



รายงานวิจัยฉบับสมบูรณ์
โครงการวิจัยดนตรีอาเซียนเพื่อการประพันธ์เพลงร่วมสมัย

โดย ศาสตราจารย์ ดร. ณรงค์ฤทธิ์ ธรรมบุตร และคณะ

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คณะผู้วิจัย

สังกัด

1. ศาสตราจารย์ ดร. ณรงค์ฤทธิ์ ธรรมบุตร จุฬาลงกรณ์มหาวิทยาลัย
2. ผู้ช่วยศาสตราจารย์ ดร. จิตตพิมญ์ แยมพราย University of Northern Colorado

สนับสนุนโดยสำนักงานกองทุนสนับสนุนงานวิจัยและจุฬาลงกรณ์มหาวิทยาลัย

(ความเห็นในรายงานนี้เป็นของผู้วิจัย สกว. และจุฬาลงกรณ์มหาวิทยาลัยไม่จำเป็นต้องเห็นด้วยเสมอไป)

โครงการวิจัยดนตรีอาเซียนเพื่อการประพันธ์เพลงร่วมสมัย

บทคัดย่อ

งานวิจัยดนตรีอาเซียนเพื่อการประพันธ์เพลงร่วมสมัยนี้ มีจุดประสงค์เพื่อศึกษาองค์ประกอบ ทางดนตรีของประเทศต่างๆ ในภูมิภาคเอเชียตะวันออกเฉียงใต้ ตลอดจนบริบททางด้าน ประวัติศาสตร์และ วัฒนธรรมด้านอื่นๆ และนำองค์ประกอบดนตรีที่ได้จากการศึกษาภาคสนาม มาใช้ในการประพันธ์เพลงร่วม สมัยตะวันตกในรูปแบบของบทประพันธ์ซิมโฟนิคโพเอ็ม โดยงาน วิจัยส่วนแรกเป็นการศึกษาดนตรีในภาคพื้น แผ่นดิน ซึ่งประกอบด้วยประเทศไทย ประเทศเมียนมาร์ ประเทศกัมพูชา ประเทศลาว และประเทศเวียดนาม ผู้วิจัยได้นำข้อมูลทางด้านประวัติศาสตร์ ของอาณาจักรต่างๆ ที่สำคัญของทั้ง 5 ประเทศ คือ อาณาจักรพุกาม อาณาจักรขอมหรืออังกอร์ อาณาจักรทวารวดี อาณาจักรล้านช้าง และอาณาจักรจามปา มาเป็นแนวคิดหลัก ของบทประพันธ์ และนำมาใช้เป็นท่อนเพลงทั้ง 5 ท่อนของบทประพันธ์ประพันธ์ซิมโฟนิคโพเอ็ม *The Empires* โดยได้นำเอกลักษณ์ทางวัฒนธรรมและเหตุการณ์สำคัญทางประวัติศาสตร์ของแต่ละอาณาจักร มา ถ่ายทอดในท่อนเพลงแต่ละท่อน ผ่านทางการประยุกต์ใช้องค์ประกอบทางดนตรีของแต่ละประเทศ อันได้แก่ เสียงของเครื่องดนตรีและวงดนตรี จังหวะ ทำนองเพลง บันไดเสียง ตลอดจน รูปแบบและโครงสร้างของดนตรี ประจำชาติ ที่ผู้วิจัยได้นำมาผสมผสานและคิดค้นเทคนิคทางการ ประพันธ์เพลงร่วมสมัยตะวันตกในรูปแบบ ใหม่ เพื่อเป็นแนวทางในการสืบสานวัฒนธรรมและ เอกลักษณ์ทางดนตรีของภูมิภาคฯ ให้คงอยู่ในสภาพสังคม ปัจจุบัน รวมทั้งเป็นการส่งเสริม ความมั่นคงและเข้มแข็งในเอกลักษณ์ทางวัฒนธรรมดนตรีของประชาคม อาเซียนสู่ประชาคมโลก

คำสำคัญ ดนตรีอาเซียน การประพันธ์เพลงร่วมสมัย ดนตรีเอเชียตะวันออกเฉียงใต้

Southeast Asian Musical Materials for Contemporary Composition

Abstract

The research Southeast Asian Musical Materials for Contemporary Composition aims to study characteristic musical elements of each country in Southeast Asian along with their historical context and cultures. Through fieldwork study, the collected data is transformed into western contemporary composition in the form of symphonic poem. The first part of the research aims to emphasize the five countries of the mainland Southeast Asia: Thailand, Myanmar, Cambodia, Laos, and Vietnam. The great ancient civilizations of the five countries: *Bagan*, *Angkor*, *Dvaravati*, *Lan Xang*, and *Champa* are set as the theme for the five movements of the Symphonic poem *The Empires*. Significant history and cultural heritages of each empire are transmitted through musical materials of the mainland of Southeast Asia including instruments and ensembles sound, rhythm, melodies, modes, as well as musical characteristics and structures of each nation that are intermingled with innovative contemporary composition techniques, projected through the sound of a western orchestra. This methodology of integrating core research of Southeast Asian music into a creative contemporary composition can serve as a means for cultural preservation and promote musical identity of the mainland Southeast Asia in this contemporary society. Also, the work can strengthen the cultural identity of the ASEAN community together with advocating their heritage throughout the world.

Key words: ASEAN music, Contemporary composition, Southeast Asian music

Executive Summary

The research *Southeast Asian Musical Material for Contemporary Composition* aims to provide a new approach in musical cultural preservation. By means of integrating research methodology of Ethnomusicology and western contemporary composition technique to bring forth the history of the mainland Southeast Asia and their musical materials, along with cultural heritage into western composition that can be reached by the world. The research, in summary, can be divided into three procedures:

- 1) The study of musical materials of the mainland Southeast Asia through ethnomusicological fieldwork methodology in five countries including Thailand, Cambodia, Myanmar, Laos, and Vietnam.
- 2) Innovative contemporary composition techniques in applying musical materials from the fieldwork to a western contemporary composition
- 3) Publicizing the knowledge of both the fieldwork and the composition in the forms of a concert, book, and articles with the explanation and demonstration on the application of contemporary composition techniques to convey the musical identity of mainland Southeast Asia.

In the first procedure, the researcher collected the information through document study and fieldwork research by interviewing ethnomusicologists and musicians in five countries of mainland Southeast Asia. The information collected includes information on scales and tuning systems, instruments and ensembles, performance practices, rhythms, repertoires, and musical structures. Types of materials gathered during the fieldwork research comprise documents, audio recordings, and video recordings.

The second procedure, the process of the composition, is considered the most challenging procedure of the research. Since the purpose of the research is to create a western contemporary composition that can convey the identity of Southeast Asian history, culture, and their music, the researcher has to create techniques that can blend Southeast Asian musical elements with western musical materials to be performed by a western orchestra. The differences in both eastern and western cultures have to be minimized with innovative techniques of contemporary composition that are designed by the researcher. The outcome of this procedure is a composition in a symphonic poem form in order to provide the historical heritage of the region. As such, the researcher has set the theme on the ancient civilization of the five countries, including *Bagan*, *Dvaravati*, *Angkor*, *Lan Xang*, and *Champa*. All the five empires are set as the internal theme of the symphonic movement in the symphonic poem *The Empires*.

The *Bagan* is designated as the first movement of the symphony. The theme of the movement is set on the *Nat pwe*, which is the belief in the spirits of Burma, accompanied by

the music of *hsaign waigh* ensemble. *Pat waigh* the Burmese drum is imitated through western instruments along with the rhythmic pattern that accompanied the *pwe*. The structure of the song is divided into 4 sections based on the structure of the *Bagan* pagoda, which is in a rectangular shape. The festive sound of the *hsaign* and the dance in the *Nat pwe* are transferred with western instrumentation techniques.

Dvaravati arrays the Mon cultures and Buddhist cultures of Thailand. The *Dhmajakra* is used as musical symbolism through the interval of the third (D-F-Ab, etc.) in the circular shape of the *Dhamajakra*. Morn chanting of *Dhamajakra sutra* is transformed into the string section and one of the movement's themes.

Lan Xang has its theme set on the heroic figure of the empire, King Fa Ngum, the founder of the *Lan Xang* empire of Laos. The Khmer melody *Kamen Aey bang* is used as one of the main themes to tell of the childhood of King Fa Ngum who was raised by the Khmer king. The Lao rhythmic pattern is set as main rhythm of the movement.

Angkor depicts the great cultural heritage of Southeast Asia, having *Apsara* dancer, a carving on the stone relief of the Angkor temple, as the main theme of the movement. As such, the melodies of the *pin-peat* ensemble are transformed to portray the *Apsara* dancer of the Angkor temple.

The last movement, *Champa* set as a battle between the great Khmer empire and the kingdom of Champa. Vietnamese melodies that were performed on the ancient lithophone are used as one of the main themes accompanied by Vietnamese drums representing as the Cham, while having *Khmer* melody of *Apsara* dancer interwoven in to mark the stand point of the other side. The conclusion of the movement presents the Vietnamese *Nam Ai* melody, a melody which refers to the heritage of the Cham.

The third procedure presents the information in three parts. In the form of a book, musical materials of the mainland Southeast Asia will be discussed in five chapters: music of Myanmar, Cambodia, Thailand, Laos, and Vietnam. The second part of the book is the explanation and demonstration of methodology in applying contemporary composition techniques to convey the musical cultures of Southeast Asia. The last part is the publication of the music score "The Empires."

