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**TEACHING A TRADITIONAL KOREAN ART FORM:
DESCRIPTIVE ANALYSES OF INDIVIDUAL LESSONS TAUGHT
BY THREE *GAYAGEUM SANJO* MASTER TEACHERS**

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by

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The University of Texas at Austin, 2016

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The present study represents the first systematic description of music teaching by *gayageum sanjo* masters. I observed and made video recordings of three renowned masters of *sanjo* who were teaching lessons to advanced-level students. I organized my descriptions around rehearsal frames, intervals of instructional time devoted to the accomplishment of identifiable proximal performance goals. Many of the characteristics of the teaching I observed are consistent with those identified in the teaching of artist-level Western musicians. Teachers strategically identified proximal performance goals that could be accomplished within brief time intervals and with few repetitions by the student. Thus, students consistently experienced successful outcomes throughout each lesson. As the students were performing at an advanced level and had already learned and could play the pieces they were working on, teachers were particularly focused on refining elements of musical expression and inflection. Perhaps as a result of this focus, teacher vocal and instrumental modeling were prominent features of all three lessons. Seldom did teachers address an aspect of student performance without providing some form of model. Data

from these observations may provide a useful starting place for the formal study and further development of *gayageum sanjo* pedagogy.

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Chapter 1: Introduction

The practice of formal music instruction in conservatories and in schools of music most often involves one-to-one instruction in which master teachers convey their knowledge and skills to students (Tait, 1992). Referring to this teacher-led tradition of music teaching, Jørgensen (2000) highlights a “master-apprenticeship relationship” that is characterized by the presence of a master teacher who serves as a “role model” and “a source of identification for the student,” and student imitation as “the dominating mode of student learning” (p. 68).

The ultimate goal of music teaching is for students to develop musical independence as they make the transition from student musician to mature professional (Burwell, 2005; Hallam, 1994; Nerland, 2007; Nielsen, 1999). Musical traditions that are based on strong master-apprenticeship relationships are often those with a long oral tradition in which students work assiduously to imitate the playing of their teachers without the aid of notated music to use for study. This reflects the nature of music cultures in which traditional technique and knowledge are handed down from generation to generation of practitioners of the discipline. The Korean musical art form of *sanjo* is emblematic of such traditions, one that is recognized as a cultural treasure in Korean society.

Sanjo is a form of solo folk music that is performed using a wide range of Korean instruments. Since its inception, *sanjo* was taught through aural modeling and imitation, but during the late 1990s the means of teaching *sanjo* began to change. The establishment

of Korean traditional music in institutions of higher learning—specifically, music schools and conservatories—led to modifications in the methods of teaching *sanjo*. The new approaches were characterized by the use of music notation and more highly structured studio lessons. This institutionalization of Korean traditional music led to the positioning of a master-apprenticeship approach within the structures of the modern college and university (Howard, Lee, & Casswell, 2008; Lee et al., 2009).

The individual expertise and personal artistry of the master teacher are central features of the apprenticeship approach (Nerland & Hanken, 2002), though recently, with the inclusion of Korean traditional music teaching into educational institutions, there has been a growing interest in the pedagogical skills of *sanjo* master teachers. Musicologist scholars have devoted considerable attention to the study of *sanjo* and its origins, structure, and lineage. Yet, there is no descriptive research that documents the instructional behaviors of *sanjo* master teachers (Song, 2004).

In contrast to the paucity of studies regarding apprenticeship learning in music such as *sanjo*, instructional effectiveness in Western music cultures has been a topic of intense study. The analyses of music teaching from the 1970s to the 2000s, for example, can be organized in the following ways: the measurement of multidimensional aspects of teaching among teachers with varying levels of experience (e.g., Bowers, 1997; Colprit, 2000; Duke, 1999b; Hendel, 1995; Kostka, 1984; Speer, 1994; Whitaker, 2015; Worthy & Thompson, 2009), the identification of instructional components that may explain student achievement (e.g., Duke & Henninger, 1998; Dunn, 1997; Henninger et al., 2006; Kendall, 1988; Kostka, 1984; Madsen, 2003; Price, 1983; Rosenthal, 1984; Siebenaler, 1997; Taebel & Coker,

1980; Witt, 1986; Yarbrough, 1975; Yarbrough & Price, 1981, 1989), and in-depth narrative descriptions of teaching (Duke & Simmons, 2006; Worthy, 2006).

In addition to defining common pedagogical behaviors that appear across diverse music settings, other research also focuses on understanding instructional practice within cultural and social contexts (Kennell, 1997; Kingsbury, 1988; Nerland & Hanken, 2002; Nerland, 2007; Persson, 1994; Rice, 1996; Young, Burwell, & Pickup, 2003). Nerland (2007), in particular, indicates that more attention should be paid to how the use of teaching strategies is facilitated by the cultural systems in which teachers work.

Although no research to date has examined pedagogical approaches in *sanjo* teaching, previous research provides direction and methodological approaches that are applicable to the investigation of institutionalized pedagogical practice in *sanjo*. Of course, understanding the pedagogy of a given music within its cultural boundaries is a necessary component of fully understanding the music itself (Nettl, 1992). Given that today there is a burgeoning body of literature about Korean traditional music, including *sanjo*, analyses of *sanjo* teaching may reveal critical aspects of the art of *sanjo*.

The institutionalization of Korean traditional music teaching—situating in schools what was once an independent apprenticeship model—has generated interest in defining the features of efficient traditional music teaching. Similarly, Rice (1996) noted that as Bulgarian folk music teaching became institutionalized, musicians, responding to social change, established pedagogical practices suitable for the institutional context.

Documenting *sanjo* master teachers' instructional behaviors may contribute to the establishment of an accepted institutional pedagogy for traditional music teaching that can

be shared among teachers, institutions, and music traditions. It may also be the case that the features that define expert teaching in Western music traditions, which have been the focus of more thorough investigation to date, are also found in the expert teaching of *sanjo* masters.

PURPOSE OF THE STUDY AND RESEARCH QUESTIONS

The purpose of the study was to investigate the pedagogical practices in *sanjo* by observing lessons taught by renowned *sanjo* master teachers. Data from the study may provide a basis for the establishment of expert *sanjo* pedagogy in Korean traditional music. There is at present no published information about the practices of *sanjo* teachers. Like the traditions of *sanjo*, the traditions of teaching *sanjo* have been handed down from masters to their apprentices throughout the last two centuries. With the advent of formal *sanjo* study in educational institutions, there is a need to assemble a working description of how *sanjo* is taught so as to provide guidance to the expanding number of teachers of the art form.

I focused this investigation on a particular aspect of *sanjo* teaching, namely, the refinement of musical expressiveness. Of course, learning involves many different levels of development. In the case of much contemporary music learning, initial experiences involve the development of fundamental instrumental or vocal technique, note reading skills, and the eventual refinement of musical execution. Given that refining learned skills is perhaps the most demanding aspect of teaching, I chose to observe masters who were teaching students who had mastered the fundamentals of the instrument (in this case, the

gayageum, a 12-string plucked instrument) and who could play all of the notes of the music they were studying (in this case, *sanjo*).

Using rehearsal frames as an observational model (see Duke, 1999a), I documented multiple aspects of *sanjo* teaching. Rehearsal frames are intervals of instructional time devoted to the accomplishment of identifiable proximal goals. In observing masters working with students on the refinement of their performances, I was most interested in the following:

1. What targets (proximal performance goals) do teachers address when refining performance?
2. What is the predominant structure of the rehearsal frames?
 - a. What are the durations of rehearsal frames?
 - b. How do teachers communicate information?
 - c. What are the numbers and durations of student performance trials?
3. Does the structure of rehearsal frames (in terms of duration, teacher behavior, and numbers of student performance trials) vary among targets?

LIMITATIONS OF THE STUDY

Although *sanjo* can be played on a variety of different instruments, the current study involves only *sanjo* for *gayageum* (a plucked 12-string instrument). All of the students whose lessons I observed were advanced-level *gayageum* players who had a great

deal of experience with the *sanjo* they were studying. The results described were obtained in lessons devoted to the refinement of high-level skills and may not be generalizable across other levels of performance or across other performance media. Fully understanding *sanjo* pedagogy from the beginning stages of instruction through the attainment of artistic level mastery will require much additional study.

I was present during the video-recordings of all 12 lessons. Although I remained silent and did not respond to the interactions as they were being recorded, my presence and the presence of the camera may have affected the lesson structure or the teacher-student interactions I observed.

Chapter 2: History of *Gayageum Sanjo* Performance and Teaching

Sanjo is a form of traditional Korean solo instrumental music that can be played on a wide variety of instruments that are accompanied by a *jangu* (barrel drum). The term *sanjo* means “scattered melodies,” and each *sanjo* is a continuous musical work that lasts from 50 to 90 minutes, during which various melodic elements are performed over a defined rhythmic framework that increases in speed through the course of the work. In some ways a *sanjo* resembles a musical suite whose sections are performed without interruption.

Since the late 19th century, *sanjo* has been transmitted from one generation to the next through rote learning, with students studying as apprentices under *sanjo* masters. More recently, as institutions in Korea have sought to preserve the traditions of indigenous Korean music, *sanjo* has become an essential genre in the music school curriculum along with court music and contemporary music.

Although there is a considerable body of musicological literature devoted to *sanjo*, there is virtually no available pedagogical literature. This is perhaps understandable given the long tradition of apprenticeship in the teaching of *sanjo*.

ART OF *SANJO* IN KOREAN CULTURE

Korean traditional music is often described as a “process art” (Lee, 2009), which implies that a consistent aesthetic value in Korean art forms involves the transformation

and reproduction of traditional forms over time. The art of *sanjo* includes a number of different “schools,” each of which follows the lineage of the *sanjo*’s creator, who is also the original master of the school. Thus, each school of *sanjo* began with the originator of the first version of the school’s *sanjo*, and the students of the master became the teachers of succeeding generations of apprentices. Although it may seem unusual to those familiar only with Western music traditions, a *sanjo* school comprises a single musical work, which is passed down from generation to generation. Many musicians who study the art of *sanjo* have in their repertoire more than one school’s *sanjo*.

Sanjo was first developed in the late 19th century, and a number of different schools have been created since that time. The creation of new *sanjo* schools is not a prominent feature of contemporary Korean folk music, but the extant schools of *sanjo* continue to be performed.

The *gayageum* is one of the many instruments on which *sanjo* is played, and *gayageum sanjo* is recognized as one of the most representative traditional forms of *sanjo*.

Gayageum

The *gayageum* is a Korean stringed instrument, similar to a zither, made of paulownia and chestnut wood. The instrument has an ancient history, and archeological evidence suggests that the *gayageum* was created in the 4th century.

There are two types of traditional *gayageum*: *jeogak gayageum*, also called *beopgeum*, which is used in the performance of court music, and *sanjo gayageum*, which

is designed for playing folk music. Both of these traditional versions of the instrument feature 12 strings that are supported and tuned by 12 moveable bridges called *anjok*.

The smaller *sanjo gayageum* is built in a way that enables performers to move more rapidly and play with greater flexibility than is possible on the earlier *jeongak gayageum*. Other types of *gayageums* with wider registers than traditional versions have been developed more recently, including *gayageums* with up to 25 strings, that are mainly employed for contemporary music.

In playing *gayageum*, the performer plucks or flicks the strings with the fingers of the right hand, while the left hand presses and mutes the strings on the opposite side of each bridge, which allows for microtonal pitch bending, embellishments, a form of vibrato called *nonghyeon*, and other stylistic adornments.

Gayaguem sanjo

Today *sanjo* is played on many different traditional instruments, but the first form of *sanjo* was created for the *gayageum*. I was particularly interested in the pedagogical approaches of renowned *gayageum sanjo* masters who have been playing and teaching for decades. It seems appropriate first to provide a description of the origin and musical characteristics of *gayageum sanjo* and how it has been transmitted to students before Korean traditional music was institutionalized.

THE ORIGIN OF *GAYAGEUM SANJO*

Korean folk music artists and musicologists believe that *sanjo* was derived from *sinawi* or *simbanggok*, and *pansori* (Howard et al., 2008; Lee, 2009). In fact, elder folk musicians oftentimes refer to *sanjo* as *sinawi* (Song, 2007), which has its origins in ritual music.

The ancient term for *sinawi* is *sano* or *sanae*, meaning a song of the Silla Dynasty (57 B.C.E. – 935 C.E.) that included lyrics or instruments (Yi, 2001). According to the *Samguk sagi*, the historical record of the three Kingdoms of Korea (*Goguryeo*, *Baekje*, *Silla*), and the history and folktales of the three Kingdoms, *Samuk yusa*, the terms *hangga* are used interchangeably with *sano*, *sanae*, and are interpreted to indicate local or religious music (Lee et al., 2009). The etymology of these terms provides support to the argument that *sinawi* was evolved from religious music.

Elder musicians may refer to *sinawi* as *simbanggok*, though *sinawi* is today the more commonly used term in contemporary Korean. The etymological meaning of *sim* is shaman (e.g., *sim* is the vernacular term of *shaman* on Jeju Island) which is another clue that *simbanggok* was a form of ritual music. Here again the etymological relationship between these terms supports the argument that *sinawi* and *simbanggok* were once used interchangeably (Lee, 1971; Yi, 2001). In modern usage, *sinawi* indicates an ensemble performed with *gayageum*, *geomungo* (6-stringed instrument), *ajaeng* (bowed instrument), *haegeum* (2-stringed fiddle), *piri* (double-reed bamboo oboe), *daegeum* (transverse bamboo flute), and *jing* (gong), and sometimes other instruments and a singer.

A text entitled *Geumok Chongbu* by An Min-yeong clarifies the musical association among *sinawi* (*simbanggok*), *pansori*, and *sanjo* (Lee, 2009). The text explains that musicians played solo *simbanggok* for aristocrats, and that the musical characteristics of *simbanggok* were closer to those of *pansori*, a storytelling vocal form, than to the ritual music of that time period. Also, a *gayageum* player, Seo Gong-chul, remarked that his teacher and *sanjo* master, Han Suk-gu, referred to solo *simbanggok* (Lee et al., 2009).

