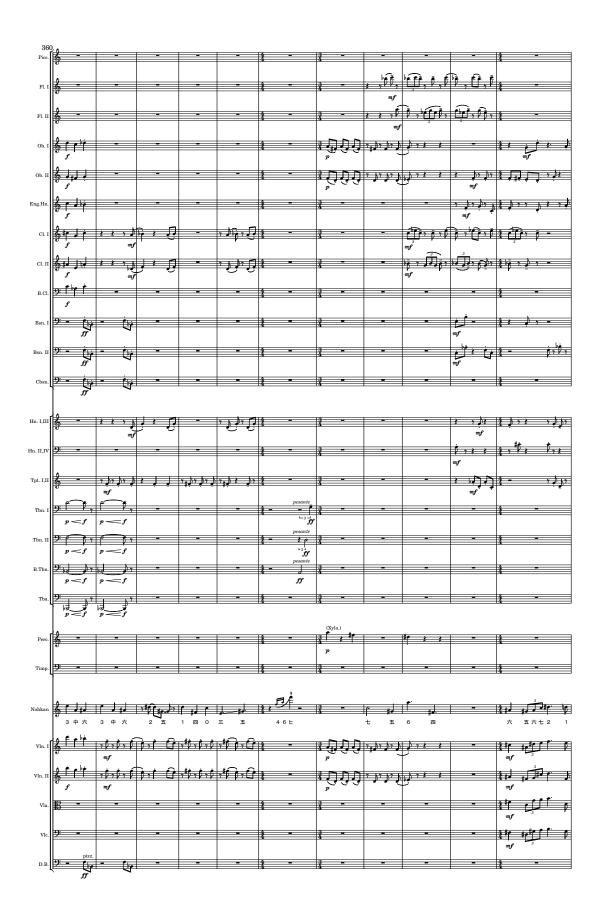


























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