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หัวหน้าโครงการ ศาสตราจารย์ ดร. ณรงค์ฤทธิ์ ธรรมบุตร
หน่วยงาน ภาควิชาดุริยางคศิลป์ คณะศิลปกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
โทรศัพท์ 02-218-4615 โทรสาร 02-218-4604 อีเมลล์ narongrit_d@hotmail.com
สถานะผลงาน ไม่ปกปิด

ความสำคัญ/ความเป็นมา

การประพันธ์เพลงร่วมสมัยมีความสำคัญกับสภาพสังคมในปัจจุบัน เนื่องจากการประพันธ์ เพลงที่เปิดโอกาสให้นักประพันธ์เพลงมีอิสระทางความคิดเพื่อจรรโลงศิลปะในรูปแบบต่างๆ ได้อย่างเสรี ทำให้เกิดการสร้างสรรค์บทประพันธ์หลากหลายรูปแบบเพื่อรับใช้สังคมและวัฒนธรรมของชาติ ทั้งเป็น การนำเอาองค์ความรู้ทางดนตรีในอดีตมาผสมผสานกับองค์ความรู้ใหม่ ผสมกับการคิดค้นเทคนิคทาง การประพันธ์และการบรรเลงเครื่องดนตรีใหม่ๆ ตลอดจนการสร้างสรรค์การเรียบเรียงเสียงวงดนตรี การประสมเครื่องดนตรีและวงดนตรีทั้งในวัฒนธรรมเดียวกันและต่างวัฒนธรรม ก่อเกิดมิติความงาม และคุณค่าที่ลึกซึ้ง ด้วยความเป็นอิสระทางคิดทางการประพันธ์นี้เอง ทำให้การประพันธ์เพลงร่วมสมัย สามารถเข้าไปมีส่วนร่วมในการพัฒนาสังคมในรูปแบบต่างๆ ปลุกฝังจิตสำนึกที่ดีงาม คุณค่าทางจิต วิญญาณและนำมาซึ่งความสงบสุขสามัคคีปรองดองในสังคม

สังคมไทยในปัจจุบัน กำลังเติบโตทางด้านเศรษฐกิจด้วยการผนึกกำลังรวมในประชาคมอาเซียน หรือ สมาคมประชาชาติแห่งเอเชียตะวันออกเฉียงใต้ ซึ่งประกอบด้วยประเทศต่างๆ ในภูมิภาคเอเชีย ตะวันออกเฉียงใต้ โดยมีวัตถุประสงค์หรือเสาหลักของประชาคมอาเซียน 3 ประการ ได้แก่ การร่วมมือส่งเสริมด้านการเมืองและความมั่นคง การร่วมมือส่งเสริมด้านเศรษฐกิจ และการร่วมมือ ส่งเสริมด้านสังคมและวัฒนธรรม ความร่วมมือกันของประเทศในภูมิภาคเอเชียตะวันออกเฉียงใต้ ตามเสาหลักทั้ง 3 ประการนั้น จะนำมาซึ่งความแข็งแกร่งทางวัฒนธรรม ความเจริญรุ่งเรืองทางเศรษฐกิจ และทรัพยากรต่างๆ รวมทั้งความเป็นอยู่ที่ดีของประชากรในภูมิภาคฯ ตามนโยบายความร่วมมือประการ ที่ 3 ที่เป็นเสาหลักด้านประชาคมและวัฒนธรรมอาเซียน (ASEAN Socio-Cultural Community-ASCC) ได้กล่าวถึงการร่วมมือทางการศึกษาและวัฒนธรรม ซึ่งเป็นปัจจัยสำคัญที่ส่งเสริมทรัพยากรมนุษย์ให้มี คุณภาพ มีความสามารถในการพัฒนาสังคมและเศรษฐกิจ ให้มีความเจริญก้าวหน้าในระดับสากล

ความโดดเด่นที่ชัดเจนที่สุดของประชาคมอาเซียน คือ ความเจริญงอกงามทางวัฒนธรรมที่ได้สั่งสมมา เป็นระยะเวลายาวนาน ทั้งอารยธรรมดั้งเดิมของท้องถิ่นตนและวัฒนธรรมร่วมที่ได้อิทธิพลมาจากภูมิภาคเดียวกัน และจากภูมิภาคอื่น เช่น อารยธรรมอินเดียและอารยธรรมจีน หนึ่งในความเจริญทางวัฒนธรรม ของภูมิภาคเอเชียตะวันออกเฉียงใต้ คือวัฒนธรรมดนตรีที่แสดงถึงประวัติศาสตร์อันยาวนานของภูมิภาคฯ การเคลื่อนที่ทางวัฒนธรรม และความเชื่อมโยงกันทางภาษา ความเชื่อ ระบบการปกครอง ประเพณี วิถีชีวิต การประกอบอาชีพ และสภาพแวดล้อมทางภูมิอากาศและภูมิประเทศ ปัจจัยเหล่านี้ก่อให้เกิดทั้ง ความแตกต่างและความคล้ายคลึงกันในเรื่องของระบบเสียงดนตรี เครื่องดนตรีและวงดนตรี ตลอดจน บทบาทของดนตรีในวิถีชีวิตของคนในพื้นที่ที่ใกล้เคียงกัน มีการเมืองและการแผ่ ขยายอำนาจจากชาติอื่น เป็นส่วนที่ก่อให้เกิดความแตกต่างทางวัฒนธรรมดนตรีของในภูมิภาค เช่น ประเทศเวียดนามได้รับ อิทธิพลจากดนตรีจีน หรือการเผชิญกับการล่า

อาณานิคมของประเทศตะวันตกในช่วงศตวรรษที่ 19 และ ศตวรรษที่ 20 ทำให้การรักษาบทบาทของวัฒนธรรมดนตรีดั้งเดิม ตลอดจนการสืบทอดดนตรีประจำชาติ ต้องถูกสั่นคลอนด้วยอิทธิพลจากประเทศมหาอำนาจทั้งอังกฤษและฝรั่งเศส ส่งผลให้วัฒนธรรมดนตรี ประจำชาติถูกแทรกแซงด้วยอิทธิพลของดนตรีสมัยนิยม ภาวะหลังสงครามนำมาซึ่งปัญหาทาง เศรษฐกิจและการเมืองภายในประเทศ รวมทั้งการเปลี่ยนแปลงค่านิยมในการเห็นคุณค่าและรักษา อัตลักษณ์ทางวัฒนธรรมดนตรี สิ่งเหล่านี้ ก่อให้เกิดการเปลี่ยนแปลงที่เห็นได้ชัดเจนกับวัฒนธรรม ดนตรีของแต่ละชาติ ที่นับวันมีบทบาททางสังคมน้อยลงและเริ่มหายไปจากสังคม ประกอบกับความ นิยมในดนตรีตะวันตกที่มีมากขึ้น ก่อให้เกิดการเปลี่ยนแปลงในทิศทางของดนตรีประจำชาติ คือ เกิดดนตรีแนวใหม่ (fusion music) ที่ใช้อิทธิพลทางดนตรีตะวันตก เข้ามาในการปรับรูปแบบวงดนตรี เกิดธุรกิจการดนตรีที่สร้างดนตรีสมัยนิยมในรูปแบบต่างๆ ขึ้น เช่น ดนตรีในภาพยนตร์ และโฆษณา ตลอดจนการประพันธ์เพลงร่วมสมัยตะวันตก ที่ใช้การผสมผสานเครื่องดนตรีประจำชาติกับวงดนตรี ตะวันตกหรือการนำบทเพลงประจำชาติมาเรียบเรียงเสียงวงดนตรีตะวันตกขึ้น เป็นต้น

เมื่อทิศทางของดนตรีประจำชาติและค่านิยมของสังคมเปลี่ยนเข้าสู่ความนิยมในดนตรีตะวันตก จึงเป็นหน้าที่ของนักประพันธ์เพลงที่ต้องแสวงหาแนวทางการสร้างสรรค์บทประพันธ์เพลงร่วมสมัย ที่สามารถปลุกจิตสำนึกการเห็นความสำคัญของคุณค่าทางวัฒนธรรมดนตรีของชาติและเสริมสร้างความรู้ความเข้าใจในวัฒนธรรมดนตรีของภูมิภาคฯ เกิดสุนทรีย์ในความงามของอัตลักษณ์ทางวัฒนธรรมดนตรี ด้วยการสื่อสารผ่านทางบทประพันธ์เพลงร่วมสมัยตะวันตกที่ประสมประสานด้วยดนตรีอาเซียน เพื่อให้ เหมาะกับความต้องการและเข้าถึงได้ของสังคมในปัจจุบัน และยังเป็นการสร้างความร่วมมือทางวัฒนธรรม ดนตรีและการศึกษาดนตรีระหว่าง ประเทศต่างๆ ในภูมิภาคเอเชียตะวันออกเฉียงใต้ตามกระแสการสร้าง ความร่วมมือทางวัฒนธรรมการดนตรีของอาเซียน ดังเช่น ผลงานการประพันธ์ล่าสุดของผู้วิจัย ในการสร้างสรรค์บทประพันธ์เพลงร่วมสมัย “ชิมโฟนี่ประสานเสียงสำเนียงระฆัง” สำหรับเครื่อง ดนตรีอาเซียนและวงออร์เคสตรา ที่ประสบความสำเร็จในวงกว้างทั้งในและนอกประเทศ กระแสเสียง การตอบรับในบทประพันธ์ ได้กลายมาเป็นแรงบันดาลใจในการสร้างงานวิจัยนี้ เป็นการขยายผล เพื่อให้เกิดประโยชน์ในวงวิชาการดนตรีและวัฒนธรรมของประเทศต่างๆ ในภูมิภาคฯ

ความสนใจดังกล่าวไม่เพียงจำกัดอยู่เฉพาะในกลุ่มประชาคมอาเซียนเท่านั้น แต่ได้ขยาย วงกว้างในวงการการประพันธ์ดนตรีร่วมสมัยตะวันตก องค์ความรู้และฐานข้อมูลของดนตรีเอเชีย จึงเป็นที่ต้องการอย่างสูงสำหรับนักประพันธ์เพลงชาวตะวันตกและนักประพันธ์เพลงร่วมสมัยในภูมิภาค เอเชียตะวันออกเฉียงใต้ ที่ต่างพยายามสร้างบทประพันธ์เพื่อนำเสนอ แนวทางใหม่ในการอนุรักษ์ วัฒนธรรมดนตรีประจำชาติ แต่เนื่องด้วยข้อมูลทางดนตรีของประเทศเอเชียตะวันออกเฉียงใต้ ที่ปรากฏในฐานข้อมูลตะวันตกทั้งในรูปแบบของหนังสือ โน้ตดนตรีสากล และไฟล์เสียงดนตรี นั้นมีอยู่จำกัด และเป็นเพียงข้อมูลทั่วไปเกี่ยวกับเครื่องดนตรี วงดนตรี ระบบเสียง เบื้องต้น และตัวอย่างของบทเพลง บางบทเท่านั้น การนำดนตรีนอกวัฒนธรรมหนึ่งมาสื่อความหมาย ในบริบทอื่นจำเป็นต้องอาศัยความเข้าใจ องค์ประกอบของดนตรีและบทบาทของดนตรีที่ผูกติดกับวัฒนธรรมนั้นๆ อย่างละเอียด จึงจะสามารถนำ ดนตรีนั้นไปใช้ในการประพันธ์เพลงหรือการเรียบเรียงเสียงดนตรีที่สื่อถึงอัตลักษณ์ทางวัฒนธรรมนั้น ได้อย่างถูกต้อง