All of this suggests that there was at one time a solo *simbanggok* (*sinawi*), an instrumental genre distinct from the ritual music style, that contained musical components of *pansori*, and that the solo *simbanggok* seems to have been a precursor of modern *gayageum sanjo*. In fact, it is now widely accepted that modern *sanjo* derived from *pansori* and *sinawi* (*simbanggok*), as there is evidence that some of the musicians who accompanied ritual events played solo *sinawi* (*simbanggok*) or *pansori* melodies on their instruments, providing a musical basis for modern *sanjo* (Song, 2007).

In light of the popularity of *pansori* in the 1800s, it is perhaps not surprising that the music form of *pansori* was a great inspiration for musicians in creating a new art form such as *sanjo*. The musical components of *sanjo* are, in fact, quite similar to those of *pansori*, so much so that *sanjo* is sometimes referred to as “*pansori* without lyrics” (Korea National University of Arts, 2004). Many of the same types of rhythmic cycles, *jangdan* (e.g., *jinyangjo*, *jungmori*, *jungjungmori*, *hwimori*, *jajinmori*), are common to both *pansori* and *sanjo*. Even the subsections within rhythmic cycles, *jo*, that contribute to mode, mood, and expression, *gyecheonjo*, *pyeonggo*, *ujo*, are common to both forms (Lee, 1996). *Pansori* singers and *sanjo* instrumentalists alike focus on the expressivity of *seong-eum* (timbre or

sound image) and the transitions of *seong-eum* in each *jo* (Korea National University of Arts, 2004).

THE MUSICAL FEATURES OF *GAYAGEUM SANJO: JANGDAN, JO(JE), SEONG-EUM*

Three of the most prominent features of *sanjo* are *jangdan*, *jo(je)*, and *seong-eum*. *Sanjo* comprises of a set of rhythmic cycles called *jangdan* (literally, “long-short”), each of which is based on a slow, moderate, or fast tempo. Most *gayageum sanjo* schools follow a prescribed sequence of *jangdan*: *jinyangjo* (4 sets of slow 6 beats), *jungmori* (12/4), *jungjungmori* (12/8), *jajinmori* (12/8), and *hwimori* (12/8). In some schools, *sesanjosi* (4/4) or *danmori* (4/4) are included as well. Each *jangdan* is performed with a set rhythmic pattern on the *janggu*, a barrel drum, but rhythm variations occur on occasion. Each *jangdan* is in some ways analogous to musical movement (section) in Western music.

The full performance of *gayageum sanjo* may last between 50 and 90 minutes, varying among *sanjo* schools. It is generally the case in all schools of *sanjo* that the first section (movement), *jinyangjo*, is as long as the remaining sections combined. A variety of short forms are also possible as musicians extract melodies from each *jangdan* and organize them in their own ways. Thus, diverse melodies are organized within each *jangdan*, the fixed rhythmic frame.

In *sanjo*, *jo(je)* takes on a wide range of definitions: “mode, scale, idiomatic musical expression, mood” (Lee et al., 2009). The most commonly used *jo(je)* are *gyemyeonjo*, *pyeongjo*, and *ujo*. *Gyemyeonjo* comprises the scale tones *mi*, *sol*, *la*, *ti*, *do*, *re*; *pyeongjo*

comprises *re, mi, sol, la, do*; and *ujo* comprises *sol, la, do, re, mi*. Transposition is often found within *jo(je)*. In terms of emotion, *gyemyeonjo* seeks to express strong sorrowfulness, *pyeongjo* represents peaceful and serene feelings, and *ujo* is described as reflecting a grand and majestic mood. Inflections and embellishments also contribute to making each *jo* distinctive. *Gyemyeonjo* in particular is characterized by more splendid embellishments and microtonal shadings than either *pyeongjo* and *ujo*. Although each school of *sanjo* features its own idiosyncratic characteristics, these musical aspects of the three *jo(je)* are commonly found.

Seong-eum in *sanjo* is the name for the timbre or sound quality produced in *gayageum sanjo*, and the transitions among different types of *seong-eum* are achieved primarily by manipulating the *gayageum* vibrato, *nonghyeon*. The proficient execution of transitions among different types of *seong-eum* is a critical quality of *sanjo* artistry (Korea National University of Arts, 2004). Teachers give frequent feedback about *seong-eum*, whether timbre is appropriate for the mood of *jo(je)*, in the course of instruction. Teaching the appropriate application of *seong-eum* is a fundamental component of teaching *sanjo*.

These features of *sanjo* combine to accomplish high levels of artistic expression, in which fixed rhythmic frames and flexible expressive musical components are harmonized. The mastery of *seong-eum* aligned with *jo(je)* within the framework of *jangdan* is an ambitious musical goal that is pursued across an artist's lifespan.

THE FORMATION OF *GAYAGEUM SANJO* LINEAGES

Many *gayageum* masters assert that Kim Chang-jo (1865-1919) created *sanjo* for *gayageum*, and this view is widely accepted among students of Korean music (Howard et al., 2008), though not universally so. Seo Gong-cheol (1911-1982), a *gayageum* musician, argues that his teacher, Han Suk-gu (1850-1925), created *gayageum sanjo* before Kim Chang-jo (Lee et al., 2009), and more recently, the lineage and musical structure of the Han Suk-gu *sanjo* have been examined (Oh, 2012). The original creation of *gayageum sanjo* has been attributed to other *gayageum sanjo* musicians as well, including Pak Han-young, Baek Pal-gwae, and Sim Jeong-sun (Lee et al., 2009), but there is limited documentation supporting these possibilities. Kim Chang-jo's *sanjo* has certainly received the greatest attention in the musicology literature.

As musicologists attempted to reconstruct the lineage of *sanjo* musicians, they determined that the “first generation” of *gayageum sanjo* masters (1850-1925) includes Kim Chang-jo, Han Suk-gu, Sim Chang-nae, and Baek Pal-gwae, all of whom are believed to have contributed to creating a formal structure of *sanjo*. A second generation of *gayageum* masters (1890-1950)—Kim Jong-gi, Kang Tae-hong, Choi Ok-sam, An Gi-ok, Kim Byeong-ho, Seo Gong-chul, Park Sang-geun—advanced the form by adding or modifying melodies conceived through improvisation or incorporated from contemporaneous music influences. Most of the masters of the third generation (1910-1980)—Kim Juk-pa, Ham Dongjeongwol, Kim Yun-deok, Seong Geum-yeon—created their own schools that are similar to those created by the masters of the second generation.

Gayageum sanjo schools of the second and third generations are the major schools of *gayageum sanjo* that are taught today.

With the implementation of the Cultural Property Protection Policy in 1962, *gayageum sanjo* and *gayageum byeongchang* (vocal music accompanied by *gayageum*) were assigned to Important Intangible Cultural Property No. 23, among a list of 129 important designations that recognize cultural treasures of Korea. A number of *gayageum* masters of the current generation gained the title *boyuja* (holder) in recognition of their artistry and the contribution as creators of *gayageum sanjo* schools (Kim, Baek, & Choi, 1995, Lee, 2009; Yang, 2003). The schools created by these holders are the *gayageum sanjo* schools that current students of the art form study most.

Some musicologists have criticized the appointment of *sanjo* masters as holders under the Cultural Property Protection Policy in 1962, concerned by the fact that, as recognized masters of traditional schools, they are expected to perform only the original form of each school, absent melodic variations that would contribute to the further development of the art form (Lee, 1997; Lee, 2009). These concerns are not entirely well-founded, as contemporary *gayageum sanjo* musicians do in fact develop their own styles of performing within traditional schools.

Many of the *gayageum* artist-teachers who currently serve as professors at modern educational institutions have learned from the “third generation” of *gayageum sanjo* masters. These teachers play not only *gayageum sanjo* but perform court music and contemporary music as well. This is in contrast to previous *gayageum* masters, who

performed only folk and court music. The development of a broad repertoire of performance styles and genres reflects a conceptual shift among *gayageum* musicians.

Although many of *gayageum* artist-teachers of today are called masters (*myeongin*) in public, it may be inaccurate to consider them the fourth generation of *gayageum sanjo* masters, because they have been less involved in the creation of new schools of *sanjo* than were the *gayageum sanjo* masters of earlier generations. Thus, there is not yet a consensus about the role of the fourth generation of *gayageum* masters in the development of *sanjo*.

Current *gayageum* musicians seek to reproduce their teachers' performance style with a high degree of fidelity, yet across repeated performances they too tend to modify rhythms, embellishments, and other aspects of *sanjo*, which leads to shifts in the characteristic style of a given school of *gayageum sanjo*. It is arguably true that *sanjo* is a more flexible performance form than any other genre of Korean traditional music (Lee, 2010). Although entirely new schools have rarely developed since the 1990s, *gayageum* musicians continue to add to the performance lineages of existing schools of *sanjo*, embodying the performance details of each *sanjo*'s founder while incorporating original elements of their own making.

TRADITIONAL TEACHING PRACTICES FOR GAYAGEUM SANJO

A wide range of traditional genres of Asian music have a history of oral transmission among generations of practitioners, though more recently some have incorporated the use of notation and other written documentation (Shehan, 1987). For many

years following its inception, *sanjo* was taught through the time-honored practice of *gugeonsimsu*, with apprentices learning from masters through imitation.

It is known that while Korea was under Japanese imperial rule, many female artists learned *sanjo* in group settings, and some students of the form lived with their teachers, learning primarily through observation (Lee, 2009; Song, 2011). Some of the third generation of *gayageum sanjo* masters had intensive applied lessons from masters of the second generation for as many as three years (Kim et al., 1995). Hwang, a current *gayageum* artist, had this to say about the way he learned *sanjo*:

When I learned *sanjo*, teaching and learning occurred naturally. I used to visit my teacher's place almost every day without a fixed lesson time. When I went there, if he was out, I simply practiced alone as much as I would like to. Luckily, if he was at home, and then I was able to learn *sanjo*. (B. G. Hwang, personal communication, June 15, 2015)

Few sources are available that describe the pedagogical approaches of *sanjo* masters in the 1990s, but it appears that the traditional teaching approach relied upon unstructured (i.e., not highly sequenced) learning. This is not uncommon among music cultures based on oral/aural tradition (Rice, 2003; Shehan 1987).

Although it is clear that rote learning is the primary mechanism through which *gayageum sanjo* has been transmitted over time, the specific teaching behaviors of *gayageum* masters are not well documented. Documenting the details of the teaching of

gayageum sanjo masters is further complicated by stories from current artists who explain that much of what they learned, they learned on their own (e.g., Hwang & Im, 2012).

GAYAGEUM SANJO TEACHING IN CONTEMPORARY KOREAN CULTURE

The establishment in the 1990s of educational institutions devoted to Korean traditional music had a major impact on the shift of *gayageum sanjo* teaching away from a traditional apprenticeship approach that relied on aural imitation to one that retained many elements of the tradition while incorporating new elements of music teaching and learning (e.g., music notation).

These changes in music pedagogy are exemplified in college departments devoted to Korean traditional music and The National Center for Korean Traditional Performance Arts. Seoul National University initiated Korean traditional music education in 1959, and since that time many other universities did so as well (Kim, 2011). Today, 24 music schools in colleges and universities (approximately half the colleges of music in Korea) include a division for Korean traditional music in addition to their departments devoted to the study of Western music. Each year approximately 700 student musicians graduate from Korean traditional music departments (Lee, 2008), and some colleges offer doctoral programs in Korean traditional music.

The establishment of the first Korean music departments was modeled after the Western music education system in terms of both the academic curriculum and weekly private lessons in performance studies. Students enrolled in these early programs, like students today, learn *jeongak* (court music), *sanjo* (folk music), and contemporary music.

Currently the professors of *gayageum* in Korean music schools are direct or indirect disciples of the third generation of *gayageum* masters.

As Korean music departments developed, *gayageum* teachers began to transcribe *sanjo* in Western music notation and incorporated the study of notation into the learning of *sanjo*. Lee Chae-suk, one of the first *sanjo* transcribers and a renowned artist-teacher of *gayageum*, believes that the use of written notation in *sanjo* teaching was unavoidable if *sanjo* was to be taught among the many other genres in the modern music curriculum. She acknowledged that the more subtle and nuanced musical components of *sanjo*, which of course are not captured in written notation, must be learned directly from a teacher (Howard et al., 2008).

With the availability of transcribed notation for *gayageum sanjo*, teachers now spend less time teaching the melodies of *sanjo* by rote, and focus instead on conveying the expressive aspects of the art form. Lee Chae-suk published six schools of *gayageum sanjo* in Western notation during the late 20th century, after which many *gayageum* teachers did so as well. The use of *sanjo* notation has become pervasive not only in lessons for *gayageum* musicians, but for other *sanjo* instrumentalists as well.

Young *gayageum* musicians typically learn the techniques of their instruments through folk songs and etudes before embarking on learning their first *sanjo*. Most study schools of *sanjo* along with other, more contemporary genres. It is estimated that nearly three years are required to learn a *sanjo* by rote imitation, but with the advent of music notation in *sanjo* teaching and learning, this time period has been shortened considerably. Given that learning *sanjo* from notation requires less time than does learning by rote, it is

now widely accepted that professional *gayageum* musicians should play several schools of *sanjo*. Most artists now perform approximately three schools over the course of their music careers and, some, as many as six schools.

Chapter 3: Observation and Analyses of Music Teaching

Although there are no systematic observation studies of Korean traditional music teaching, music education practices in Western music cultures have been studied extensively. Findings from these studies have revealed a great deal about the structure and implementation of music pedagogy in the context of Western art music, though less attention has been paid to more informal learning in folk music traditions, even in the West.

The methods developed and applied in the investigation of formal music teaching provide a basis for designing and conducting research into the teaching of *gayageum sanjo*. I apply a number of approaches that have been developed in the context of Western music education in the current dissertation. A review of some of the observational research in music education follows.