ด้วยเหตุผล ความสำคัญ และความเป็นมาดังกล่าว ผู้วิจัยในฐานะนักประพันธ์เพลงร่วมสมัย จึงเห็นความจำเป็นในการศึกษาข้อมูลดนตรีในเชิงลึกของประเทศต่างๆ ในภูมิภาคเอเชียตะวันออกเฉียงใต้ เพื่อนำมาสร้างเป็นแบบอย่างบทประพันธ์เพลงร่วมสมัยเชิงอนุรักษ์วัฒนธรรม ที่ใช้การผสมผสาน องค์ประกอบทางดนตรีอาเซียน รวมทั้งอธิบายและวิเคราะห์วิธีการอนุรักษ์และการนำไปใช้ในการ ประพันธ์เพลงร่วมสมัยด้วยบริบท

ของดนตรีตะวันตก เพื่อเป็นประโยชน์ต่อการส่งเสริมความเข้าใจใน วัฒนธรรมดนตรีที่ถูกต้อง ให้กับนักวิชาการ ดนตรี นักประพันธ์เพลง และนักดนตรีที่อยู่นอกวัฒนธรรม ดนตรีประจำชาติของตน

ผลของการวิจัยนี้ จะนำมาซึ่งฐานข้อมูลดนตรีเอเชียตะวันออกเฉียงใต้และบทประพันธ์เพลง ร่วมสมัย อาเซียนเชิงอนุรักษ์ รวมทั้งก่อให้เกิดความร่วมมือกันทางวิชาการดนตรีและการสร้างสรรค์ งานดนตรีเพื่อการ อนุรักษ์ทางวัฒนธรรมในหลากหลายรูปแบบ เกิดการพัฒนาบุคลากรทางการดนตรี และการสร้างกิจกรรม ทางดนตรีร่วมกัน ทั้งด้านวิชาการการดนตรี การประพันธ์เพลง และการแสดงดนตรี ที่เน้นการนำเสนอ เอกลักษณ์ของวัฒนธรรมดนตรีอาเซียนในบริบทของสภาพการดนตรีในสังคมปัจจุบัน และยังนำมาซึ่งการ สร้างปฏิสัมพันธ์ทางการศึกษาดนตรีระหว่างอาเซียนกับประเทศต่างๆ นอกประชาคม

การวิจัยนี้ เมื่อสิ้นสุดลง ผลของโครงการจะนำมาซึ่งฐานข้อมูลดนตรีในรูปแบบของหนังสือ ที่นำเสนอ ข้อมูล ด้านองค์ประกอบทางดนตรีต่างๆ ของประเทศในประชาคมอาเซียนที่นำมาใช้ในการประพันธ์เพลงร่วม สมัย ในส่วนที่สองของหนังสือ เป็นการสาธิตการประพันธ์เพลงร่วมสมัยในรูปแบบต่างๆ โดยใช้ข้อมูลที่ได้ จากการวิจัย องค์ประกอบทางดนตรีอาเซียน ส่วนที่สามของหนังสือ เป็นการนำบทประพันธ์ที่สร้างขึ้นใหม่ใน ส่วนที่สอง มาอภิปรายเชิงวิเคราะห์เรื่องการถ่ายทอดเอกลักษณ์ทางวัฒนธรรมดนตรีด้วยเทคนิคทางการ ประพันธ์ต่างๆ เพื่อส่งเสริมการศึกษาวัฒนธรรมดนตรีของประเทศต่างๆ ในประชาคมอาเซียน

วัตถุประสงค์ของโครงการ

- 1) เพื่อศึกษาองค์ประกอบทางดนตรีอาเซียนที่นำมาใช้ในการประพันธ์เพลงร่วมสมัย
- 2) สร้างบทประพันธ์ดนตรีร่วมสมัยที่ใช้อัตลักษณ์ของดนตรีอาเซียนและดนตรีตะวันตก
- 3) วิเคราะห์และอธิบายเทคนิคต่างๆ ที่ใช้ในการประพันธ์เพลงในรูปแบบของหนังสือภาษาอังกฤษ ที่ รวมผลการศึกษาและการสร้างสรรค์จากวัตถุประสงค์ข้อ 1 และ 2

ผลการวิจัย

1. ผลการศึกษาดนตรีภาคสนาม ทำให้ตระหนักถึงปริมาณของข้อมูลดนตรีด้านต่างๆ ของแต่ละ ประเทศ ที่มีเป็นจำนวนมาก ทั้งเครื่องดนตรี วงดนตรี องค์ประกอบดนตรี ดนตรีแบบแผน ดนตรีพื้นบ้าน และ ดนตรีร่วมสมัย ทำให้ผู้วิจัยต้องจำกัดข้อมูลในการศึกษา และเลือกข้อมูลมาใช้ในการประพันธ์เพลง และเพื่อให้ งานมีคุณภาพ ผู้วิจัยจึงต้องแบ่งการวิจัยเป็นสองส่วน คือ ดนตรีภาคพื้นแผ่นดินเอเชียตะวันออกเฉียงใต้ ซึ่งเป็น งานวิจัยในฉบับนี้ และงานวิจัยดนตรีภาคพื้นสมุทรเอเชียตะวันออกเฉียงใต้ ซึ่งเป็นงานวิจัย ต่อเนื่อง นอกจากนี้ การสำรวจข้อมูลดนตรีของภูมิภาคยังส่งเสริมให้เกิดแนวทางในการสร้างสรรค์งานวิจัย ในรูปแบบ ต่างๆ และเกิดการต่อยอดงานวิจัยด้านดนตรีอื่นๆ ได้อีกเป็นจำนวนมาก

2. การสังเคราะห์และการวิเคราะห์ข้อมูลดนตรีจากการศึกษาภาคสนาม ทำให้สามารถสร้างการ เชื่อมโยงการเคลื่อนที่ทางวัฒนธรรมทางด้านดนตรีของประเทศต่างๆ ในภาคพื้นแผ่นดินอุษาคเนย์ เห็นที่มา ที่ ไปของดนตรีในอดีตถึงปัจจุบัน เกิดการประสานรอยต่อทางวัฒนธรรมร่วมดนตรีในภูมิภาค ตลอดจน วัฒนธรรมดนตรีนอกภูมิภาคเอเชียตะวันออกเฉียงใต้ เป็นการรวบรวมข้อมูลทางด้านประวัติศาสตร์ดนตรีของ ภูมิภาคๆ

3. เกิดการคิดค้นเทคนิคทางการประพันธ์ดนตรีร่วมสมัย ที่สามารถถ่ายทอดเอกลักษณ์ทาง วัฒนธรรม ดนตรีประจำชาติของประเทศต่างๆ ในภาคพื้นแผ่นดินเอเชียตะวันออกเฉียงใต้

4. เป็นแนวทางในการนำเสนอเอกลักษณ์ด้านต่างๆ ของประเทศในภูมิภาคเอเชียตะวันออกเฉียงใต้ เช่น ด้านประวัติศาสตร์ ด้านคติความเชื่อ ศาสนา ประเพณี วัฒนธรรม ภูมิทัศน์ ผ่านทางการ สร้างสรรค์ดนตรี ร่วมสมัย

5. เกิดการสร้างเครือข่ายของนักประพันธ์เพลงอาเซียน การแลกเปลี่ยนแนวทางการประพันธ์เพลง และเกิดความร่วมมือในการสร้างสรรค์ผลงานดนตรีของภูมิภาคเอเชียตะวันออกเฉียงใต้

6. มีบทประพันธ์เพลงร่วมสมัย “The Empires” ที่ใช้เป็นบทประพันธ์ต้นแบบสำหรับ วงออร์เคสตราตะวันตกในการถ่ายทอดองค์ประกอบดนตรีของภาคพื้นแผ่นดินเอเชียตะวันออกเฉียงใต้

คำสืบค้น (Keywords) ดนตรีอาเซียน การประพันธ์เพลงร่วมสมัย การอนุรักษ์วัฒนธรรมดนตรี

การนำผลงานวิจัยไปใช้ประโยชน์

1. ด้านนโยบาย

โครงการนี้ได้นำเอาองค์ความรู้ของดนตรีอาเซียนไปประยุกต์ใช้กับดนตรีคลาสสิกตะวันตก ทั้งสามารถ สนองนโยบายด้านความร่วมมือในภูมิภาคอาเซียน โดยเฉพาะอย่างยิ่งนโยบายด้านศิลปวัฒนธรรม ที่จะ เป็นแนวทางให้เกิดความร่วมมือด้านสังคมวัฒนธรรม ทั้งเป็นหนึ่งในสามเสาหลักของด้านประชาคมและวัฒนธรรม อาเซียน (ASEAN Socio-Cultural Community-ASCC) ที่ เป็นความร่วมมือในการส่งเสริมนโยบายและความ เป็นอยู่ของมนุษย์ให้มีคุณภาพและมีความสามารถในการพัฒนาสังคมและเศรษฐกิจ ให้เจริญก้าวหน้า ในระดับสากล

2. ด้านสาธารณะ

ผู้วิจัยได้นำข้อมูลวิจัยมาพัฒนาด้วยการสร้างวิธีการสอนดนตรีอาเซียนให้กับครูสอนดนตรีในโรงเรียน K-12 ในรัฐโคโลราโด ประเทศสหรัฐอเมริกา โดยฝึกหัดการสอนร้องเพลงและการรำ เพื่อให้ที่ครูที่เข้าอบรมได้ นำสื่อการสอนและวิธีการสอนไปใช้ในการสอนนักเรียนได้ นอกจากนี้ยังได้นำ ความรู้ที่ได้จากการวิจัยมาจัด กิจกรรมดนตรีและอบรมความรู้เรื่องดนตรีเอเชียตะวันออกเฉียงใต้ให้กับชุมชน

3. ด้านชุมชนและพื้นที่

โครงการวิจัยนี้ ได้มีการศึกษาดนตรีประจำชาติและได้ออกงานภาคสนามพบปะกับนักดนตรี ประจำชาติ ได้พูดคุยและสัมภาษณ์นักดนตรีท้องถิ่น ดังนั้นองค์ความรู้บางส่วนจึงเป็นข้อมูลปฐมภูมิ (primary source) เกิดกระบวนการแลกเปลี่ยนความรู้ในดนตรีอาเซียนซึ่งกันและกัน รวมทั้งทราบถึงแก่นของ นักดนตรี อาเซียนในเชิงลึก ผู้วิจัยได้นำวัตถุดิบเหล่านี้ มาต่อยอด สังเคราะห์ และประยุกต์กับเทคนิคดนตรี ร่วมสมัย ดังนั้น ในแง่หนึ่งของโครงการจะเป็นการอนุรักษ์ดนตรี ประจำชาติอาเซียนเหล่านี้ให้ยังคงมีชีวิต และเผยแพร่ ออกไปสู่ระดับสากล และการประพันธ์เพลง “The Empires” ก็เป็นแบบอย่างให้กับชุมชน ในการประพันธ์ เพลงในเชิงอนุรักษ์ ที่ดนตรีประจำชาติเองก็ต้องมีการเปลี่ยนแปลงให้ทันกับบริบทของโลก

4. ด้านพาณิชย์

เป็นการสร้างรูปแบบการสร้างสรรค์งานร่วมสมัยให้กับสังคม เนื่องจากเป็นงานวิจัยที่ประกอบด้วย ผลผลิตทางด้านหนังสือและบทประพันธ์เพลงพร้อมแผ่นบันทึกเสียง ทั้งสองรูปแบบสามารถนำมาซึ่งการ เผยแพร่ผลงานเชิงพาณิชย์ การจัดคอนเสิร์ตทั้งในประเทศและต่างประเทศ เป็นการส่งเสริม ดนตรีประจำชาติ ในรูปแบบต่างๆ ที่จะกระตุ้นให้เกิดการเรียนรู้ทางวัฒนธรรมของอาเซียน และเป็นการส่งเสริม การท่องเที่ยว เชิงวัฒนธรรมที่จะนำรายได้มาสู่ประเทศต่างๆ ในประชาคมอาเซียน นอกจากนี้ เกิดการสร้างงานให้กับนัก ดนตรีอาเซียนในระดับนานาชาติ ที่สืบเนื่องมาจากการเผยแพร่ผลงานในรูปแบบ ของหนังสือ บทประพันธ์ เพลง และแผ่นบันทึกเสียง

5. ด้านวิชาการ

ผลของงานวิจัยประกอบด้วย 2 ส่วนหลัก คือ

1. หนังสือ *Southeast Asian Musical Materials for Contemporary Composition* เป็น หนังสือภาษาอังกฤษ สามารถนำไปเป็นตำราการเรียนการสอนให้กับนักศึกษาในสถาบันอุดมศึกษา ทั้งใน ประเทศและต่างประเทศ ตั้งแต่ระดับบัณฑิตศึกษาถึงระดับปริญญาเอก และผู้วิจัยและผู้ร่วมวิจัยยังได้ไป เผยแพร่องค์ความรู้ด้านดนตรีอาเซียนและการประพันธ์เพลงร่วมสมัยในระดับนานาชาติ นอกจากนี้หนังสือ เล่มนี้ ยังสามารถเป็นแบบอย่างให้กับนักประพันธ์เพลงและนักดนตรีอาชีพ ตลอดจนผู้สนใจอื่นๆ รายวิชาดนตรี ที่จะสามารถใช้หนังสือเล่มนี้ได้ ได้แก่ การประพันธ์เพลง ดนตรีวิทยาและมานุษยดนตรีวิทยา การเรียบเรียงเสียง วงดนตรี สังคีตลักษณ์การวิเคราะห์ และทฤษฎีดนตรีร่วมสมัย

2. บทประพันธ์เพลง “The Empires” จัดพิมพ์อยู่ในระบบโน้ตสากล ซึ่งพร้อมที่จะบรรเลงด้วย วง ออร์เคสตราใดๆ ก็ได้ทั่วโลก เป็นงานที่ได้มาตรฐาน ทั้งในแง่การประพันธ์ การเรียบเรียงเสียงประสาน โครงสร้างบทประพันธ์ และการใช้เครื่องดนตรี อนึ่ง บทเพลงนี้ ถึงแม้จะมีความซับซ้อนด้านการประพันธ์ แต่ก็ มีสีสันที่ผู้ฟังทั่วไปจะติดตามได้ จึงเหมาะสมที่จะบรรเลงในคอนเสิร์ต งานเทศกาลดนตรีนานาชาติ งาน สัมนาดนตรีร่วมสมัย ตลอดจนการประชุมสูงสุดผู้นำอาเซียน ซึ่งประเทศไทยจะเป็นเจ้าภาพในปี พ.ศ. 2562

ผลผลิตของโครงการ (Output)

1 หนังสือ *Southeast Asian Musical Material for Contemporary Composition, Book I, The Mainland* (มีกำหนดพิมพ์เผยแพร่ภายในเดือนกรกฎาคม พ.ศ.2561 ขณะนี้ปริมาณงานที่ทำได้ประมาณ 85 เปอร์เซ็นต์)

2 บทประพันธ์เพลง “The Empires” ซึ่งเป็นผลผลิตด้านดนตรีสร้างสรรค์ ซึ่งบันทึกด้วยโน้ตสากล ในแบบโน้ตรวมวง (full score) และโน้ตแยกแนว (parts) สามารถนำไปบรรเลงด้วยวงออร์เคสตรามาตราฐาน 80 คน ได้ทุกๆ วงในระดับนานาชาติ มีความยาวของการบรรเลงประมาณ 22 นาที มีกำหนดแสดงวันที่ 11 สิงหาคม พ.ศ.2561 ในงาน Thailand International Composition Festival (TICF 2018) โดยวง Thailand Philharmonic Orchestra (TPO) (ขณะนี้ปริมาณงานที่ทำได้ประมาณ 90 เปอร์เซ็นต์)

3 แผ่นบันทึกเสียง “The Empires” มีการบันทึกเสียงด้วยระบบบันทึกเสียง ที่ทันสมัยที่สุด สามารถ เผยแพร่บทประพันธ์ที่มีคุณภาพเสียงที่มีประสิทธิภาพได้ทั่วโลก (บันทึกการแสดงสดในวันที่ 11 สิงหาคม พ.ศ. 2561)

4 บทความวิชาการ ดังนี้

4.1 Dhamabutra, Narongrit and Jittapim Yamprai. “Methods in blending ASEAN Cultures in Contemporary Composition.” *Rangsit Music Journal* (13/2), 2018.

4.2 Yamprai, Jittapim. *Teaching Asian Musical Materials through Songs, Dances, and Games. Journal of Literature and Art Studies* (6/8), 2018.

5 การแสดงบทประพันธ์

- แสดงประพันธ์ซิมโฟนีสยามินทร์ (Sinfonia Siamindra) เมื่อวันที่ 15 กรกฎาคม พ.ศ. 2560 บรรเลงโดยวง Royal Bangkok Symphony Orchestra (RBSO) ณ ศูนย์วัฒนธรรมแห่งประเทศไทย อำนวยเพลงโดย Charles Olivier-Munroe ผู้อำนวย เพลงชาวแคนาดา บทเพลงนี้เป็นเพลงที่ผู้วิจัยได้นำองค์ประกอบดนตรีอาเซียนมาใช้ในการ ประพันธ์เพลง
- แสดงบทประพันธ์ “ลำนํายุธยา ศรีรามเทพนคร” บรรเลงในงานครบรอบ 25 ปี สำนักงานคณะกรรมการวิจัยแห่งชาติ (สกว.) บรรเลงโดยวง CU Chamber Orchestra ในวันที่ 25 สิงหาคม พ.ศ. 2560
- บทประพันธ์เพลงซิมโฟนิคโพเอ็ม “The Empires” ตอนที่ 1 และ 2 Bagan and Davaravati ในคอนเสิร์ต *The Sound of ASEAN and Romanticism* ที่หอประชุม ศิลปวัฒนธรรม อำนวยเพลงโดย Dr. Michael Alexander มหาวิทยาลัยจุฬาลงกรณ์ เมื่อวันที่ 19 มกราคม 2561
- การแสดงบทประพันธ์เพลง “The Empires” ในงาน Thailand International Composition Festival (TICF 2018) โดยวง Thailand Philharmonic Orchestra (TPO) ในวันที่ 11 สิงหาคม 2561

6 การนำเสนอข้อมูลในที่ประชุมวิชาการนานาชาติและระดับชาติ

- ได้นำเสนอผลการวิจัยในที่ประชุมระดับชาติ รวมทั้งสิ้น 8 ครั้ง

ปีที่ 1 (2558-2559)

1) การบรรยายประกอบการแสดงบทประพันธ์ *Quintet for the Spirits of ASEAN for Piano Quintet* หอศิลปวัฒนธรรม จุฬาลงกรณ์มหาวิทยาลัย วันที่ 21 กรกฎาคม พ.ศ. 2559 ได้มีการนำแนวคิดทาง ดนตรีอาเซียนไปประยุกต์ใช้

2) วิธีการเขียนงานวิจัยทางดนตรี

วิทยาลัยดนตรี มหาวิทยาลัยรังสิต วันที่ 25 กรกฎาคม พ.ศ. 2559

ปีที่ 2 (2559-2560)

1) บรรยายในงานเปิดตัวหนังสือ “พรรณานาฏมโหรีสถานอยุธยา” ที่จัดขึ้นเมื่อวันที่ 9 พฤศจิกายน พ.ศ. 2559 ณ ศูนย์มนุษยวิทยาสรินทร

2) บรรยายนำเสนอผลงานวิจัยในที่ประชุมประจำปีของสำนักงานคณะกรรมการวิจัยแห่งชาติ เมื่อวันที่ 11-13 มกราคม พ.ศ. 2560 ที่ โรงแรมรีเจนท์ ซะอ่า

3) บรรยายเรื่องการสร้างงานวิจัยสร้างสรรค์ทางวิชาการดนตรี เมื่อวันที่ 9 มกราคม พ.ศ. 2560 ณ มหาวิทยาลัยศิลปากร

4) บรรยายหัวข้อเรื่อง การประพันธ์บทเพลง “Two Suvarnabhumi Portraits” เมื่อวันที่ 27 กรกฎาคม พ.ศ. 2560 ณ หอศิลป์ ราชดำเนิน

5) บรรยายในหัวข้อเรื่อง ศิลปะเพื่อการสร้างสรรค์ ในงานประชุมวิชาการระดับชาติ (The 2nd National Fine Arts Conference) ในวันที่ 3 สิงหาคม พ.ศ. 2560 ณ มหาวิทยาลัยศรีนครินทรวิโรฒ ประสานมิตร

● ได้นำเสนอผลการวิจัยในที่ประชุมระดับนานาชาติ รวมทั้งสิ้น 6 ครั้ง

ปีที่ 2 (2559-2560)

1) บรรยายเรื่องดนตรีอาเซียน ในงาน *Multi Cultural Festival* เมื่อวันที่ 7 ตุลาคม 2560 ที่ Lincoln Park, Colorado

2) เป็นวิทยากรรับเชิญและสาธิตการแสดงดนตรีอาเซียนในหัวข้อ *Teaching Asian musical materials through songs, dances, and games* ในงานสัมมนา World Music Pedagogy Workshop ของการประชุมวิชาการดนตรี Society of Ethnomusicology 62nd Annual Meeting เมื่อวันที่ 28 ตุลาคม 2560 ที่ Denver

3) เป็นวิทยากรรับเชิญบรรยายเรื่องดนตรีในภาคพื้นแผ่นดินของภูมิภาคเอเชียตะวันออกเฉียงใต้ ที่มหาวิทยาลัย Colorado States University, Fort Collins เมื่อวันที่ 2 พฤศจิกายน 2560

4) นำเสนองานวิจัยในที่ประชุมเรื่องเพลงไทยในสมัยอยุธยา ในการประชุม 45th Annual Meeting of the Council for Thai Studies (COTS) วันที่ 11 พฤศจิกายน 2560 ที่มหาวิทยาลัย UCLA, California.