SYSTEMATIC OBSERVATION OF MUSIC TEACHING

The systematic observation of music teaching has a long history, and traditions of behavioral observation that had been developed in the middle of the 20th century were applied directly in subsequent years to the study of music teaching and learning. Observational research in music has focused on both classroom instruction (including ensemble rehearsals) and individual instruction in private lessons. The purposes of this research vary among investigations, as might be imagined, but the ultimate goals of the studies described below were to outline the structures of lessons and rehearsals, report the

nature of teachers' verbalizations and demonstrations, document the behavior of teachers with varying levels of experience and expertise, and explore the relationships between these variables and student accomplishment.

Most of the investigations described below used quantitative methodological approaches, including measurements of frequencies and durations of teacher and student behavior (e.g., Hendel, 1995; Persson, 1996; Worthy, 2006). More recently researchers have endeavored to capture the essential components of effective teaching using narrative approaches (e.g., Duke & Simmons, 2006).

Studies of time use in music rehearsals, lessons, and classes exemplify this early approach to observation, and have revealed that student attentiveness varies with the nature of ongoing activities and that music teachers with varying levels of experience and expertise use time differently. Moore and Bonney (1987), for example, in a study of 60 elementary music teachers, used an observation procedure that was typically employed in behavioral research at the time: an interval-sampling procedure. In this approach, periods of observation are evenly divided into brief time intervals that alternated between "looking time" (on the part of the observers) and "recording time," when observers mark the behaviors present in the preceding "look" interval. In this way, the relative proportions of time devoted to the behaviors or activities of interest can be estimated from the proportions of intervals that include each type of event. Moore and Bonney found that experienced teachers tended to shift among instructional activities more frequently than did novice teachers, though in the classes taught by both categories of teachers, students engaged in music activities for approximately half of the instructional time. In addition, the

experienced teachers used time more efficiently, devoting less time than the novices to dealing with issues of classroom control and the logistics of distributing materials, for example.

Wagner and Strul (1979) in a 20-week study of 27 elementary music teachers used a similar observation procedure. They also found that more experienced teachers used time more efficiently than did less experienced teachers, especially with regard to their explaining activities to students and giving instructions. In observing nine expert elementary music teachers, Hendel (1995) found that their class time was divided almost equally between teacher activity and student activity. In a study of individual piano lessons with students of varied ages and levels of experience, Kostka (1984) found that lessons in this context were characterized by large proportions of student performance time, from 50-58% on average, and that students were most attentive when they were engaged in performance.

In a study of instrumental ensemble rehearsals, Goolsby (1996) observed 30 middle and high school band directors. He found that the most experienced teachers allotted more time for student performance and spent less time giving instructions than did less experienced teachers. Whitaker (2015), in a study of 15 expert band conductors, found that student performance averaged over 66% of total rehearsal time and that when teachers gave instructions, over 60% of their attention was devoted to musical interpretation.

Worthy (2006) set out to identify common elements present in the rehearsals of three renowned college band conductors. He observed not only that approximately half of each rehearsal was devoted to student performance time, but that the distribution of time

was broken into relatively brief alternating intervals of teacher instruction and student performance. Capturing more detailed information about the distribution of time within the rehearsal was facilitated by an observation procedure that was based not on intervals of fixed duration, as had been the practice in research of this type, but on rehearsal frames (Duke, 1999a). Observational analyses based on rehearsal frames organize the observation period into time intervals devoted to identifiable proximal performance goals. Thus, rather than parse an observation into intervals of fixed length, rehearsal frame analyses organize observations within intervals of varying duration, according to the short-term goals that are the focus of the teacher's and students' attention. Worthy and Thompson (2009) also applied this observation strategy in a study of three expert teachers working with beginning instrumentalists.

The assessment of time allocation is only one example of the types of measurements that have been employed in the study of music teaching and learning. Other studies have attempted to explain the structure of instructional interactions in ways that make the teaching of experts more understandable. A summary of this research follows.

OBSERVATION OF INSTRUCTIONAL INTERACTIONS BETWEEN TEACHERS AND STUDENTS

The characterization of direct instruction is another aspect of teaching and learning that evolved in domains outside of music and was later applied in the analysis and pedagogy of music teaching. Direct instruction, as its name implies, comprises a sequence of teacher instructions, student responses, and subsequent feedback that is based on the model of reinforcement learning (Rosenshine, 1979).

Many studies have examined the sequential alternations between teacher and student behaviors. In observing students' attentiveness during band rehearsal, Yarbrough and Price (1981) were the first to apply the observation of what they termed "sequential patterns of instruction" to analyses of music teaching. In this initial study of school band directors, the authors found no relationship between these patterns of instructional interaction and student attentiveness, the primary dependent variable in the study. Further investigations applying this approach to analysis have obtained mixed results. In a later study Yarbrough and Price (1989) sought to determine the extent to which teaching is characterized by "complete patterns," ones in which teacher instructions and subsequent student behavior are followed by teacher feedback. The authors determined that a large proportion of student performance trials are not followed by teacher feedback and this seems to have no negative effect on student attentiveness.

It is interesting that observers who view video excerpts of teaching that depict different types of instructional patterns tend to evaluate complete patterns more positively than they do incomplete patterns, particularly when those patterns end with positive teacher feedback, which indicates successful student accomplishment (Yarbrough & Hendel, 1993;

Yarbrough, Price, & Hendel, 1994). Price (1992) demonstrated that novice teachers could learn to identify sequential patterns of instruction in their own teaching, and to increase the extent to which they followed an instructional model that included teacher feedback following most student performance trials.

Hendel (1995), in a study of elementary music teachers, modified the definition of complete and incomplete patterns of instruction, recognizing that multiple performance trials (repetitions) are often required before reaching a defined goal and that there is often no need for the teacher to provide feedback after every trial. This notion is consistent with observations by Speer (1994), who examined teaching patterns in lessons taught by 25 experienced piano teachers, and found, again, that most student performance trials were not followed by teacher feedback. Using her modified approach, Hendel (1995) found that teachers demonstrated the complete sequence patterns more often than had been observed previously.

The application of direct instruction principles in the implementation and analysis of music instruction was problematic for a number of different reasons that are illustrated in the research above. The alternation of teacher and student behavior in the course of music instruction is in reality much less orderly than the overly simplified direct instruction model suggests. Hendel (1995) acknowledged that the sequence of interaction between teachers and students is flexible in practice, as teachers observe and respond in ways that seem advantageous in bringing about positive student outcomes.

Duke (1999a) devised an alternative approach that organizes the observation of teaching and learning around proximal instructional goals. Within this framework of

observation, it is possible to examine all of the relevant aspects of teaching that pertain to each goal (which Duke refers to as a target). This approach to observation has been applied in a number of subsequent investigations in music (Cavitt, 2003, 2004; Colprit, 2000; Henninger, 2002; Maynard, 2006; Montemayor, 2006; Roesler, 2013; Taylor, 2006; Worthy, 2003, 2006; Worthy & Thompson, 2009).

THE RELATIONSHIPS BETWEEN TEACHER BEHAVIOR AND STUDENTS' MUSICAL ACHIEVEMENT

In a review of 86 published studies of observation and evaluation of music teaching, Duke (1999a) observed that only a small proportion (13 of 86) considered student accomplishment as a dependent measure in relation to teacher behavior. This finding eventually led to analyses of teaching effectiveness that followed an informed narrative approach.

Davis (1998) analyzed 83 choral rehearsals taught by two renowned choral conductors, each of whom worked with two choruses over 24 rehearsals as they prepared for public performances. Davis documented the quality of student performances throughout each rehearsal period. Her results illustrate that as dates of the performances approached, teachers made fewer verbal comments during rehearsals and relied more on their conducting to communicate with their students; as a result, there were increasingly fewer complete instructional sequences as time passed. Of particular interest was the finding that teacher feedback was unrelated to the quality of students' performances. In

one choir the highest performance ratings were obtained when the teacher gave either high proportions of negative feedback or no feedback at all.

Siebenaler (1997) observed 13 experienced piano teachers in an attempt to identify variables that were associated with high quality instruction. Siebenaler analyzed 78 private lessons taught to children and adult students to examine the relationship between teacher behavior and student performance quality. One of the unique variables in this study was the assessment of progress from one student performance trial to the next. The data indicated that predicting the quality of student performance required the consideration of multiple individual variables. In other words, measurements of specific behaviors and timing were not clearly related to student accomplishment, which suggests that the assessment of teaching quality requires the consideration of interactions among multiple variables.

In a stark departure from the systematic procedures that had been applied in the analyses of music teaching for nearly four decades, Duke and Simmons (2006) adopted an informed narrative approach in observing the teaching of three renowned, conservatory-level artist-teachers. Their meticulous descriptions of the teaching they observed in over 30 hours of private lessons provide a view of expert teaching unlike what had been obtained previously. The authors distilled the common features of teaching they observed in common among these three experts into 19 descriptors, which are summarized as follows:

- (1) The repertoire assigned students is well within their technical capabilities; no student is struggling with the notes of the piece.

- (2) Teachers have a clear auditory image of the piece that guides their judgments about the music.
- (3) The teachers demand a consistent standard of sound quality from their students.
- (4) The teachers select lesson targets (i.e., proximal performance goals) that are technically or musically important.
- (5) Lesson targets are positioned at a level of difficulty that is close enough to the student's current skill level that the targets are achievable in the short term and change is audible to the student in the moment.
- (6) The teachers clearly remember students' work in past lessons and frequently draw comparisons between present and past, pointing out both positive and negative differences.
- (7) Pieces are performed from beginning to end; in this sense, the lessons are like performances, with instantaneous transitions into performance character; nearly all playing is judged by a high standard, "as if we are performing."
- (8) In general, the course of the music directs the lesson; errors in student performance elicit stops.
- (9) The teachers are tenacious in working to accomplish lesson targets, having students repeat target passages until performance is correct.
- (10) Any flaws in fundamental techniques are immediately addressed; no performance trials with incorrect technique are allowed to continue.
- (11) Lessons proceed at an intense, rapid pace.
- (12) The pace of the lessons is interrupted from time to time with what seem to be "intuitively timed" breaks, during which the teachers give an extended demonstration or tell a story.
- (13) The teachers permit students to make interpretive choices in the performance of repertoire, but only among a limited range of options

that are circumscribed by the teacher; students are permitted no choices regarding technique.

(14) Teachers make very fine discriminations about student performances; these are consistently articulated to the student, so that the student learns to make the same discriminations independently.

(15) Performance technique is described in terms of the effect that physical motion creates in the sound produced.

(16) Technical feedback is given in terms of creating an interpretive effect.

(17) Negative feedback is clear, pointed, frequent, and directed at very specific aspects of students' performances, especially the musical effects created.

(18) There are infrequent, intermittent, unexpected instances of positive feedback, but these are most often of high magnitude and extended duration.

(19) The teachers play examples from the students' repertoire to demonstrate important points; the teachers' modeling is exquisite in every respect. (Duke & Simmons, 2006, pp. 11-15)

TEACHING EXPRESSIVITY

Performance of *gayageum sanjo* involves intricate and nuanced musical ornaments that play a major role in expressing emotions and moods of the work. Teachers convey to their students the elements of stylistic expressivity that define their lineage of performance style. The pedagogical approach to teaching expressivity in *sanjo* has not been well documented, but there are a number of studies of expressivity in the context of Western art music. I describe some of this research below.

Musical expressivity

Expressive performance is in some respects the ultimate goal pursued by musicians (Gabrielsson, 1999; Lindström, Juslin, Bresin, & Williamon, 2003; Woody, 2000). Yet defining the relevant variables that contribute to musical expressivity remains a difficult challenge.

Juslin (2003) acknowledged the complexity involved in fully understanding musical expression, noting that listener perceptions of musical expression are affected by variables related to the piece performed, the instrument or voice, the performer, the listener, and the context. Based on his review of studies that addressed multiple aspects of expressivity in performance, Juslin (2003) described musical expression as “a multidimensional phenomenon” that comprises five components that he enumerates as follows: (1) “generative rules” that are related to music’s structural features, (2) “emotional expression” that performers convey to listeners through the manipulation of sound parameters, (3) “random variability” in the activations of human motor control, (4) “motion principles” that are embodied in the dynamic movement of human beings, and (5) “stylistic unexpectedness,” which refers to violation of expectancies that result from music’s structural elements or from deviations from accepted convention.

Seashore (1938) first described the intentional or systematic deviation from notation as “expressive deviation,” illustrating that there exist musically acceptable parameters within which musicians may operate. Woody (2000) acknowledged the

difficulty in teaching and learning musical expression, and it seems widely accepted that the aspects of musical expressivity that are involved in emotional communication are difficult to define in concrete language (Juslin & Persson, 2002).

In light of the view that expressive music is attributable to variations in musical components, some researchers have investigated advanced musicians' tempo variations (Johnson, 1996, 1998) and their manipulations of timing or dynamics that are associated with musical interpretation or emotional expression (Gabrielsson & Juslin, 1996; Juslin & Madison, 1999; Laukka & Gabrielsson, 2000; Palmer, 1989, 1997). Deviations within culturally- and traditionally-defined acoustic parameters may involve the manipulation of note durations, tempo change, and pitch (Palmer, 1996).

It has been suggested that nonverbal cues, including facial expressions and body movements, also contribute to the creation of expressivity in music performance (Davidson, 1993, 2007; Juchniewicz, 2008; Morrison, Price, Geiger, & Cornacchio, 2009; Vines, Krumhansl, Wanderley, & Levitin, 2006). Physical gesture has been shown to have an impact on the recognition of emotion by listeners (Wallbott, 1998).

Approaches to teaching expressivity in music

There has been a growing interest in the essence of musical expressivity, and along with such interest, researchers have considered the development of expressivity in student musicians. One of the issues surrounding the teaching and learning of musical expressivity concerns the contrast between implicit and explicit instruction (Ebie, 2004; Woody, 1999).

Karlsson and Juslin (2008) analyzed 22 music lessons, and found that goals concerning technique and notation were the most frequently addressed, and found few instances of attention to expressive goals. When attending to expressive elements of music making, teachers relied more on demonstrations of intended expressions, giving little verbal description.