ปีที่ 3 (2561)

5) นำเสนอผลงานวิจัยเรื่อง *Bronze and Bamboo Cultures of Southeast Asia* ในเทศกาล Asian-Pacific exhibition ที่หอประชุม Lindou, Michener Library มหาวิทยาลัย Northern Colorado ในวันที่ 26 มีนาคม 2561

6) นำเสนอผลงานวิจัยเรื่อง *Whose music is this: Thailand, Laos, or Cambodia?* ในที่ประชุม College Music Society Conference 2018 ในวันที่ 31 มีนาคม 2561

เอกสารแนบต่างๆ

1. Poster concert *Sinfonia Siamindra* บรรเลงโดยวง Royal Bangkok Symphony Orchestra วันที่ 15 กรกฎาคม 2560 ที่ศูนย์วัฒนธรรมแห่งประเทศไทย

การสนับสนุนโดยมูลนิธิราชประชานุเคราะห์ในพระบรมราชูปถัมภ์ มูลนิธิราชประชานุเคราะห์ในพระบรมราชูปถัมภ์ มูลนิธิราชประชานุเคราะห์ในพระบรมราชูปถัมภ์ เนื่องในโอกาสมหามงคลเฉลิมพระชนมพรรษา 28 กรกฎาคม 2560

ROYAL BANGKOK SYMPHONY ORCHESTRA

Royal Celebration Concert
"Stefan Viadar plays Schumann"

Conductor
 Charles Olivieri-Munroe

Piano
 Stefan Viadar

Programme
 Narongrit Dhamabutra : Sinfonia Siamindra
 Schumann : Piano Concerto in A minor, Op. 54
 Brahms : Symphony No. 2 in D major, Op. 73

SATURDAY 15 JULY 2017 at 8 PM
 THAILAND CULTURAL CENTRE, MAIN HALL

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Piano

To celebrate His Majesty the King's Birthday anniversary 28 July 2017, this **RBSO** concert will open with the world premiere of *Sinfonia Siamindra*, composed by **Narongrit Dhamabutra**, in honour of His Majesty the King.

Austrian concert pianist **Stefan Viadar** makes his first performance with **RBSO** in a favourite from the repertoire, Schumann's Piano Concerto. Born in Vienna, **Viadar** is one of Austria's most remarkable musical personalities, appearing in illustrious events such as the Salzburg Festival and Schubertiade Schwarzenberg. He won the 1985 Ludwig van Beethoven competition. During the 2015/16 season the Vienna Concert House celebrated his 50th birthday with a series of concerts in which he displayed his diverse artistic scope as soloist, conductor, accompanist, and chamber musician. Austrian Label CAPRICCIO recently released **Viadar's** four CD-Box set with the complete Beethoven solo concertos.

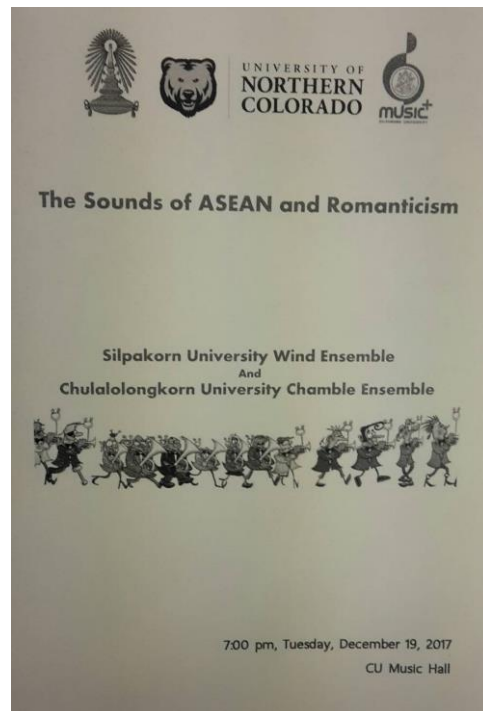
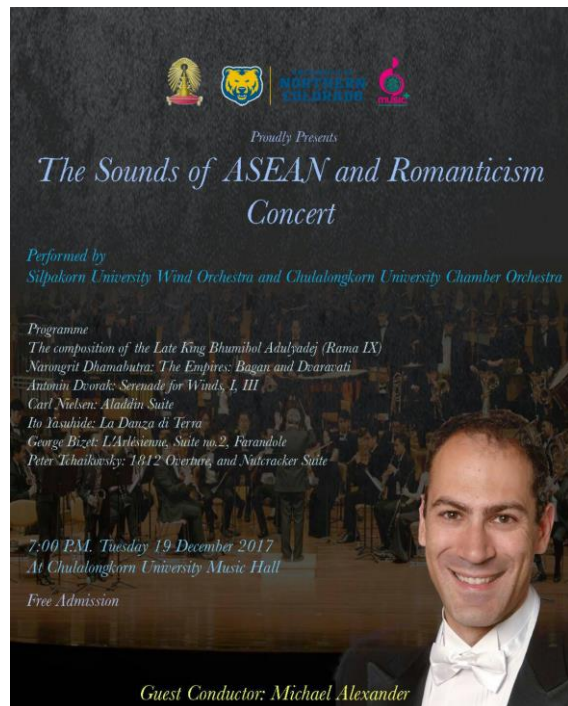
Canadian conductor **Charles Olivieri-Munroe** is joining the **RBSO** for the fifth time, having by now established an enjoyable working relationship with the musicians. This time he will conclude the programme with Brahms Symphony No. 2 in D major, a glorious work that overflows with joyful optimism. **Olivieri-Munroe** is presently Artistic Director and Principal Conductor of Krakow Philharmonic Orchestra.

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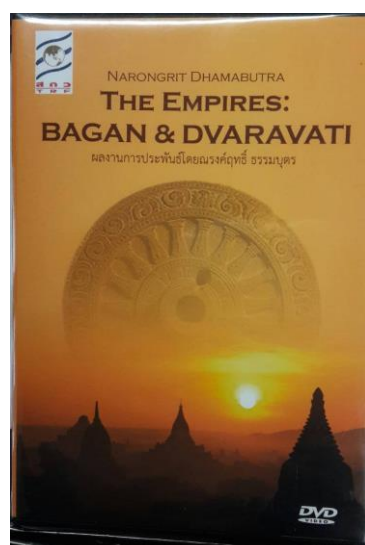
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2. Poster concert, “The Empires” ตอนที่ 1 และ 2 *Bagan and Davaravati* และหน้าปกโปรแกรมโน้ต ในคอนเสิร์ต *The Sound of ASEAN and Romanticism* ที่หอประชุมศิลปวัฒนธรรม อำนวยเพลงโดย Dr. Michael Alexander จุฬาลงกรณ์มหาวิทยาลัย เมื่อวันที่ 19 ธันวาคม 2560



3. แผ่นบันทึกการแสดงคอนเสิร์ต *The Sound of ASEAN and Romanticism* ที่หอประชุมศิลปวัฒนธรรม อำนวยเพลงโดย Dr. Michael Alexander จุฬาลงกรณ์มหาวิทยาลัย เมื่อวันที่ 19 ธันวาคม 2560



4. บรรยายาการแสดงคอนเสิร์ตและการฝึกซ้อม *The Sound of ASEAN and Romanticism*



5. จดหมายเชิญ นำบทประพันธ์ “The Empires” ไปแสดงในงาน International Composition Festival 2018 ในวันที่ 11 สิงหาคม 2561



วิทยาลัยดุริยางคศิลป์ มหาวิทยาลัยมหิดล
๒๕/๒๕ ทุทธรณีสถาย ๔ ศาลา นครปฐม
โทรศัพท์ ๐ ๒๘๐๐ ๒๕๒๕-๓๔ ต่อ ๑๒๐๙
โทรสาร ๐ ๒๘๐๐ ๒๕๓๐

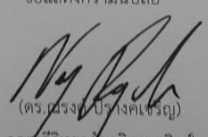
ที่ ศธ ๐๕๑๗.๓๑/๐๗๒๓
วันที่ ๒๖ เมษายน ๒๕๖๑
เรื่อง ขอความอนุเคราะห์นำบทเพลง “The Empires” มาบรรเลงโดยวงดุริยางค์ฟิลาฮาร์โมนิกแห่งประเทศไทย ในงาน “14th Thailand International Composition Festival”

เรียน ศาสตราจารย์ ดร.ณรงค์ฤทธิ์ ธรรมบุตร

ด้วยวิทยาลัยดุริยางคศิลป์ มหาวิทยาลัยมหิดล ได้กำหนดจัดงานเทศกาลการประพันธ์ดนตรีนานาชาติ “14th Thailand International Composition Festival (TICF)” ขึ้น ในระหว่าง วันที่ ๖-๑๑ สิงหาคม ๒๕๖๑ อันเป็นงาน Thailand International Composition Festival (TICF) เป็นงานเทศกาลดนตรีระดับนานาชาติ โดยในหลายปีที่ผ่านมามีนักประพันธ์เพลงที่มีชื่อเสียงในระดับนานาชาติมาเข้าร่วมงานอย่างสม่ำเสมอ อาทิ John Corigliano, Dr. Chen Yi, Dr. Zhou Long, Dr. Narong Prangcharoen

ในการนี้ วิทยาลัยดุริยางคศิลป์ ประสงค์จะนำบทเพลง “The Empires” ของท่าน ซึ่งเป็นส่วนหนึ่งของงานวิจัย “การวิจัยดนตรีอาเซียนเพื่อการประพันธ์เพลงร่วมสมัย” ซึ่งได้รับการสนับสนุนจากสำนักงานกองทุนสนับสนุนการวิจัย (สกว.) มาบรรเลงในงานเทศกาลดนตรีครั้งนี้ โดยวงดุริยางค์ฟิลาฮาร์โมนิกแห่งประเทศไทย (Thailand Philharmonic Orchestra หรือ TPO) ซึ่งเป็นวงดุริยางค์ชั้นนำของประเทศ มีผลงานแสดงร่วมกับผู้ชำนาญเพลงและนักดนตรีระดับนานาชาติจำนวนมาก จะบรรเลงบทเพลงนี้ในคอนเสิร์ตปิดงานเทศกาล ในวันที่ ๑๑ สิงหาคม ๒๕๖๑

จึงเรียนมาเพื่อโปรดพิจารณาอนุญาตให้วิทยาลัยดุริยางคศิลป์นำบทเพลงดังกล่าวมาบรรเลงในงานเทศกาลการประพันธ์ดนตรีนานาชาติ “14th Thailand International Composition Festival” จักขอบพระคุณยิ่ง

ขอแสดงความนับถือ

(ดร.ณรงค์ ปรังค์เจริญ)
คณบดีวิทยาลัยดุริยางคศิลป์

ผู้ประสานงาน นางสาวชุดิมา ภูมิณี หมายเลขโทรศัพท์ ๐ ๒๘๐๐ ๒๕๒๕-๓๔ ต่อ ๑๒๐๙ หรือ ๐๘ ๙๑๑๑ ๐๙๔๒

6. Poster บรรยายเรื่อง Bronze and Bamboo Cultures of Southeast Asia เมื่อวันที่ 26 มีนาคม 2561
Asian-Pacific Exhibition, University of Northern Colorado

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School of Music
College of Performing & Visual Arts*

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7. Poster งานเทศกาล Thailand International Composition Festival 2018



ภาคผนวก ก

บทความวิจัย

1. Dhamabutra, Narongrit and Jittapim Yamprai. "Methods in blending ASEAN Cultures in Contemporary Composition." *Rangsit Music Journal* (13/2), 2018.

Methods in blending ASEAN cultures in contemporary composition

บทคัดย่อ

การอนุรักษ์วัฒนธรรมของภูมิภาคเอเชียตะวันออกเฉียงใต้ เป็นหนึ่งในประเด็น สำคัญที่ทุกประเทศ ใน ภูมิภาคในเอเชียตะวันออกเฉียงใต้ พยายามหาทุกวิถีทางและวิธีการในการสืบสานวัฒนธรรมที่เป็น เอกลักษณ์ ของตนให้ดำรงอยู่ในยุคโลกาภิวัตน์ งานวิจัยเรื่องวิธีการผสมผสานวัฒนธรรมดนตรีอาเซียนใน บทประพันธ์ เพลงร่วมสมัยนี้ มีจุดประสงค์เพื่อเสนอแนะ แนวทางในการอนุรักษ์วัฒนธรรมด้านต่างๆ ของ ภูมิภาคเอเชีย ตะวันออกเฉียงใต้ผ่านทางเทคนิค ในการการประพันธ์เพลงร่วมสมัยของณรงค์ฤทธิ์ ธรรมบุตร ผลการวิจัย แสดงให้เห็นถึงการนำเสนอวิธีการในการถ่ายทอดวัฒนธรรมทางด้านศาสนา องค์ประกอบดนตรี และเครื่อง ดนตรีประจำชาติ ตำนานและความเชื่อด้านต่างๆ ของภูมิภาคอุษาคเนย์ ผ่านทางบทประพันธ์เพลง ร่วมสมัยที่ บรรเลง ด้วยวงดนตรีตะวันตกและบทประพันธ์เพลงร่วมสมัย ที่ผสมผสานระหว่างเครื่องดนตรี ประจำชาติ และวงดนตรีตะวันตก

คำสำคัญ: ประพันธ์เพลงร่วมสมัย, อาเซียน, อนุรักษ์วัฒนธรรม

Abstract

Cultural preservation is one of the significant policies that all countries in Southeast Asia are obligated to seek strategies for maintaining it in this modern era. The research Blending ASEAN Cultures in Contemporary Composition aims to demonstrate methodologies for conserving Southeast Asian cultural identities through the contemporary composition of Narongrit Dhamabutra. The research outcome arrays techniques in transforming several ASEAN cultural aspects including religions, traditional musical materials and instruments, mythology and beliefs into a contemporary composition of western orchestra and mixed ensemble.

Keywords: Contemporary composition, ASEAN, cultural preservation

Methods in Blending ASEAN Cultures in Contemporary Composition

Narongrit Dhamabutra

Jittapim Yamprai

One of the great Southeast Asian contemporary composers and ethnomusicologist, José Maceda (1917-2004) had set up a model in combining ethnomusicological research in musical cultures of the Philippines and Southeast Asia with contemporary composition techniques. Michael Tenzer wrote in *José Maceda and the Paradoxes of Modern Composition in Southeast Asia* that Maceda was different from other twentieth century composers who applied exoticism in their works since Maceda did serious fieldwork study in Southeast Asian materials and used it in his composition.¹ Following his attempt in promoting Southeast Asian musical culture through contemporary composition, Narongrit Dhamabutra, Thai national awarded composer, integrated ethnomusicological research in Southeast Asia and expanded further from Maceda in developing new techniques in transmitted not just the Southeast Asian musical materials but the various aspects of Southeast Asian cultures including history, religions and beliefs,

Dhamabutra is a Thai contemporary composer and nationally awarded composer whose entire life has been devoted to seeking methods in contemporary composition for conserving Thai traditional music as well as other Southeast Asian musical traditions. His compositions aim to present not only Southeast Asian musical materials, but also cultural identity, and the ancient heritages of the region. The common features and uniqueness of each Southeast Asian cultural identity are explained in the topics of religious context, indigenous instruments, and musical materials to reveal how contemporary composition is a means to display cultural identity of Southeast Asia. Therefore, this research aims to demonstrate methodologies in composition techniques of Narongrit Dhamabutra in

¹ Michael Tenzer, "José Maceda and the Paradoxes of Modern Composition in Southeast Asia," in *Ethnomusicology* 47/1 (Winter, 2003), 108.

transferring those aspects of ASEAN cultural identity in his compositions. Following to this, are the areas of cultural transmission that Dhamabutra aims to display in his compositions.

1. Displaying religious context

Southeast Asia is a land that has blended with several religious cultures since the ancient times including Animism, Hinduism, Buddhism, Christianity, Islam, and others. All the religions have their own identity along with common features such as bells and the sound of chant. In Buddhism, the “temple sound” is the sound that people hear when they enter the Buddhist temple in Thailand. It involves with sound from chimes and bells of several sizes that are ringing at a different time when the wind blows.

These sounds are transferred into different types of rhythm, creating variety into each voice of different keys and tempi. The “temple sound” brings peace and tranquility to the mind when entering the temple, a perfect place for meditation. The example below displays how the piano can mimic the sound of the temple bells and hanging gong. The lower register of the piano is designated for the largest hanging gong of the temple while the small bells are imitated by the technique of tone clusters notated in triplets at the middle and high register of the piano. The sound of the little bells that typically hang under the roof of the temple is notated with box notation where the performer can select their own tempo to imitate the actual sounding of the bells (see Music Example 1).

Misterioso ♩ = 56
(temple bells)
8th

Piano

pp p f mf

loco 3:2 8th

play in any order, like little bells from the distance.

Music Example 1 Bells and gong in three registers of the piano in the *Quintet Spirit of ASEAN*, mvt. II, mm. 1.

Besides the sound of the temple bell, is the technique to imitate chant. The melodic characteristic and rhythmic pattern of the chant are transferred to the musical theme. The example below (music example 2) is the melody representing the chanting of Mon culture in the *Dvaravati* movement of symphonic poem, *The Empires*. The main characteristic of Mon Chant is the melismatic vocal expression. This character is imitated in contemporary composition technique through the implication of augmented second that leads to the main pitch with a half step motion to create pitch bending and applying glissando to imitate melisma (see Music Example 2).



Music Example 2. Applying pitch bending technique to imitate “Mon chanting,” in the symphonic poem, *The Empire*, mvt. II, mm. 77-80.

2. Imitating the sound of indigenous instruments with western instrument

The sound of Southeast Asian instruments, including chordophone, aerophone, and idiophone, can be imitated by western instruments through new instrumental techniques. The example presented here shows the technique for imitating the sound of instruments including the mouth organ, the gourd monochord instrument, and Burmese ensemble, *hsaing waing*.

2.1 Imitating the sound of the mouth organ

Mouth organ is one of the popular folk instruments of Southeast Asia that circulated in the mainland of Southeast Asia. The characteristic of drone from the mouth organ is

imitated by playing on the open D and A strings on the first and the second violin. The dynamic adjusts from loud to soft to imitate the breathing of the mouth organ player. The marking, *Quasi cadenza* together with the dotted bar line are assigned to create flexible rhythm (see Music Example 3).

Violin I: Moderato $\text{♩} = 96$. (Echo) (Quasi Cadenza). $mp > pp$, $mp > pp$, $mp > pp$, $mp > pp$.

Violin II: (Quasi Cadenza). $f > p$, $f > p$, $f > p$, $f > p$, f , fp , $f > p$, $f > p$.

Viola: Rests.

Violoncello: Rests.

Music Example 3 Creating the sound of “Kaen” (mouth organ in Thailand) in the first and the second violin of *Quintet for the Spirits of ASEAN*, mvt. III, mm. 1-5

2.2 Gourd monochord instrument

Besides the mouth organ, the excerpt in the example 4 displays the technique in imitating the sound of a gourd monochord instrument, which is called “*khse muoy*” in Cambodia or “*pin pia*” in Thailand. The tone color of the instrument is soft and has a unique sound of vibration through the resonance created from gourd that interacts with the chest of the player. The expression, *pizz. molto vibrato* is assigned to imitate the plucking sound of the monochord instrument and *molto vibrato* is to use human body as an amplifier of the quarter tone (see Music Example 4).

Violin I: *pizz. molto vibrato*, mf , f , f .

Violin II: *pizz. molto vibrato*, mf , f , f .

Viola: Rests.

Violoncello: Rests.

Contrabasso: Rests.

Music Example 4 Using pizzicato and molto vibrato to imitate a gourd monochord instrument in the symphonic poem, *The Empires*, mvt. II, mm. 84-86.