Lindström et al. (2003) surveyed 135 conservatory musicians' levels of understanding and learning experiences regarding expressivity. Nearly all participants (92%) reported that their felt emotion is naturally expressed through their music making without the need for conscious attention; many (60%) indicated that communication of intended emotion to listeners is closely related to how deeply musicians internalize the emotions themselves. Most of the participants learned expressivity through metaphor (46%), felt emotion (34%), and aural modeling (15%).

In analyzing musicians' descriptions of their own practicing, Rosenthal and colleagues (2009) found that, compared to less experienced musicians, professional musicians relied more on metaphoric language in describing their performance. Experienced musicians focused more on the structural and expressive aspects of the music they were practicing and used metaphoric language nearly twice as often as did younger or less experienced musicians.

Woody (2000) investigated the experiences of 46 college students with regard to their learning musical expressivity. Over half of the students reported that their teachers conveyed ideas about expression only verbally, but students whose teachers more frequently modeled for them during lessons spent more of their practice time working on

elements of personal expression. It appeared that students who were taught by teachers who frequently used modeling were more likely than other students to believe that their own intuitive feelings were important in informing their musical decision making.

Of course, the extent to which music learners benefit from performance models is related to their ability to make accurate discriminations about what they hear (Linklater, 1997; Woody, 2002). Woody (1999) addressed this issue in a study that examined the influence of accurate dynamics perception on actual performance. He found that advanced pianists' ability to imitate idiomatically appropriate and inappropriate models was in fact closely related to their ability to identify expressive features of the model performances. Woody suggested that "the most effective approach for expressive performance involves conscious identification and implementation of specific expressive features" (p. 339).

Woody (2006) examined the extent to which young musicians translate performance prompts that focus on musical imagery into more explicit action plans for music performance. He found that individual musicians' approaches to interpreting the provided imagery varied widely, but that their attention to aspects of imagery was possible only when there were not technical challenges that required attention. Woody noted that the musicians in his sample with the fewest years of private instruction and those with the most tended not to explicitly translate the imagery into explicit action plans, suggesting that focusing on emotional expression is somewhat intuitive for novices, and as more experienced players master the technical demands of their instruments, they again focus their attention on more abstract aspects of playing.

In a study designed to test whether young singers could be taught to convey four specific emotions in their singing, Ebie (2004) compared song learning that involved either a “traditional approach,” vocal modeling, kinesthetic exploration (movement), and an audio-visual presentation, in which learners viewed images while listening to music depicting the target emotion. Ebie found that modeling and the audiovisual were most effective in obtaining appropriately expressive performances from the young singers.

Brenner and Strand (2013), in a study of teaching expressivity to young children, interviewed five teachers and observed their work with children during lessons. All of the teachers reported that they did not approach expressivity apart from other aspects of fundamental technique, and they considered “physical freedom and connection to the instrument” as central components of musical expression. The teachers used a wide range of teaching skills including: vocal or instrumental modeling, imagery or metaphor, directives, performance-like environments (mental training), alternation, and repetition, and pursued the combination of these teaching approaches in each lesson. “They did not teach technique and then teach expressivity, but, rather, developed expressiveness in each piece that they taught” (p. 15).

Following on the report by Brenner and Strand (2013), Meissner (2016) recently studied the teaching of expressiveness by nine teachers working with children between 9 and 15 years of age. Not all students showed improvement in their levels of expressivity following the 10-week observation period, but students who performed most expressively had studied with teachers who employed inquiry and discussion. The use of inquiry in

teaching expressivity was also observed in choral rehearsals with young students (Broomhead, 2006).

McPhee (2011), in a case study of two instrumental music teachers, noted that the approaches that teachers employ in teaching expression may be less important than ensuring that students actually understand what is being asked of them as they strive to develop expressivity in their playing. McPhee also noted that the teachers he observed were inclined to shape student expressivity according to the teachers' own interpretations.

Both the results and the methodologies employed in systematic investigations of Western music pedagogy have yielded important insights into the processes involved in developing the skills of young musicians. These studies provide useful models for the study of pedagogy in other cultural contexts.

Chapter 4: Method

The purpose of this study was to examine the pedagogical behaviors of three of the most prominent expert *sanjo* teachers who represent different schools of *gayageum sanjo* in South Korea. As a student of *gayageum sanjo*, I was well acquainted with the work of the masters of the art form, and I sought permission to make video recordings of their private lessons with students from their own studios.

Although there is a considerable body of literature devoted to *sanjo*, almost no attention has been devoted to the study of *sanjo* teaching. As described in earlier chapters, *gayageum sanjo*, like many musical genres with a long cultural tradition, has been taught through a model of apprenticeship, with individual students working under the guidance of masters who themselves learned from the older masters who preceded them. This is not uncommon in music throughout the world that began before the inception of musical notation and was transmitted to succeeding generations through an oral/aural tradition. Yet, the actual behaviors that characterize the teaching of such music have seldom been carefully documented, and there are at present no formal analyses of the teaching of *gayageum sanjo* masters.

I analyzed video recordings of master teachers to document (1) the proximal performance goals that are identified and pursued during lessons, (2) the relative frequencies and durations of time devoted to these goals, and (3) the modes of communication used by teachers to convey information about these goals. Compiling

descriptive information of this type was facilitated by organizing the lesson time in terms of rehearsal frames, intervals of instructional time devoted to the pursuit of identifiable proximal goals (see Duke, 1999a, 2005).

In addition to the video analyses, I conducted interviews with the participant master teachers following the lesson recordings. Their responses to my inquiries provide additional perspective about their thinking as masters of a musical art form.

PARTICIPANTS

Three expert *gayageum* teachers and nine students participated in the study (five students were undergraduates, two were master's students, and two were doctoral students). The *gayageum* teachers are well known as active performers, and all hold faculty positions in Korean music schools. Each of the teachers has an extensive performance repertoire, in addition to *gayageum sanjo*, that ranges from traditional court music (*jeongak*) to contemporary works. All three teachers play more than one school of *gayageum sanjo*, but in their more detailed biographies below I focus on their principal *sanjo*, which is also the *sanjo* that each teacher taught in the lessons I recorded.

In recognition of their performance experience and artistry, the government of South Korea appointed all three teachers as Candidates of Important Intangible Cultural Property No. 23 *gayageum sanjo* and *gayageum byeongchang* (vocal music accompanied by *gayageum*). Each master had been teaching *gayageum sanjo* for over 30 years.

Information in the individual biographies below was obtained from previous written profiles and interviews with the teachers.

Park Hyeon-sook serves as a professor in the department of music education at Seowon University and leads the Seowon *Gayageum* Orchestra. She was formerly a member of the National Gugak Center and Seoul Metropolitan Traditional Music Orchestra. She has given solo recitals in many venues worldwide—in Korea, France, Austria, and Germany—and has performed with the Korean Broadcasting System (KBS) Traditional Music Orchestra, the Seoul Metropolitan Traditional Music Orchestra, and the Seoul Symphony Orchestra. Professor Park won the KBS Traditional String Music Award in 2005; the award annually recognizes outstanding achievement in traditional Korean music. In 2013, she received the World Music Award from Académie Charles Cros for her album “Kim, Juk-pa *gayageum sanjo*,” released with Maison des Cultures du Monde. For 15 years Professor Park was a direct disciple of master Kim Juk-pa, a biological granddaughter of Kim Chang-jo, one of the first *gayageum sanjo* creators. Professor Park has been playing Kim Juk-pa *gayageum sanjo* school for nearly 50 years. Many music critics describe her as a *sanjo* master who embodies the characteristics of master Kim Juk-pa’s performance style. Professor Park is a Candidate for Important Intangible Cultural Property No. 23 of *gayageum sanjo* and *gayageum byeongchang*. (To be a Candidate for Important Intangible Cultural Property in Korea means that she is eligible to become the holder of the position in the future.)

Seong Ae-sun is a professor of music at Chonnam National University. She is also the director of the Kwangju *Gayageum* Orchestra and director of the Society for the

Preservation of Choi Ok-sam school of *gayageum sanjo*. She is a disciple of Ham Dongjeongwol, who was the designated holder of the Choi Ok-sam *gayageum* school. After studying under master Ham Dongjeongwol, Professor Seong became the first Candidate for Important Intangible Cultural Property No. 23 of *gayageum sanjo* and *gayageum byeongchang*. She has mastered six different schools of *gayageum sanjo*, and has given approximately 370 recitals in Korea and abroad, including performances with the KBS Traditional Music Orchestra, the Seoul Metropolitan Traditional Music Orchestra, and Kwangju Symphony Orchestra in Korea. Professor Seong performs a wide range of genres and has released many recordings. She has won two KBS Traditional Music Awards: The Traditional String Award in 1999, and The Performance Group Award in 2004. In 2007, she received the Im Bang-ul Korean Traditional Music Award in recognition of her contribution to the development of *gayageum* performance.

Yi Ji-young, professor in the Korean Music department at Seoul National University, is the first *gayageum* player to receive a doctoral degree in *gayageum* performance from Ewha Womans University. She was engaged as a soloist of the National Gugak Center from 1988 to 1993, and she is currently the youngest member of the Jeongnonakhoe, a prestigious Korean classical music ensemble. Professor Yi learned the Kim Byeongho school of *sanjo* from Yang Yeonseop, a disciple of *gayageum sanjo* master Kim Byeong-ho; she learned the Seo Gong-cheol school from Kang Jeong-suk, master of *gayageum sanjo* and *gayageum byeongchang* (vocal music accompanied by *gayageum*). As a Candidate for Important Intangible Cultural Property No. 23, *gayageum sanjo* and *gayageum byeongchang*, she has been actively presenting solo recitals of *gayageum sanjo*

since 1993. An enthusiastic supporter of contemporary music, she has premiered approximately 100 modern works. She is the director of Contemporary Music Ensemble Korea, a group that performs experimental ensemble music that includes both traditional Korean and Western instruments. Since her debut, Professor Yi has appeared at numerous world-renowned festivals such as the Edinburgh Festival, ISCM, the Asian Composer's League, the Otherminds Contemporary Festival, the Pacific Rim Music Festival, and MIDEM. She has performed with notable orchestras and ensembles, including the Tokyo City Philharmonic Orchestra, the Kyoto Orchestra, the Jerusalem Philharmonic Orchestra, the Atlas Ensemble, the Del Sol String Quartet, the Lydian String Quartet, and KNM [Kammerensemble Neue Musik] Berlin. In 2003, the Ministry of Culture and Tourism awarded her The Best Young Musician Award for her work as a creative and experimental *gayaguem* performer.

The nine student participants all were experienced *gayageum* players, but their experience with *sanjo* varied: The two participants whose lessons I observed with Professor Park were master's degree holders; one had studied *sanjo* for 20 years, the other for 25 years. Professor Seong's students included two doctoral students who had studied *sanjo* for 20 and 25 years and a master's student who had studied for 10 years. The four students whose lessons I recorded with Professor Yi were all undergraduates, and their study of *sanjo* ranged from 6 to 10 years.

DATA COLLECTION

I initially contacted the teachers by phone or by email and described the purpose of the study. The teachers consented without hesitation and allowed me to record their teaching. I recorded four lessons taught by each teacher in their respective studios in Seoul, South Korea, in July, August, and December of 2015. The lessons were taught to nine different students.

When I arrived to record the lessons, I reiterated the purpose of the study and had the teachers and students sign consent forms that had been approved by the Institutional Review Board of The University of Texas at Austin (see Appendix A and B).

I recorded the lessons on a Samsung HMX-F90 camcorder fixed on a stationary tripod, placed so that the teacher and student were both in full view throughout the lessons. In all lessons, the teachers and students sat facing one another.

At the conclusion of the last recordings with each teacher, I conducted brief interviews with the teachers, who responded to questions about their own learning of *sanjo* and their thoughts about expert *sanjo* teaching. Each interview lasted approximately 30 minutes. Questions posed during the interviews are presented in Appendix C. I made digital audio recordings of the interviews using my iPhone.

I transferred the video and audio recordings from the camcorder and phone to an Apple Macbook Pro laptop computer.

THE IDENTIFICATION OF REHEARSAL FRAMES

Individual music lessons, like most teaching episodes, are neither monolithic nor homogeneous. The period of time described as “a lesson” in music comprises many different parts, each of which serves a purpose that is generally definable. The overall structure of many music lessons is highly routinized, beginning with brief informal conversations, proceeding to focused work, and concluding with planning for future lessons and closure. Even within the period of focused work on refining performance there are numerous individual goals that guide lesson structure. Although often thought of as “working to improve one’s playing,” the “work” involves numerous proximal goals that, under the guidance of a skillful teacher, are strategically ordered to bring about successful student accomplishment.

A successful approach to analyzing the teacher-student interactions in music settings is to first identify the proximal goals that form the basis of instruction and to define the time intervals devoted to their accomplishment (Duke, 1999a, 2005). Duke’s method of partitioning music instructional time into rehearsal frames has proven to be an effective means of describing the details of music pedagogy. I employed this method in analyzing the recordings of my participants’ work.

I approached the analysis of the 12 lesson videos using the following procedures: I first conducted unstructured observations of the recordings during which I took notes about the content of each video. I identified the various interactions throughout the lesson and noted where the focused work on the *sanjo* began. The time other than focused teaching time included conversation, instrument tuning, interruptions (e.g., telephone), teacher

narratives about their own teachers and what they had learned from them, and other *gayageum* tasks that were not related to the *sanjo* that was the focus of the lesson.

All of the students knew and were able to play all of the notes of the *sanjo* they were studying. The lessons were focused primarily on refining their playing to make it more closely resemble the artistic-level performance of their teachers.

I set the start point of each lesson at the first instance of observable behavior (e.g., tuning, social greeting) on the video, and the end point as the last note played or last word spoken before the student departed. I created an Excel worksheet within which I recorded each instance of behavior throughout the lesson, marking the start and end times of each.

During subsequent viewings of the video recordings, I identified the proximal goals (targets) and marked the start and end times of each rehearsal frame. I coded the targets, student performance trials, and teacher behavior in later viewings.