2.3 Folk ensemble of North Eastern Thailand and Laos

Varieties of instruments in the aerophone, chordophone, and idiophone categories are the nature of musical life along the Mae Kong river. These native instruments derive from materials used in everyday life, such as a jar, a pottery for keeping salt, marinated fish, rice liquor, etc. The jar is then modified to become a pitched percussion instrument with the rubber band tied across the mouth of the jar. The sound produces from plucking the rubber band and the size of the jar create different pitches in the bass register. Besides the jar, the plucking lute, called *pin* are another popular folk instruments functioning in the folk ensemble.

To displays the sound of these native instruments, instrumentation and string techniques comprising of *col legno*, *sul ponticello*, *sul tasto*, and tapping on instrument's body are applied.

This example shows how cello and bass are assigned to tap on the instrument to imitate the sound of a North-Eastern drum (see Music Example 5).

17 [4]

Vc. solo

pp *pizz.* *mp* *pp* *mp*

Vln. I

p *pizz.*

Vln. II

p *pizz.*

Vla.

p *pizz.*

Vc.

p *pizz.* * Tap on the body of the instrument

Cb.

p *pizz.* * Tap on the body of the instrument

Music Example 5 Hand tapping on Cello and Double bass, *Lao Pan Concerto in Piano Concerto of Siam*, mm. 37-43.

The following example (Music Example 6), indicates the use of snap pizzicato technique by the cello to imitate the sound of north-eastern percussion.

ff Prestissimo con fuoco, quasi cadenza

Prestissimo con fuoco, quasi cadenza pizz.

Vc. solo

Vln. I

Vln. II

Vla.

Vc.

Cb.

Music Example 6 Using “snap pizzicato” to imitate native percussion instrument, *Lao Pan Concerto*, mm. 401-403.

2.4 Burmese *Hsaing Waing*

In this example, the goal was to present the over all sound of the Burmese *hsaing waing* ensemble that comprises the sound of drums, gongs, and percussion instruments. The sound of *chauk lon pat* (set of drums) and the cymbals are imitated in the example 7 through the sound of four timpani that are tuned with different pitches. The vibraphone represents the gongs sound of *muang hsaing* and *ci waing*. Trumpet and horn imitate the sound of *nhe*, the Burmese folk oboe (see Music Example 7).

Hn.

Tpt.

Timp.

Vib.

Cym.

Music Example 7 Imitating the sound of *hsaing waing* ensemble through western percussion instruments, *The Empires*, mvt. I, mm. 65-67.

3. Displaying musical tradition and festival

Presenting cultural identity can be done through the creative sound that displays the atmosphere of the event as well as the music tradition itself. The example here is to present Indonesian *Gejog lesung*, the working song that imitates the life of people in grinding rice. Many wooden poles are thumping at a different time in a large hollowed piece of wood by performers to imitate the action of pounding the rice. To imitate the sound of *Gejog lesung*, the techniques of slapping on the body of the string instruments are used to represent the sound of the wooden pole. Since the poles are thumped at different times, polyrhythm and metric modulation are applied with an ostinato pattern that is placed among the strings section in a changing tempo, to represent the rice pounding that is done freely without a strict pattern.

At the beginning of the movement, the tempo is set with the quarter note at 120, then the grouping is changed to a quintuplet in which a quarter is set at 140 and keeps increasing until it reaches 150. Examples presented here (Music Example 8.1-8.2) are from the fourth movement of *Quintet for the Spirits of ASEAN*.

The image displays a musical score for Music Example 8.1, featuring an ostinato pattern in a tempo of 120. The score is written for four instruments: Violin I, Violin II, Viola, and Violoncello. The tempo is marked as 'Allegro molto, preciso meccanico' with a quarter note equal to 120 (♩ = 120). The score is divided into two main sections: 'a' and 'b'. Section 'a' is marked with a forte (f) dynamic and includes the instruction 'Tab on the body of the instrument'. Section 'b' is marked with a forte (f) dynamic and includes the instruction 'Tab on the body of the instrument'. The score shows a complex rhythmic pattern with slurs and accents, indicating a polyrhythmic and metric modulation effect.

Music Example 8.1 Ostinato pattern in a tempo of 120, *Quintet for the Spirits of ASEAN*, mvt. V, mm. 1-10.

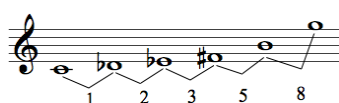


Music Example 8.2 Ostinato pattern in a quintuplet setting of 144, *Quintet for the Spirits of ASEAN*, mvt. V, mm. 37-40.

4. Cultural symbolism

Symbolism in Southeast Asia involves mythical creatures, folklore, and signs. It represents feelings and emotions that are attached to culturally significant stories that have been passed down since ancient times. *Gala* or *Kirtimukha* is one of the Hindu Gods created by Shiva. Traditionally, the face of *Gala* is inscribed over the entrance of the Hindu temples in South Asia and Southeast Asia. Legend tells the story of his birth from Shiva's anger — that *Gala* came out of Shiva having the body of a giant with a lion's face. *Gala* destroyed everything, created chaos all over the place. Shiva, avoiding the doom, asked *Gala* to eat himself, in which he obeyed Shiva. Only his cruel face without the lower lip was left. In sympathy for his sacrifice, Shiva placed him at the entrance of his temple.

From the legend, *Gala* is a symbol of fierce violence, fear, and also connects to Lord Shiva himself. To present the image of *Gala* and his connection with Lord Shiva, non-traditional harmony is invented by the use of the intervals reflecting the distance of the planets to the sun, arranged from the closest one. Hence the serial number of half-step intervals produces the numbers of 1, 2, 3, 5, and 8, which results in the pitches of C, Db, Eb, F#, B, and G (see Music Example 9).



Music Example 9 The series reflecting the distance of the planets from the sun

This series represents Lord Shiva, while other musical materials, including extreme dynamic force, frequent accents, utmost contrast between lowest and highest registers, tremolo, and the techniques of *sul ponticello* that produces the high harmonic nasal sound (bowing near the bridge) and *portamento* (sliding from one note to the others) in strings instrument (see Music Example 10) express the ferocious nature of *Gala*.

The image displays a musical score for Music Example 10, which is an application of dynamic forces, tremolo, extreme contrasting register, and strings techniques to portraying *Gala*, *Quintet for the Spirits of ASEAN*, mvt. IV, mm. 10-17. The score is presented in two systems. The first system (measures 10-21) features a string quartet (Violin I, Violin II, Viola, and Cello/Double Bass) and a piano accompaniment. The string parts exhibit extreme dynamic contrasts, including *p* (piano), *ff* (fortissimo), *pp* (pianissimo), and *sul pont.* (sul ponticello). The piano part includes a tremolo in the right hand and a sustained note in the left hand. The second system (measures 14-17) shows a more complex texture with multiple string parts and piano accompaniment, including dynamic markings like *f* (forte), *p* (piano), and *ff* (fortissimo), and techniques like *ord.* (ordine) and *8va* (ottava).

Music Example 10 Application of dynamic forces, tremolo, extreme contrasting register, and strings techniques to portraying *Gala*, *Quintet for the Spirits of ASEAN*, mvt. IV, mm. 10-17.

5. Traditional melody

Melody presents each culture's identity due to the characteristics of pitch sets, intervallic structure, modes, and styles. Implying traditional melody is, therefore, not only preserving the tune, but also provides the entire composition with cultural identity. The melodies presented here are drawn from the

Mon melody *Nang kruan* (woman's weeping) and the Vietnamese melody *Luu thuy* (river flows). Each presents different techniques for applying traditional melodies in contemporary compositions.

The first melody, *Nang kruan* maintains only the melodic motif, but restructured in the new rhythm and melodic inversion (see Music Example 11).

Music Example 11 *Nang kruan* melody in triplet and its melodic inversion, *The Empires*, mvt. II, mm. 73-76.

The second melody, *Luu thuy*, aims to keep the whole melody in its original shape and rhythm but provides a counter melody that vivifies the beautiful flowing river of its title (Music Example 12).

Music Example 12 Counter melody depicting river flowing in woodwinds that leads to Vietnamese melody in strings in the symphony, *The Harmony of Chimes*, mvt. VI, mm. 7-17.

6. Blending traditional instruments with western orchestra

The major challenge for every contemporary composer is an attempt to blend the traditional instrument with the western orchestra. The challenges always surround the differences in tuning systems and modes and how to maintain both identities in one composition. The examples presented here are from the symphony, *The Harmony of Chimes*, using five Southeast Asian instruments: Burmese *Saung Guak*, Indonesian *Bonang*, Thai *Pii*, Philippine *Kulintang*, and Vietnamese *Dan Bau*.

Two movements, *Bonang* and *Kulintang* are presented here with different methods in maintaining their identity along with western orchestra. To make the identity remain, the traditional instrument should not be forced to change its tuning to western tuning. Likewise, western orchestra should not change their tuning to match others. Therefore, in order for both cultures to perform together, some significant pitches should be synchronized together including the tonic and dominant. The rest of the pitches should be left in their tradition.

5.1 Indonesian *Bonangs* and western orchestra

The following example displays the application of Indonesian musical scales: *slendro* and *pelog*. The seven-pitch *pelog* scale is played by the western orchestra while the five-pitch *slendro* is used for the *bonang panerus* and *bonang barung*. This maintains the tonic dominant pitches for all instruments while giving each instrument freedom to avoid alteration. Also, in order to represent the identity of Indonesian music, not only their scales the scales should be used, but also the structure and style are important. The Indonesian ensemble is considered a layered ensemble where each instrument presents the selected pitches in a different time and rhythm. Therefore, in this example the western canon

technique (see Music Example 13.1) with diminution and augmentation are applied through heterophonic texture (see Music Example 13.2).

Music Example 13.1 shows a musical score for Percussion 1, Percussion 2, and Bonang. The score is in 4/4 time and features the slendro scale. Percussion 1 and 2 play a melodic line with a 'mp' (mezzo-piano) dynamic. The Bonang part is divided into sections A, B, and C, also marked 'mp'.

Music Example 13.1 Using canon technique to present the *slendro* scale, *Harmony of Chimes*, mvmt. III, mm. 1-12

Music Example 13.2 shows a musical score for Glock, Vib, Perc, Hp, and Bon. The score is in 4/4 time and features the slendro scale. The Glock and Vib parts play a melodic line with a 'diminution' label. The Perc part plays a rhythmic pattern with an 'augmentation' label. The Hp part plays a melodic line with a 'heterophony' label. The Bon part is divided into sections F and G, marked 'mf' (mezzo-forte).

Music Example 13.2 Using diminution and augmentation technique with heterophonic texture to imitate musical layers of *Gamelan* ensemble, *Harmony of Chimes*, mvmt. III, mm. 1-12.