In three of the 12 recordings, some time was spent on instruction unrelated to refining learned *sanjo*. Although I also coded the behavior in these portions of the videos, I did not include them in my analyses.

OPERATIONAL DEFINITIONS OF INSTRUCTIONAL GOALS (TARGETS)

In my coding of rehearsal frames in terms of their proximal goals, I used the operational definitions given below, which I developed after I had completed informal observations of the video recordings. All of the discernible targets fit one of the categories below, and in some rehearsal frames more than one target was identified by the teacher.

There were a number of rehearsal frames that included no teacher verbalization about the nature of the target(s), but the teacher provided an instrumental or vocal demonstration and indicated that the student should attempt to imitate what the teacher had done. I labeled these rehearsal frames as Imitation, without designating a target goal.

The targets I defined were:

Pitch. The highness or lowness of a single tone produced by an open string or by pressing a string with the left hand. Pitch is coded when the teacher specifically talks about, sings, or plays passages for the purpose of correcting errors in pitch accuracy, microtonal shadings, or the multiple notes involved in *nonghyeon* (e.g., initial or intermediate note of *nonghyeon*).

Timbre. The tonal quality of sound as determined by techniques of the right hand, including plucking and flicking the strings to initiate tones. This does not include the timbre of embellishments that are modified using left and right hand techniques.

Rhythm. The timing of the onsets of individual tones within an ongoing pulse. Rhythm in *sanjo* is synchronized with a given *jangdan* (rhythmic cycle), and teachers direct attention to the ways that melodies are synchronized with the *jangdan*.

Tempo. The speed of the steady pulse of the *jangdan*.

Dynamics and Intensity. The loudness of the sound of the *gayageum*.

Articulation. The durations of individual tones that are varied by left- and (primarily) right-hand dampening techniques.

Embellishments. Stylistic ornaments, called *nonghyeon* (strong, medium or light vibrato), *jeongseong* (a speedy alternation between pressing and releasing string

that is connected to *nonghyeon*), and *kkeokneun eum* (releasing string sharply followed by light *nonghyeon*). Teachers often use modeling to demonstrate the depth, speed, and continuity of *nonghyeon*. Embellishments called *seong-eum* are other aspects of performance that play a major role in conveying moods of *jo(je)*.

Gesture. The Gesture target includes both “musical gesture,” primarily motions of the left hand that produce microtonal shadings and resonance, and “physical gestures,” which includes physical motions that convey expressive intentions to the listener/viewer but do not affect the sound of the instrument.

Fingering. Use of fingers in the right hand to pluck and flick in order to set the string in motion.

Imitation. Instances in which the teacher either sings or plays and beckons the student to imitate. The precise reason for the imitation in these instances is not clear to the observer, but it is clear that the teacher intends for the student to do one or more things differently.

These definitions formed the basis of my labeling rehearsal frames in the lesson videos. I also defined the modes of communication used by the teachers in each rehearsal frame. As one might expect, teachers not only talk, but also play and sing to demonstrate. After the rehearsal frames had been identified and labeled according to target goal, I coded the teacher behavior that indicated to the student to alter her performance from the previous trial. I used the following definitions.

Directive. Teacher verbalization that directs the student to modify her performance from the preceding trial (e.g., play more softly; wait longer after the *nonghyeon*).

Vocal Model. Teacher sings to demonstrate one or more aspects of performance.

Performance on the Instrument. Teacher plays her *gayageum* to demonstrate one or more aspects of performance.

Finally, I recorded the number of student performance trials (SPTs) in each rehearsal frame. Figure 1 presents a screen shot of a sample Excel file with the time and behavior codes. This procedure allowed me to summarize the data in several ways, which I describe in the Results.

	A	B	C	D	E	F	G	H	I	J
1	teacher	student	minute	sec	target	target type	teacher behavior code	SPTs	total sec	time spent in RF
72	Park Hyunsook	1	22	56	s				1376	2
73	Park Hyunsook	1	23	25	embellishment	st	dp	5	1405	29
74	Park Hyunsook	1	23	32	s				1412	7
75	Park Hyunsook	1	24	43	embellishment	st	dvp	8	1483	71
76	Park Hyunsook	1	24	51	s				1491	8
77	Park Hyunsook	1	24	56	embellishment	st	dp	1	1496	5
78	Park Hyunsook	1	25	0	s				1500	4
79	Park Hyunsook	1	25	23	gesture	st	dp	1	1523	23
80	Park Hyunsook	1	25	25	s				1525	2
81	Park Hyunsook	1	25	32	imitation	st	p	2	1532	7
82	Park Hyunsook	1	25	35	s				1535	3
83	Park Hyunsook	1	25	48	imitation	st	p	2	1548	13
84	Park Hyunsook	1	25	51	s				1551	3
85	Park Hyunsook	1	30	13	embellishment	st	dp	69	1813	262
86	Park Hyunsook	1	30	24	t				1824	11
87	Park Hyunsook	1	30	38	s				1838	14
88	Park Hyunsook	1	31	38	embellishment	st	d	5	1898	60
89	Park Hyunsook	1	32	37	narrative				1957	59

Figure 1. Screenshot of Excel spreadsheet containing timing and behavior codes.

SPTs = the number of student performance trials in each rehearsal frame. Time spent in RF = time devoted in each rehearsal frame, s = student performance, t = teacher performance, st = single target, mt = multiple targets, dp = directives and performance, vp = vocal model and performance, dvp = directives, vocal model, and performance.

I conducted structured interviews with the teachers, during which I posed 9 questions (see Appendix C). The interviews were conducted in the teachers' studios or

homes at a time of their convenience. After reading each question, I allowed teachers to respond without interruption. I recorded the interviews, which lasted approximately 30 minutes, on my iPhone. I later created written transcripts.

OBSERVATION RELIABILITY

For this project, given that the lessons were taught in Korean, I chose to use the method of intra-rater reliability. I selected a random sample (using the random numbers generator in Excel) of 135 (approximately 20%) of the 677 single-target and Imitation rehearsal frames to assess reliability of coding.

I viewed these 135 frames a second time and recoded all of the data in each. The recoding took place approximately 3 weeks after I had initially coded the data. There were three data points for each rehearsal frame: the target, the teacher behavior, and the number of SPTs.

Of the 405 data points (3 data points for each rehearsal frame), I found no discrepancy in the coding of teacher behavior compared to first coding, therefore resulting in a reliability of 100%. There were few discrepancies in my coding of the target and the numbers of SPTs.

I calculated a reliability of 99.25% and 93.5% for the target and SPTs in each between the first and second coding, following the formula: number of agreements divided by sum of disagreements and agreements. My recoding of targets and teacher behavior was highly reliable.

Chapter 5: Results

The data provided below represent the distribution of time and numbers of rehearsal frames devoted to the various targets (proximal goals) addressed in each lesson by each teacher. I defined total lesson time as the duration from the point at which interactions between the teacher and student began on each video—including initial greeting, casual conversation, and setting up the instruments and tuning—to the time at which the last note was played or the last word was spoken before the student departed.

Table 1 shows the values for each teacher, summed across each teacher's four lesson recordings. The total lesson time available on all videos was 33,461 s (approximately 9.3 h of lesson time). The total lesson time for Professor Yi is less than that of Professors Park and Seong, because three of Yi's lessons were conducted in the school at which she works, rather than in a private studio, and there were various interruptions associated with the day-to-day operations of the school.

I focused my analysis on the time devoted to *refining* student performance of the *sanjo* in each lesson. All of the participating students had already learned the melodies of the *sanjo* they were studying, and their work with their teachers focused on improving the precision and expressiveness of their playing. This attention to detail is perhaps the most important and least-well documented aspect of expert teaching.

Thus, I analyzed only that portion of each lesson when work on the *sanjo* had begun. I did not analyze preparatory exercises or the learning of new material. The analyzed portion of each video, then, was a subset of the entire lesson, which I labeled Teaching

Time. I defined teaching time as the duration from the point at which the student began playing the beginning of the *sanjo* to the time at which the student played the last note of the lesson. The total duration of Teaching Time across all 12 lessons was 28,186 s (approximately 7.8 h), which is 84% of the total lesson time.

I identified 765 rehearsal frames for detailed analysis. Note that the majority of the rehearsal frames ($n = 578$) addressed only one target, whereas 88 rehearsal frames included multiple targets (i.e., the teacher identified more than one target for a single student performance trial). There were 99 rehearsal frames labeled Imitation (target goal[s] could not be confidently identified).

In the analyses that follow, I focused especially on the 578 rehearsal frames with a single target, for reasons I explain below. Note that the total duration of all rehearsal frames is less than the total Teaching Time, because the intervals of Teaching Time included student and teacher performances that were not a part of rehearsal frames.

Table 1. *Numbers and Durations of Rehearsal Frames Summed Across the Four Lessons Taught by Professors Park, Seong, and Yi*

		Park	Seong	Yi	Total
	Total Duration of Each Lesson Recording (s)	12,496	12,181	8,784	33,461
	Total Duration of Teaching Time in Each Lesson (s)	10,727	9,555	7,904	28,186
	Percentage of Recording in Teaching Time (%)	85.84	78.44	89.98	84.24
Total	N of Rehearsal Frames	260	359	146	765
	Total Duration of Rehearsal Frames (s)	7,130	6,995	2,808	16,932
	Mean Rehearsal Frame Duration (s)	27.42	19.48	19.23	22.13
	Standard Deviation of Rehearsal Frame Duration (s)	41.10	20.38	26.75	30.29
	N of ST Rehearsal Frames	175	285	118	578
	Total Duration of ST Rehearsal Frames (s)	5,242	5,337	1,827	12,406
ST	Percentage of Teaching Time Spent in ST Rehearsal Frames (%)	48.87	55.86	23.11	44.01
	Mean ST Rehearsal Frame Duration (s)	29.95	18.73	15.48	21.46
	Standard Deviation of ST Rehearsal Frame Duration (s)	41.39	19.42	16.52	28.12
	N of MT Rehearsal Frames	25	43	20	88
	Total Duration of MT Rehearsal Frames (s)	1,378	1,450	934	3,762
MT	Percentage of Teaching Time Spent in MT Rehearsal Frames (%)	12.85	15.18	11.82	13.35
	Mean MT Rehearsal Frame Duration (s)	55.12	33.72	46.70	42.75
	Standard Deviation of MT Rehearsal Frame Duration (s)	63.21	24.90	53.10	45.88
	N of I Rehearsal Frames	60	31	8	99
	Total Duration of I Rehearsal Frames (s)	509	208	47	764
I*	Percentage of Teaching Time Spent in I Rehearsal Frames (%)	4.75	2.18	0.59	2.71
	Mean I Rehearsal Frame Duration (s)	8.48	6.71	5.88	7.72
	Standard Deviation of I Rehearsal Frame Duration (s)	5.12	7.30	3.48	5.82

Note: ST = Single Target, MT = Multiple Targets, I = Imitation.

*In 99 rehearsal frames, the target was not clearly identified by the teacher. In these instances, the teacher asked the student to imitate her playing or singing without specific verbal directives.

Tables 2, 3, and 4 present the same data for each of the four lessons taught by each of the three teachers.

Table 2. Numbers and Durations of Rehearsal Frames in the Four Lessons Taught by Professor Park

		Lesson Number			
		1	2	3	4
	Total Duration of Each Lesson Recording (s)	2,722	2,059	3,523	4,192
	Total Duration of Teaching Time in Each Lesson (s)	2,689	2,059	3,447	2,532
	Percentage of Recording in Teaching Time (%)	98.79	100.00	97.84	60.40
Total	N of Rehearsal Frames	56	69	100	35
	Total Duration of Rehearsal Frames (s)	2,209	1,659	2,148	1,114
	Mean Rehearsal Frame Duration (s)	39.44	24.04	21.48	31.83
	Standard Deviation of Rehearsal Frame Duration (s)	56.16	24.46	30.09	59.54
	N of ST Rehearsal Frames	35	43	72	25
	Total Duration of ST Rehearsal Frames (s)	1,312	1,281	1,749	900
ST	Percent of Teaching Time Spent in ST Rehearsal Frames (%)	48.79	62.21	50.74	35.55
	Mean ST Rehearsal Frame Duration (s)	37	30	24	36
	Standard Deviation of ST Rehearsal Frame Duration (s)	50.24	27.87	33.37	63.05
	N of MT Rehearsal Frames	10	6	7	2
	Total Duration of MT Rehearsal Frames (s)	785	186	231	176
MT	Percentage of Teaching Time Spent in MT Rehearsal Frames (%)	29.19	9.03	6.70	6.95
	Mean MT Rehearsal Frame Duration (s)	75.20	31.00	33.00	88.00
	Standard Deviation of MT Rehearsal Frame Duration (s)	83.25	18.30	28.37	111.7 2
	N of I Rehearsal Frames	11	20	21	8
	Total Duration of I Rehearsal Frames (s)	111	192	168	38
I*	Percentage of Teaching Time Spent in I Rehearsal Frames (%)	4.13	9.32	4.87	1.50
	Mean I Rehearsal Frame Duration (s)	10.09	9.6	8	4.75
	Standard Deviation of I Rehearsal Frame Duration (s)	6.17	5.28	4.70	1.91

Note: ST = Single Target, MT = Multiple Targets, I = Imitation.

*In 60 rehearsal frames, the target was not clearly identified by the teacher. In these instances, the teacher asked the student to imitate her playing or singing without specific directives.

Table 3. Numbers and Durations of Rehearsal Frames in the Four Lessons Taught by Professor Seong

		Lesson Number			
		1	2	3	4
	Total Duration of Each Lesson Recording (s)	2,729	3,089	3,393	2,970
	Total Duration of Teaching Time in Each Lesson (s)	2,502	3,030	3,364	659
	Percentage of Recording in Teaching Time (%)	91.68	98.09	99.15	22.19
Total	N of ST Rehearsal Frames	108	101	118	32
	Total Duration of Rehearsal Frames (s)	1903	2356	2215	521
	Mean Rehearsal Frame Duration (s)	17.62	23.33	18.77	16.28
	Standard Deviation of Rehearsal Frame Duration (s)	19.33	23.91	18.97	15.32
	N of ST Rehearsal Frames	86	79	95	25
	Total Duration of ST Rehearsal Frames (s)	1,348	1,890	1,740	359
ST	Percentage of Teaching Time Spent in ST Rehearsal Frames (%)	53.88	62.38	51.72	54.48
	Mean ST Rehearsal Frame Duration (s)	16	24	18	14
	Standard Deviation of ST Rehearsal Frame Duration (s)	14.73	24.23	19.92	9.54
	N of MT Rehearsal Frames	13	9	18	3
	Total Duration of MT Rehearsal Frames (s)	506	387	454	103
MT	Percentage of Teaching Time Spent in MT Rehearsal Frames (%)	20.22	12.77	13.50	15.63
	Mean MT Rehearsal Frame Duration (s)	38.92	43.00	25.22	34.33
	Standard Deviation of MT Rehearsal Frame Duration (s)	33.96	21.01	13.21	40.53
	N of I Rehearsal Frames	9	13	5	4
	Total Duration of I Rehearsal Frames (s)	49	79	21	59
I*	Percentage of Teaching Time Spent in I Rehearsal Frames (%)	1.96	2.61	0.62	8.95
	Mean I Rehearsal Frame Duration (s)	5.44	6.08	4.20	14.75
	Standard Deviation of I Rehearsal Frame Duration (s)	3.71	6.03	1.92	15.56

Note: ST = Single Target, MT = Multiple Targets, I = Imitation.

*In 31 rehearsal frames, the target was not clearly identified by the teacher. In these instances, the teacher asked the student to imitate her playing or singing without specific directives.

Table 4. Numbers and Durations of Rehearsal Frames in the Four Lessons Taught by Professor Yi

		Lesson Number			
		1	2	3	4
	Total Duration of Each Lesson Recording (s)	2,781	1,259	2,043	2,701
	Total Duration of Teaching Time in Each Lesson (s)	1,208	1,175	2,031	2,691
	Percentage of Recording in Teaching Time (%)	43.44	93.33	99.41	99.63
Total	N of Rehearsal Frames	30	24	21	71
	Total Duration of Rehearsal Frames (s)	640	479	156	1,533
	Mean Rehearsal Frame Duration (s)	21.33	19.96	7.43	21.59
	Standard Deviation of Rehearsal Frame Duration (s)	23.19	21.75	5.08	32.36
	N of ST Rehearsal Frames	26	18	18	56
	Total Duration of ST Rehearsal Frames (s)	427	357	144	899
ST	Percentage of Teaching Time Spent in ST Rehearsal Frames (%)	35.35	30.38	7.09	33.41
	Mean ST Rehearsal Frame Duration (s)	16.42	20	8	16
	Standard Deviation of ST Rehearsal Frame Duration (s)	15.12	20.98	5.26	17.51
	N of MT Rehearsal Frames	4	5	0	11
	Total Duration of MT Rehearsal Frames (s)	213	113	0	608
MT	Percentage of Teaching Time Spent in MT Rehearsal Frames (%)	17.63	9.62	0	22.59
	Mean MT Rehearsal Frame Duration (s)	53.25	22.60	-	55.27
	Standard Deviation of MT Rehearsal Frame Duration (s)	41.52	28.47	-	64.25
	N of I Rehearsal Frames	0	1	3	4
	Total Duration of IM Rehearsal Frames (s)	0	9	12	26
I*	Percentage of Teaching Time Spent in IM Rehearsal Frames (%)	0	0.75	1.02	1.28
	Mean IM Rehearsal Frame Duration (s)	-	9	4	6.5
	Standard Deviation of IM Rehearsal Frame Duration (s)	-	-	1.73	4.36

Note: ST = Single Target, MT = Multiple Targets, I = Imitation.

*In 8 rehearsal frames, the target was not clearly identified by the teacher. In these instances, the teacher asked the student to imitate her playing or singing without specific directives.

THE RELATIONSHIP BETWEEN TARGETS AND NUMBERS OF STUDENT PERFORMANCE TRIALS (SPTs)

Based on the identification of target goals, I examined the duration of rehearsal frames devoted to each target coupled with the number of student performance trials (SPTs) in each. This analysis provides a view of the most and least prominent instructional goals in terms of number and durations of rehearsal frames and number of SPTs. Because of the extreme skewness in the rehearsal frame durations and means of SPTs, I report the medians and ranges of the duration and SPTs data in Tables 5, 6, and 7.

Table 5. *Numbers and Durations of Rehearsal Frames (RFs) and Numbers of Student Performance Trials (SPTs) Across the Four Lessons Taught by Professor Park*

Target	<i>N</i> of RFs	Total RF Duration (s)	Median RF Duration (s)	RF Duration Range (s)	Median <i>N</i> of SPTs	Range of <i>N</i> of SPTs
Articulation	9	408	20	10–179	3	1–6
Dynamics & Intensity	7	53	7	3–13	1	1–3
Embellishment	79	2362	18	3–262	3	1–69
Fingering	3	25	9	5–11	2	1–4
Gesture	13	441	23	7–128	2	1–20
Pitch	54	1794	15	4–316	2	1–35
Rhythm	4	35	7	3–18	1.5	1–3
Tempo	0	0	–	–	–	–
Timbre	6	125	18	9–36	2	1–20
Imitation*	60	509	8	2–23	1	1–7
Multiple Targets	25	1378	39	7–252	5	1–34
Total	260	7130	13.5	2–316	1	1–69

*In 60 rehearsal frames, the target was not clearly identified by the teacher. In these instances, the teacher asked the student to imitate her playing or singing for reasons that were unclear.

Table 6. *Numbers and Durations of Rehearsal Frames (RFs) and Numbers of Student Performance Trials (SPTs) Across the Four Lessons Taught by Professor Seong*

Target	<i>N</i> of RFs	Total RF Duration (s)	Median RF Duration (s)	RF Duration Range (s)	Median <i>N</i> of SPTs	Range of <i>N</i> of SPTs
Articulation	18	267	9	3–48	2	1–10
Dynamics & Intensity	36	801	10	2–112	1	1–6
Embellishment	158	2987	12	2–101	1	1–14
Fingering	4	42	10	7–16	1	1–2
Gesture	44	758	11	2–53	1	1–12
Pitch	18	325	10	2–60	2	1–7
Rhythm	3	106	33	22–51	1	1–2
Tempo	1	4	4	4	1	1
Timbre	3	47	19	9–19	1	1
Imitation*	31	208	4	2–38	1	1–3
Multiple Targets	43	1450	29	5–112	2	1–12
Total	359	6995	12	2–112	1	1–14

*In 31 rehearsal frames, the target was not clearly identified by the teacher. In these instances, the teacher asked the student to imitate her playing or singing for reasons that were unclear.

Table 7. *Numbers and Durations of Rehearsal Frames (RFs) and Numbers of Student Performance Trials (SPTs) Across the Four Lessons Taught by Professor Yi*

Target	<i>N</i> of RFs	Total RF Duration (s)	Median RF Duration (s)	RF Duration Range (s)	Median <i>N</i> of SPTs	Range of <i>N</i> of SPTs
Articulation	11	135	7	4–51	1	1–2
Dynamics & Intensity	19	333	12	4–85	1	1–4
Embellishment	41	666	9	2–74	1	1–12
Fingering	3	19	8	2–9	1	1–2
Gesture	4	104	17	7–64	2	1–6
Pitch	29	304	7	3–38	2	1–8
Rhythm	10	258	15	6–90	2	1–5
Tempo	1	8	8	8	2	2
Timbre	0	0	–	–	–	–
Imitation*	8	47	5	3–12	1	1–3
Multiple Targets	20	934	29	3–232	3	1–20
Total	146	2808	9	2–232	2	1–20

*In 8 rehearsal frames, the target was not clearly identified by the teacher. In these instances, the teacher asked the student to imitate her playing or singing for reasons that were unclear.

To further examine the relationship between rehearsal frame duration and the number of student performance trials (SPTs), I performed bivariate correlations between these two variables for each teacher. Rehearsal frames with multiple targets and imitation rehearsal frames were excluded from this analysis, as I was interested in determining the relationships among targets, time, SPTs, and teacher behaviors.

In the 175 single-target rehearsal frames in the lessons of Professor Park, I found a correlation (Pearson's r) between rehearsal frame duration and number of SPTs of .75,

indicating that longer rehearsal frames contained more SPTs than did shorter rehearsal frames and vice versa. In the 285 single-target rehearsal frames in the lessons of Professor Seong, the correlation between rehearsal frame duration and number of SPTs was .47, and in the 118 rehearsal frames in the lessons of Professor Yi, the correlation between those variables was .54. Of course, differences among numbers of SPTs may to some degree be attributable to the target of each rehearsal frame.

FREQUENCIES OF TEACHER BEHAVIORS

Table 8 presents the number of single-target and imitation rehearsal frames that include each of the three categories of teacher behavior: Directives, Vocal Model, and Performance on the Instrument. Note that the total of the RFs in each category exceeds the number of single-target and imitation rehearsal frames, because most rehearsal frames included more than one category of teacher behavior.

The results presented in this table illustrate the extent to which modeling, both vocally and on the instrument, is a prominent part of *gayageum sanjo* teaching. Although 564 of 667 rehearsal frames included verbal directives by the teacher, 537 included the teacher's performing on the instrument. Professor Seong employed the most modeling (nearly all of the rehearsal frames in her lessons included performance on the instrument and over half included vocal modeling) in her teaching, but all three teachers employed a performance model in at least half of their single-target and imitation rehearsal frames.

Table 8. *Numbers of Rehearsal Frames that Included Teacher Verbal Directives, Teacher Vocal Modeling, and Teacher Performance*

	Park	Seong	Yi	Total
<i>N</i> of RFs	235	316	126	677
RFs with Directives	162	294	108	564
RFs with Vocal Model	12	182	38	232
RFs with Performance	162	312	63	537

The data presented in Tables 5, 6, and 7 illustrate that the most frequently addressed target in the 12 lessons observed was Embellishment, which is perhaps not surprising given that this element of *gayageum* playing is one of the defining features of artistry. Embellishments form the basis of each *sanjo* school's expressive distinctiveness, and they are in some ways the most difficult elements of performance that students have to learn. The subtle shadings and microtonal variations are of course not precisely recordable in music notation. They are learned only through attentive and diligent work with masters who have memorized not only the sounds of these embellishments but also the physical movements necessary to produce them.

In the section that follows I describe in greater detail the ways that teachers go about teaching embellishments to their students. This is unquestionably the least-well-understood process in *gayageum* teaching, and one that deserves more careful analysis.

REHEARSAL FRAMES DEVOTED TO EMBELLISHMENTS

One important finding from the analysis of proximal performance goals is that teachers devoted the greatest amount of lesson time, among all the targets, to the refinement of embellishments such as *nonghyeon* (vibrato). Given that most of the tones in *sanjo* are adorned with stylistic embellishments, attention to this aspect of *gayageum sanjo* is not surprising. Yet, no extant research has attempted to describe the critical features of teaching embellishments in this genre.

I reviewed the rehearsal frames devoted to embellishment multiple times, making notes about relevant aspects of the structure of the rehearsal frames and the teacher and student behaviors observed. In the narrative descriptions that follow, I outline the relevant features of the rehearsal frames devoted to refining students' performance of embellishments. The descriptions below reflect the teaching of all three master teachers, whose work on this aspect of *gayageum sanjo* was remarkably consistent.

Teachers immediately identify small discrepancies between accurate performance and the students' attempts.

Regardless of whether they play together with students, teachers instantly notice inaccuracies in their students' playing and identify the precise nature of embellishment errors. Most often, the students' errors are a result of one or more of the following: lack of preparation (physical and tonal) for the embellishment, inaccurate intermediate pitch of the embellishment (the limit of the pitch bend), or inaccurate discontinuation of the

embellishment. On rare occasions, teachers ask the students to repeat their performance to confirm the error before making corrections.

Teachers define for the student whether the unsuccessful embellishment is attributable to problems with physical tension, particularly in the upper body. In these instances, teachers tend to give verbal directives (e.g., release tension on shoulder) with little hesitation between repeated student attempts. The teachers persist in alternating between their own directives and models and student performance trials.

Teachers frequently refer to the fundamental physical and auditory principles involved in creating quality nonghyeon (vibrato).

Although the students in the lessons observed were all advanced musicians who had learned the *sanjo* they were studying, teachers consistently addressed student errors in terms of the *fundamental principles* of movement and sound that are inherent in producing high quality *nonghyeon*. Rather than simply describing what needs to be done in the moment, they call attention to the essential physicality required for *sanjo nonghyeon* that is applied to all schools of *gayageum sanjo*: the execution of a preparatory stage that leads to rich *nonghyeon*, the appropriate placement of the left hand on the string away from *anjok* (movable bridges), and the maintenance of intermediate and ending sounds of *nonghyeon*. In this way, teachers direct students to think in terms of basic aspects of playing that are applicable in many different circumstances beyond the one being addressed in the moment.

Teachers' verbal directives and performance models alternate strategically with student performance trials at a rapid pace.

It has been reported that *sanjo* teachers of earlier generations typically played together with their students during lessons, although there are no extant recordings to document that this was the case. The master teachers in the current study employed this pedagogical practice at times during the lessons I observed; however, it was much more often the case that teacher and student behavior alternated in rapid succession.

Teachers sometimes played together with their students until a flaw in a student's playing was identified, but then immediately following the identification of the embellishment as a target, the teachers and students alternated playing very brief passages that contained the error. This continued until the error was corrected. This procedure of rapid alternation of brief passages was highly successful in bringing about the successful accomplishment of proximal goals. In several embellishment rehearsal frames, teachers performed negative models to illustrate for their students what was amiss in their playing.

In the rehearsal frames devoted to embellishment targets, teachers employed multiple channels of communication: verbalizations, singing, and playing. Vocal modeling was particularly prominent in rehearsal frames devoted to "mood" and similar nuances. In a few of the embellishment rehearsal frames, the teachers held the student's hand and produced the *nonghyeon* with the student's hand on the student's instrument. Following the active intervention, teachers gave students multiple opportunities to create the desired sound by themselves.

Teachers define and explain embellishment based on a deep understanding of the structure of sanjo.

Gayageum sanjo comprises multiple *jangdan* (rhythmic cycles), each of which includes many subsections—*jo(je)*: *ujo*, *pyeongjo*, *gyemyeonjo*, *boncheong ujo*, *boncheong gyemyeonjo*, *bonghwangjo*, *gangsanje*, and *seokhwajae*. Each subsection features specific stylistic embellishments that are commonly shared among *sanjo* players. The expert teachers observed have impressively precise auditory images of the features of each subsection and the embellishments in each.

In describing their students' performance of embellishments, teachers often referred to the nature of subsections in which the embellishments resided along with desired sound (e.g., "Your *nonghyeon* fits in the *gyemyeonjo* section, but not in *ujo* section." "The speed and pitch of the *nonghyeon* is accurate but its timbre [*seong-eum*] is not appropriate within *ujo boncheong*"). Such specificity is remarkably consistent over multiple lessons. Teachers often explain their approaches to embellishment and interpretation from an analytical perspective that reflects a deep knowledge of the structure of the *sanjo* they are teaching.

Teachers are insistent about the refinement of the details of embellishments that in turn create expressivity.

Professor Yi performed on the *janggu* (drum) during the lessons I observed. Hence, she devoted the least time among the three teachers to refining embellishments, but during

the teaching time devoted to embellishments on *gayageum*, she tenaciously alternates until students achieved the target she had identified.

Professors Park and Seong devoted a great deal of the lesson time to the refinement of embellishments, giving special attention to details of pitch, speed, depth, timbre, gesture, and dynamics of *nonghyeon* (vibrato). They required their students to imitate minute details of their stylistic inflections. Of course, this was facilitated by the fact that Professors Park and Seong were also playing *gayageums* during the lessons, providing more opportunities for direct imitations of instrumental sound.

Although there were individual differences among the teachers in their approach to teaching expressivity in embellishments, descriptions above characterize the means by which teachers convey the musical artistry of their *sanjo* lineage.

TEACHER INTERVIEWS

I conducted structured interviews with each teacher at a time of her convenience, following the recording of the fourth lesson. Each interview included a list of 9 questions and lasted approximately 30 minutes.

All three of the teachers play several different schools of *gayageum sanjo*, and have learned those schools studying under different masters, either the creators of the *sanjos* or a disciple of the creator. Professor Park, for example, learned her primary *sanjo* from its creator. Professors Seong and Yi each learned their primary *sanjo* from a disciple of its creator.

I focused the interviews on the learning and teaching experiences related to the primary *sanjo* of each teacher, which is the same *sanjo* each teacher taught in her four lesson recordings. Except for teachers' biographical characteristics (answers to interview Questions 1 and 2) that were described in Chapter 3, I present the questions and summaries of the teachers' responses (all translated from Korean) below:

Question 3: It is widely said that becoming a skilled gayageum sanjo player requires a long time of preparation on fundamental drills. Based on your experience, how much time would be required?

Professors Park and Seong said that *gayageum* players need to practice fundamental drills consistently for at least 10 years, especially in order to express skillful *nonghyeon* with high quality sound. Professor Yi stated that approximately 20 years is required for polishing fundamentals of *sanjo*, including all available *sanjo* skills, particularly solid *nonghyeon* techniques.

Question 4: Please describe the degree of similarity between your sanjo performance and your teacher's sanjo?

All three teachers stated that they performed their primary *sanjo* exactly as they learned it from their teachers, but they explained that to some degree they had established their own ideas for expressivity in middle-age (long after they had studied with their master teachers). Professor Park estimated that 30% of her current *sanjo* performances are distinctively different from her teacher's *sanjo*; Professor Seong gave an estimate of 10%;

Professor Yi estimated that as much as 50% of her performance is different from her teacher's *sanjo*.

Although students achieve *sanjo* imitating their teacher's sound in detail under the master-apprenticeship approach, at a certain point, *sanjo* players came to establish their own stylistic performance in some way distinctive from their teachers, said Professor Yi. Consistent with Professor Yi's point above, Professor Seong highlighted the fact that *gayageum* players are required to study their own expressiveness of the *sanjo* they are playing after learning it from their teacher.

Question 5: I would like to learn about your teacher's sanjo teaching approach. How would you describe their pedagogical behaviors?

Professor Park explained, "It is totally different teaching [from me]. My teacher [creator of Kim Juk-pa school] generally played together with me in studio lessons from the beginning to the end [of *sanjo*]. She interrupted [my performance] only at some points when poor sound quality was particularly noticeable. But I was always given a chance to play the entire *sanjo* with her at every lesson." In contrast, Professor Seong stated that, "I only learned several passages at a time. She [master Ham Dongeongwol, a direct disciple of Choi Oksam school] did not teach more than several passages but instead devoted to polishing *seong-eum* [of *nonghyeon*] in each passage." Professor Park and Seong did not specifically state how they learned the details of *sanjo*. On the other hand, Professor Yi described, "Professor Yang [a student of master Kim Byeongho] taught me fundamentals for playing *gayageum* in detail, and regarding *sanjo*, he was thorough in every aspect of

my skills.” She continued, “For the time period studying with him, I was able to totally change fingering, the way to modify the tension in my torso, *nonghyeon* techniques.”

Question 6: Did your teacher strictly instruct you to imitate all features of his sound?

Both Professor Park and Professor Seong answered that they invested a great deal of effort in trying to imitate their teachers’ sound as precisely as possible, although their teachers did not teach them in ways that facilitated their doing so. Professor Yi stated, “I clearly remember he [Professor Yang Yeonseop] was very thorough in terms of training fundamentals, but I barely remember anything about his strictness related to my imitating [his sound].”

Question 7: Compared to your teachers, how would you describe your teaching, particularly with regard to refining students’ learned skills?

Professors Park and Seong both explained that they are very “detailed” teachers, addressing fine details of student sound in brief episodes of isolated tones and gestures. They explained that their approach was unlike the approaches of their teachers, Kim Juk-pa and Ham Donggeongwol. They both felt that, instead of playing together with their students in lessons, it is important to let their students play alone in order to ensure sound quality and skill accuracy. Professor Yi stated that her own teaching is basically modeled after her teacher’s, Professor Yang Yeonseop, in terms of teaching fundamentals, but said that she now addresses smaller units (briefer passages) than did her teacher in order to deal with delicate aspects of expression.

Question 8: Do you teach your students to imitate all aspects of your stylistic performance? To what degree do you think it is important to transmit your stylistic performance?

All three teachers explained that they do not expect their students to precisely imitate all components of their sound, and they are rather flexible with regard to individual expressivity. They stated that it is important to provide sufficient demonstration and instruction to achieve accurate pitch and high quality sound in students' performances, but they are not concerned about whether students imitate their stylistic inflections precisely. All stated that students need to establish their own stylistic performances based on what they have learned.

Question 9: What is required to become an expert sanjo teacher?

All teachers stressed the most important requirement of expert *sanjo* teaching is that one be an *expert sanjo musician*. Professors Park, Seong and Yi all mentioned that expert *sanjo* teachers are proficient in expressing *seong-eum* (timbre or sound quality varied in subsections—*jo* or *je*) and being harmonized with *jangdan* (rhythmic cycles to accompany *sanjo*) along with solid basic techniques (Professor Park) and skillful manipulation of tension (Professor Yi). All three teachers emphasized that before one can teach *sanjo* effectively, one must first understand the *seong-eum* of *pansori* (vocal music, the prototype genre of *sanjo*) as it relates to *sanjo*, and the construction of melodies within

jangdan. They stressed that without such understanding of *sanjo*, it is impossible to become a competent teacher. They expressed concerns over the fact that many current *sanjo* teachers are not sufficiently knowledgeable and skilled at *seong-eum* and *jangdan*.

These analyses and interview results present multiple aspects of three master teachers' pedagogical approaches to teaching *sanjo*. The teachers have established their own pedagogical behaviors partially from their teachers, but mainly from their own teaching experience. Regardless of different biographical characteristics in terms of learning and teaching *sanjo*, teachers' perspectives on expert *sanjo* teaching are remarkably consistent.

Regarding imitation, teachers commonly emphasized in their interview that prompting students' "imitation" in *sanjo* is primarily for the purpose of developing accurate performance of notes and rhythms, and not for the purpose of students imitating all aspects of the masters' expressive inflection. The teachers explained that students should create their own stylistic *sanjo*. They all to some extent respect students' individual expressiveness in the process of teaching *sanjo*, though the teachers' views on *sanjo* expressivity vary.

Chapter 6: Discussion

The purpose of this study was to describe important features of teaching in individual lessons taught by *gayageum sanjo* masters. In particular, I focused on aspects of teaching that were devoted to the *refinement* of the technical and expressive elements of performance. Of course, teaching and learning in any domain necessarily involve many levels of instruction and skill development, from the introduction and acquisition of new skills through the meticulous refinement of the minute details of performance. In music, this refinement involves not only heightened accuracy of physical movements, but also the effective combination of multiple skill components to produce a beautiful and expressive result.

I observed three highly-regarded *gayageum sanjo* master teachers, all of whom had agreed to my recording four of their private lessons with advanced-level students. In all 12 of the lessons I observed, the students had learned and were able to perform the *sanjo* they were studying with the master, and were striving to refine the accuracy and expressiveness of their playing.

There is no published research that has examined the teaching of *gayageum sanjo* in detail. Thus, there are many questions about the process of teaching and learning that are yet to be answered. Given that the pedagogy of this form of Korean traditional music has not been studied in the past, formulating a complete description of all of the relevant aspects of *gayageum sanjo* teaching seems beyond the scope of a single dissertation.

In the current project, I chose to focus my analysis on several components of the teaching I observed: the identification of proximal performance goals, or targets, that were addressed in each lesson; the means through which teachers conveyed musical and technical ideas to students; and the numbers and durations of student performance trials. As described in earlier chapters, *gayageum sanjo*, like many traditional music forms, has since its inception been passed down from master to apprentice through a process of demonstration and imitation. As Korean traditional music became a part of institutional curricula and when the music of *sanjo* was committed to written notation, the pedagogy changed somewhat. No longer did students learn everything by rote imitation. Notation afforded students the opportunity to practice and acquire the basic pitches of *sanjo* apart from a teacher.

I found it useful to organize my descriptions of teaching around rehearsal frames, defined intervals of instructional time that are devoted to identifiable proximal goals. In this way, I was able to determine not only the focus of attention in lessons, but also the size of instructional units. This analysis made clear that across all lessons, the units of learning were very small and the time intervals devoted to refining each unit were relatively brief, indicating that the teachers were able to successfully define targets that were accomplishable in the moment. Seldom did teachers attempt to change aspects of students' playing that spanned more than a few seconds of music.

I attempted to identify aspects of teaching that were consistent across all three master teachers, though, not surprisingly, there were varied idiosyncrasies, both in teaching approaches and in student competencies, in the lessons I observed. My results describe

aspects of expert *sanjo* teaching that may serve as a basis for future research in the field of Korean traditional music pedagogy.

Teachers devoted on average 44% of what I defined as Teaching Time in rehearsal frames that included a single target; that is, teachers spend the largest proportion of teaching time addressing one aspect of performance at a time. Compared to Professors Park and Seong, Professor Yi spent much less time in the rehearsal frames with single targets. This is perhaps attributable to the fact that Professor Yi accompanied students with the *janggu* (drum) so that her students had opportunities to experience *jangdan* (rhythmic cycles) with *janggu* accompaniment. Professor Yi seldom demonstrated on *gayageum*. Of course, using *janggu* in studio lessons provides a recital-like experience for the students. Professor Yi explained to me that she seemed to attend primarily to the harmonization between *jangdan* performed on *janggu* and the *gayageum* performance so that her students would learn to devote conscious attention to the *jangdan* while playing.

In fact, Professor Yi often interrupted student performance when she heard discrepancies between her accompaniment and student's timing, even when there were no other coincident errors in the students' *gayageum* playing. This was particularly apparent in the lesson of one of Professor Yi's students who was preparing for an upcoming recital.

Across all teachers, the mean duration of the rehearsal frames with single targets was 21.5 s. I found the range of rehearsal frame duration across all teachers was approximately 10 s. I observed no rehearsal frame in which a student did not accomplish the target identified by the teacher. These results show that teachers strategically select proximal goals that are achievable in the short-term, and that the pace of instruction is

similar across lessons and teachers. This is similar to results observed in artist-teachers of Western music (Duke & Simmons, 2006).

Rehearsal frames with multiple targets appeared much less frequently than did single-target rehearsal frames. Across all lessons, approximately 13% of the Teaching Time was devoted to rehearsal frames with more than one target. Again this is consistent with teachers' practice of directing students' attentional focus to one proximal goal at a time. It is notable that rehearsal frames devoted to multiple targets were longer in duration than were single-target rehearsal frames, and they tended to involve a greater number of student performance trials. This aspect of teaching deserves further investigation, as it raises the question of whether dealing with multiple targets in a given rehearsal frame is more or less efficient than is addressing one target at a time. It is unknown whether attending to multiple targets in a longer rehearsal frame consumes more time than would addressing the same targets in separate rehearsal frames.

I found that rehearsal frames in which the target was not clearly identified (at least as far as one could observe) but required the student to imitate the teacher's playing, represented approximately 3% of the total Teaching Time. Of course, imitating teacher demonstrations with little verbal direction from the teacher is a common part of instruction in the music of many cultures (Shehan, 1987). The mean duration of rehearsal frames coded with Imitation in each lesson ranged from approximately 4 to 10 s, except in one of the lessons taught by Professor Seong, in which she focused on a *dasereum* (the first section of *sanjo* structure performed in flexible tempo and rhythm). The structure of rehearsal frames that were labeled Imitation (i.e., no clearly discernible target goal) tended to be very

brief and contained few student performance trials. It is not clear what targets lead teachers to employ alternation with no verbal description, but seems an important aspect to be investigated in the future.

As described previously the distribution of rehearsal frame durations has strong leftward skew (shorter durations). The distribution of the numbers of student performance trials is similar. Teachers were able to bring students to accomplish the targets they identified in a small number of performance trials. The median SPTs for nearly all targets is between one and three.

In analyzing the ways that teachers communicated with students in rehearsal frames (through verbal directives and vocal and instrumental modeling), I found that teachers rarely gave only verbal directives in a rehearsal frame without including instrumental or vocal modeling. As I mentioned earlier, Professor Yi performed on the *jangu* during the lessons I recorded, but Professors Park and Seong both taught with their *gayageums*, playing and singing to demonstrate in the vast majority of the rehearsal frames identified.

I observed only 46 rehearsal frames (7% of the total rehearsal frames coded with single target or Imitation) in which the teachers only gave verbal directives. In contrast, I observed 540 rehearsal frames (80% of the total) in which there were more than two different modes of teaching behavior. In other words, in 80% of the rehearsal frames with single targets or Imitation, the teachers employed at least two teaching behaviors of verbal directives, vocal modeling, and performance on their instrument. This represents a high level of musical activity on the part of these master teachers as they worked with advanced

students. As one might imagine, this level of modeling is necessary in light of the fact that the many stylistic shadings of *sanjo* are not represented in the written notation.

For *sanjo* instrumentalists, one ultimate goal is expressing *seong-eum* at an artistic level (Korea National University of Arts, 2004). Particularly because skillful embellishment, in particular the use of *nonghyeon* (vibrato), is an essential component of expert *sanjo* performance, I looked more closely at the rehearsal frames devoted to embellishments.

The master teachers are all recognized for their artistry in performing *sanjo*, and also are well known for their detailed teaching method. Hence, identifying their instructional approaches and thoughts on current *sanjo* teaching is beneficial for establishing an expert pedagogical model of current Korean music education. Focusing on rehearsal frames devoted to embellishments, I found that in alternating embellishments with students, teachers seek to manipulate intricate aspects of students' expressive techniques.

Of course, the teachers varied in the extent to which they required students to imitate the teachers' embellishments and expressive inflections precisely. Yet all three teachers clearly convey the conventionally accepted parameters of expressive deviations in embellishments, including appropriate timbre, dynamics, intensity, and gesture in relation to the context of the form. In communicating individualized or manipulated expressions within the boundary of shared convention, they conveyed their ideas primarily through precise verbal descriptions and ample demonstrations rather than through metaphoric expressions.

To achieve highly expressive performances, musicians employ systematic variations in various aspects of tone production (Johnson, 1996; Juslin, 2003; Palmer, 1997; Seashore, 1938; Windsor & Clarke, 1997), and it has been suggested that concrete instructions are more effective than metaphoric descriptions in developing musical expressivity in students (Hallam, 1998; Woody, 1999).

Over the course of many viewings of the video recordings, I observed a number of features of teaching that were common to all three teachers:

- Strategic target selection appropriate for students' current capacity and manageable in a rehearsal frame
- Rapid alternation between episodes of teacher and student behavior
- Clear communication of a consistent sound image
- Attention to fundamental aspects of physicality in addressing performance errors
- Defining limited acoustic parameters within which to manipulate expressive components
- Appropriate or inappropriate modeling to explicitly demonstrate the proximal goal or to facilitate auditory discrimination among possibilities.

These components of expert *gayageum sanjo* teaching are consistent with those observed in lessons taught by artist-level teachers of Western music (Duke & Simmons, 2006). These results suggest that there are common characteristics in the teaching of expert pedagogues from different cultures that contribute to the accomplishment of musical goals in advanced-level students.

A number of authors have discussed the fact that the teaching practices within the form of one-to-one lessons is modulated to accommodate the cultural and social contexts in which the teaching is situated (Kennell, 1989; Nerland & Hanken, 2002; Nerland, 2007; Persson, 1994). The three *sanjo* masters whom I observed for this investigation all reported that their own teaching practices reflect those of the masters under whom they studied, but also include modifications that developed over time and in response to the changes invoked as the teaching and learning of *sanjo* became a part of music instruction in educational institutions.

One of the most remarkable findings from the lessons of *sanjo* master teachers is their explicit communication of detailed expressions in *sanjo*. In my observations I found that the teachers meticulously attended to nearly all aspects of students' expressiveness, instructing students to embody nuanced expressions that were similar to their teachers'. Yet, all three of the teachers indicated to me that their goal was not to teach their students to imitate their own expressivity in *sanjo*. Rather, their goal was to help their students establish a level of musical independence so that they would be able to construct their own expressive interpretations within the parameters of accepted convention. To accomplish this, the teachers provide explicit instruction about the expressive elements of the art form, demonstrating their interpretations and illustrating the possibilities that are available to their students.

The *sanjo* master teachers who generously permitted me to observe and record their teaching all have distinguished biographies. Although they are students of different schools of *sanjo* masters, their teaching is in most respects quite similar. The structure of their

lessons, the explicitness of their teaching points, and the beautiful and confident instrumental and vocal demonstrations reflect not only a deep understanding of the art of *sanjo*, but a deep understanding of the process of learning as well. My observations are the first to document the teaching of *gayageum sanjo* master teachers. I hope that the information presented in this document will contribute to the development of a pedagogy of *sanjo* that may be applied in the education of students at all levels of experience and expertise who are enrolled in the music schools of Korea.

Appendices

APPENDIX A THE INSTITUTIONAL REVIEW BOARD OF THE UNIVERSITY OF TEXAS AT AUSTIN CONSENT FORM



OFFICE OF RESEARCH SUPPORT
THE UNIVERSITY OF TEXAS AT AUSTIN

P.O. Box 7426, Austin, Texas 78713 · Mail Code A3200
(512) 471-8871 · FAX (512) 471-8873

FWA # 00002030

Date: 06/17/15
PI: Youjin Kim
Dept: Music
Title: The Transmission of Gayageum Sanjo: Pedagogy of Gayageum
Sanjo Masters
Re: IRB Expedited Approval for Protocol Number 2015-05-0046

Dear Youjin Kim:

In accordance with the Federal Regulations the Institutional Review Board (IRB) reviewed the above referenced research study and found it met the requirements for approval under the Expedited category noted below for the following period of time: 06/16/2015 to 06/15/2016. *Expires 12 a.m. [midnight] of this date.* If the research will be conducted at more than one site, you may initiate research at any site from which you have a letter granting you permission to conduct the research. You should retain a copy of the letter in your files.

Expedited category of approval:

- 1) Clinical studies of drugs and medical devices only when condition (a) or (b) is met. (a) Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required. (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review). (b) Research on medical devices for which (i) an investigational device exemption application (21 CFR Part 812) is not required; or (ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.
- 2) Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows: (a) from healthy, non-pregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week; or (b) from other adults and children², considering the age, weight, and health of the subjects, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml per kg in an 8 week period and collection may not occur more frequently than 2 times per week.
- 3) Prospective collection of biological specimens for research purposes by non-invasive means. Examples:
 - (a) Hair and nail clippings in a non-disfiguring manner.
 - (b) Deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction;
 - (c) Permanent teeth if routine patient care indicates a need for extraction.

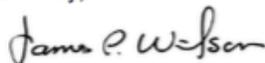
- (d) Excreta and external secretions (including sweat).
 - (e) Uncannulated saliva collected either in an un-stimulated fashion or stimulated by chewing gumbase or wax or by applying a dilute citric solution to the tongue.
 - (f) Placenta removed at delivery.
 - (g) Amniotic fluid obtained at the time of rupture of the membrane prior to or during labor.
 - (h) Supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques.
 - (i) Mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings.
 - (j) Sputum collected after saline mist nebulization.
- 4) Collection of data through non-invasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications).
Examples:
- (a) Physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy.
 - (b) Weighing or testing sensory acuity.
 - (c) Magnetic resonance imaging.
 - (d) Electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography.
 - (e) Moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.
- 5) Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for non-research purposes (such as medical treatment or diagnosis).
Note: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(4). This listing refers only to research that is not exempt.
- 6) Collection of data from voice, video, digital, or image recordings made for research purposes.
- 7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.
Note: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.
- Use the attached approved informed consent document(s).
- You have been granted a Waiver of Documentation of Consent according to 45 CFR 46.117 and/or 21 CFR 56.109(c)(1).
- You have been granted a Waiver of Informed Consent according to 45 CFR 46.116(d).

Responsibilities of the Principal Investigator:

1. Report immediately to the IRB any unanticipated problems.
2. Submit for review and approval by the IRB all modifications to the protocol or consent form(s). Ensure the proposed changes in the approved research are not applied without prior IRB review and approval, except when necessary to eliminate apparent immediate hazards to the subject. Changes in approved research implemented without IRB review and approval initiated to eliminate apparent immediate hazards to the subject must be promptly reported to the IRB, and will be reviewed under the unanticipated problems policy to determine whether the change was consistent with ensuring the subjects continued welfare.
3. Report any significant findings that become known in the course of the research that might affect the willingness of subjects to continue to participate.
4. Ensure that only persons formally approved by the IRB enroll subjects.
5. Use only a currently approved consent form, if applicable.
Note: Approval periods are for 12 months or less.
6. Protect the confidentiality of all persons and personally identifiable data, and train your staff and collaborators on policies and procedures for ensuring the privacy and confidentiality of subjects and their information.
7. Submit a Continuing Review Application for continuing review by the IRB. Federal regulations require IRB review of on-going projects no less than once a year a reminder letter will be sent to you two months before your expiration date. If a reminder is not received from Office of Research Support (ORS) about your upcoming continuing review, it is still the primary responsibility of the Principal Investigator not to conduct research activities on or after the expiration date. The Continuing Review Application must be submitted, reviewed and approved, before the expiration date.
8. Upon completion of the research study, a Closure Report must be submitted to the ORS.
9. Include the IRB study number on all future correspondence relating to this protocol.

If you have any questions contact the ORS by phone at (512) 471-8871 or via e-mail at orsc@uts.cc.utexas.edu.

Sincerely,



James Wilson, Ph.D.
Institutional Review Board Chair

APPENDIX B CONSENT FORM FOR PARTICIPATION IN RESEARCH STUDY

Title: Teaching a Traditional Korean Art Form: Descriptive Analyses of Individual Lessons Taught by Three *Gayageum* Master Teachers

Introduction

This study aims to examine pedagogical aspects of expert *gayageum* musicians.

Please read the information below and ask any questions you might have before deciding whether or not to take part. If you determine to be involved in this study, this form will be used to record your consent.

Purpose of the Study

The purpose of this study is to explore the pedagogy of renowned *gayageum* teachers in teaching *sanjo*. Extant research about *sanjo* concerns theoretical analyses and musical organization, but no research to date has specifically examined teaching methods related to *sanjo*. The microtonal details of *sanjo* require that students depend on their teachers' artistry or instruction in learning the art form. The goal of the present study is to describe the pedagogy of the art form by observing *gayageum sanjo* masters' lessons.

What will you be asked to do?

If you agree to participate in this study, you will be asked to

- Video record your private lesson with your students no more than three times
- Answer several questions about the important teaching points and teaching experience during about 40 mins.

The interview will be audio-recorded and your lessons will be video-recorded so you will be identifiable in the recordings.

The video clips can be put up on a website only with your permission.

Two or three recordings of approximately 50 mins each will be made at the *gayageum* teachers' private lesson studios.

What are the risks involved in this study?

This study involves no more risk than those ordinarily encountered in daily life.

What are the possible benefits of this study?

You will receive no direct benefit from participating in this study; however, **your participation will contribute to our understanding of *sanjo* teaching methods.**

Do you have to participate?

No, your participation is voluntary. You may decide not to participate at all or, if you start the study, you may withdraw at any time. If you would like to participate, you need to sign up at the bottom of the last sheet. You will receive a copy of this form.

Will there be any compensation?

You will not receive any type of compensation as a result of participating in this study.

How will your privacy and confidentiality be protected if you participate in this research study?

If it becomes necessary for the Institutional Review Board to review the study records, information that can be linked to you will be protected to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate it with you, or with your participation in any study.

Video recordings will be stored securely until all clips are analyzed. Following the analysis, and only after obtaining participants' permission, the edited clips can be uploaded on a website created by the primary researcher and the project supervisor. If participants deny permission, the primary researcher will not post the data on the Internet. The audio-recorded interview data will not be destroyed, but only the research team will have access to it.

Whom to contact with questions about the study?

Prior, during or after your participation you can contact the researcher [**Youjin Kim**] at [**010-6318-1249**] or send an email to [**youjinaustin@utexas.edu**] for any questions or if you feel that you have been harmed.

Whom to contact with questions concerning your rights as a research participant?

For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu.

Participation

If you agree to participate, please sign up at the bottom of the following sheet.

Signature

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

Printed Name

_____ I agree to allow video recordings of myself to be posted on the Internet.

_____ I do NOT agree to allow video recordings of myself to be posted on the Internet.

Signature

Date

As a representative of this study, I have explained the purpose, procedures, benefits, and the risks involved in this research study.

Print Name of Person obtaining consent

Signature of Person obtaining consent

Date

APPENDIX C INTERVIEW QUESTIONNAIRE

Question 1: How did you start playing gayageum? What event or who inspired you?

Question 2: How long did you study sanjo [the sanjo you taught in the lesson recordings] under the master?

Question 3: It is widely said that becoming a skilled gayageum sanjo player requires a long time of preparation on fundamental drills. Based on your experience, how much time would be required?

Question 4: Please describe the degree of similarity between your sanjo performance and your teacher's sanjo?

Question 5: I would like to learn about your teacher's sanjo teaching approach. How would you describe her/his pedagogical behaviors?

Question 6: Did your teacher strictly instruct you to imitate all features of his sound?

Question 7: Compared to your teachers, how would you describe your teaching, particularly with regard to refining students' learned skills?

Question 8: Do you teach your students to imitate all aspects of your stylistic performance?

To what degree do you think it is important to transmit your stylistic performance?

Question 9: What is required to become an expert sanjo teacher?

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