5.2 Philippines *Kulintang* and western orchestra

The nature of *Kulintang* instrument is similar to *Bonang* where the pitches of the gongs are selected depending on their repertoire. *Kulintang* contains seven to nine gongs. These selected pitches of gongs are set in rhythmic mode and are performed with improvisation. José Maceda (2001) clarified that there are no standard tunings and also pitches are varied among ensembles in the Philippines.

In this example, the contemporary composition is structured in call-and-response style, having *Kulintang* interchange its dialogue with the western orchestra. Melody is created from the selected five pitches of *Kulintang* that are similar to western pitches (Eb, F, G, A, and B). Musical texture is constructed with stratification techniques to imitate the sound of the *Kulintang* ensemble (see Music Example 14).

Music Example 14 Techniques of stratification to imitate Kulintang ensemble and leave Kulintang instrument for their rhythmic improvisation, *Harmony of Chimes*, mvt. V, mm. 76-81.

Conclusion

Contemporary composition can be one of the effective ways to promote musical cultures of Southeast Asia. Through compositional techniques, along with ethnomusicological research on musical traditions, instruments, ensembles, and sound systems, the cultural identities of Southeast Asia and their heritage can be presented in a modern ways that could attract the audience of this contemporary world. For contemporary composers, this research provides a new guideline in creating contemporary composition for the benefit of world musical heritage as well as adding new instrumental techniques to the contemporary composition methods and expanding the area of contemporary composition in promoting Southeast Asian musical cultures. By studying, learning the cultures, the right perspective in understanding cultural identity can be created. As a consequence, western contemporary composers can realize its value and significance in musical culture preservation.

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Teaching Asian musical materials through songs, dances, and games

Jittapim Yamprai
Assistant Professor (Music History & Ethnomusicology)
School of Music, University of Northern Colorado
Email: jittapim.yamprai@unco.edu; Phone: 970-405-9323

Today music education in the schools has changed its traditional practices from American and European based music curriculum to integrate more world music elements in order to serve the multi-cultural community that keeps growing in the United States. Campbell stated in her article *Music Instruction: Marked and Molded by Multiculturalism* that

“Multicultural music education” is the study of music from groups distinguished by race or ethnic origin, age, class, gender, religion, life style and exceptionality... “Multiethnic” is a label applied to curricular developments that focus exclusively on the study of groups distinguished by ethnic origin. A music program that focuses in greater depth on a representative and prominent musical style of a group of people united by national or ethnic origin is a model of “multiethnic music education.”²

Music education books have integrated songs and dances around the world for school teachers to invite students of every age to experience other cultures with a greater goal that understanding and learning other cultures outside their own comfort zone can reduce problems of racism and break down the barriers of differences.

Among sources published in music education books, the majority of songs and dance selections are drawn from popular countries of European, Latin America, African, Australian, West Asia and East Asia regions and less are from countries of South and Southeast Asia. Also, many songs and dances, in reality, share history, materials, and cultures with each other. That information should be part of the instruction and a group of songs or dances that share the same cultures should be taught together in order to erase the border of differences for the student.

The dance presented in this article is one of the famous bamboo dances of Southeast Asia; however, only the Philippines *Tinikling* dance is made popular due to its festive

² Patricia Shehan Campbell, "Music Instruction: Marked and Molded by Multiculturalism" in *American Music Teacher* 42, no. 6 (1993): 14-69.
<http://www.jstor.org.unco.idm.oclc.org/stable/43542462>.

character and simple triple meter that is derived from Spanish music during the western colonization in Southeast Asia since the seventeenth century. Nevertheless, the bamboo dance is practiced all over the region from Southern China to the mainland and maritime of Southeast Asia. Therefore, teaching bamboo dance can and present the cultures that are bound together by the agricultural lives of people in this region and the bamboo — the material that is rooted in everyday life for these people providing food, tools, housing, and musical instruments. Similarities and cultural identity can be introduced to the students through the same materials — “bamboo poles” — along with the various music of the cultures in Southeast Asia.

Bamboo Dance in Southeast Asia

Bamboo dance represents the agricultural life of the people in Southeast Asia. Major landscapes of the region are used for growing rice, the fundamental food for all people in Southeast Asia. Traditionally, growing rice is done as group-work by the villagers, who will later all do the harvest together. Music accompanying their work, therefore, is associated with their living, such as growing rice, pounding paddy, or fishing. Bamboo dances were developed from their work when pounding rice paddies with a pestle in a large rice mortar. While helping each other pounding the paddies, workers use the rhythm of the pestle hitting the rice mortar to create a rhythmic base for music, such as “Gejog Lesung” in Indonesia. Others, sing a folksong while working. Later, it developed into a dance form as an entertainment after a long work day. The bamboo dance or pestle dance is called by different names in various regions: *Tinikling* in Philippines, *Robam Kous Angrey* in Cambodia, *Lao kra-tob mai* in Thailand, and *Mua sap* in Vietnam. There are also distinct bamboo dances of ethnic minorities including Chin and Karen bamboo dance in Myanmar, and various bamboo dances from each tribe in Indonesia and Malaysia.

Basic materials needed for teaching bamboo dance are bamboo poles. One set of bamboo dance materials is comprised of two bamboo poles at the length of 8-10 feet, two wood blocks (such as a 2x6 about 30-36 inches long) to support the bamboo, and an audio recording of the music used in each Southeast Asian country, or this can be played on the piano. The number of the bamboo sets used in a class (can vary from 2-6) depends on the number of students in the classroom and the size of the classroom.

Equipment:

1. Two bamboo poles (9 ft.)
2. Two rectangle solid wood blocks (2x6 x 30’')
3. Audio files

Players:

3-4 (2 people doing bamboo clapper, 1-2 performing the dance)

Philippines ‘Tinikling’

The dance imitates the movement of the *Tikling* bird while walking on the grass stems in the rice field of the Philippines. The music accompanying *Tinikling* came from the Spanish *Rondalla* (Folk music played by a string ensemble). Bamboo dance has become a popular dance performed in all festive events in Philippines. Each region in the Philippines has their own style of dance with various names and different musical instruments to accompany the dance.

Tinikling music (3-beat pattern)

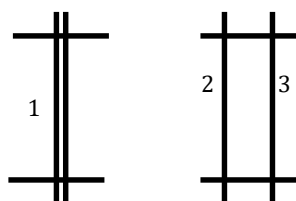
Influenced by Spanish *Rondalla*, *Tinikling* music is in 3/4 meter.

Dance pattern:

Rhythm	1	2	3
Bamboo	In	Out	Out
	(clap)	(tap)	(tap)

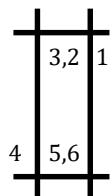
How to play:

1. Listen to *Tinikling* song; teach students to feel the 3-beat group and clap their hands on beat 1
2. Practice clapping the bamboo on beat 1 and tap on beats 2 and 3



3. Practice dancing without music
4. Practice dancing with music but without moving the bamboo through the order of these steps (with music on the last step):

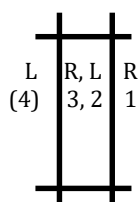
4.1 Beginning position: each dancer will stand on different sides of the bamboo, while standing on the left foot outside the bamboo, touch the tip of the right foot on beat 2 and beat 3 inside the bamboo and on beat 1 step outside the bamboo.



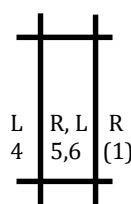
4.2 Start dancing to match the pattern without moving the bamboo

(beat 1 - outside the bamboo, beat 2 and 3 inside the bamboo). Beat 2 with the left foot and 3 with the right foot, then 4 will be with the left but changing to the other side of the bamboo. Beats 5 and 6 are inside the bamboo and then the pattern repeats.

(1)



(2) Reverse the dance



4.3 Repeat steps 1 and 2 with music and then with the bamboo clapping

Cambodian *Robam Kous Angrey*

The Cambodian bamboo dance was a development from the action of milling the rice by using two people alternately pounding the paddies with a pestle in the rice mortar, providing a constant rhythm. The dance is derived from two different roots: one from the *Kuoy* in Cambodia (ancient Khmer people) and the second from the Philippines (the Philippines presented the dance to entertain the Cambodian King during his visit in Philippines). However, when accompanying the pestle, Cambodian music uses a different meter than the 3-beat pattern of the Philippines (*Rondalla*) music. The dance, as we know it today, has been recreated by the Royal University of Fine Arts and is a product of modernization.³ More authentic versions of this dance can be found in the remote regions of Northern Cambodia. The old type of folk ensemble has replaced by the more formal Mahori

³ Sam-Ang Sam and John Melville Bishop, *Cambodian Court Dances: The Next Generation*, West Hills, CA: Media Generation, 2001, pp. 87-90.

ensemble (one of the popular ensembles in Cambodia). Today, the pestle dance is a very popular dance in Cambodia.

Music of Angre Dance (4/4)

Cambodian music is written in either duple or quadruple meter depending on the transcriber. The melody is written in a C pentatonic scale with simple melodic structure of 8 measures in length.

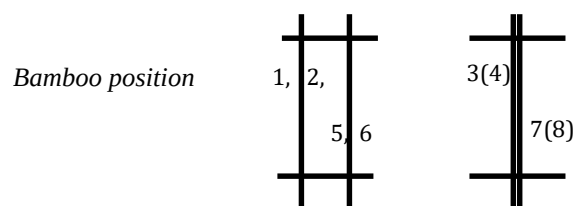


Dance pattern: (8-beat pattern)

Rhythm	1	2	3	4	5	6	7	8
Bamboo	Out	Out	In	-	Out	Out	In	-
	(tap)	(tap)	(clap)	-	(tap)	(tap)	(clap)	-

How to play:

1. Listen to the *Angre Dance* song; teach students to feel the 4-beat group in the 8-beat pattern, and clap their hands while counting beats 1-4 (clap on 1-2-3 and hold their hands on beat 4), then counting 5-8 (clap on 5-6-7 and hold their hands on beat 8)
2. Listen to the *Angre Dance* song, counting 8-beat pattern by tapping both hands on the front of their legs (beat 1-2) and clap their hands on beat 3 (hold it while counting 4). Then, do the same pattern on beat 5-8 (tap on the legs while counting 5 and 6, clap hands on 7 and hold it while counting 8)
3. Repeat step 2 with the bamboo on the 8-beat pattern. Beat 1 and 2, 5 and 6 are done by tapping on the wooden board and 3 and 7 are done by clapping it together (4 and 8 are done by keeping the pole in the clap position but no clapping on the beat).



4. Practice dancing without music (first time without moving the bamboo, second time with the bamboo clapping)

5. On beats 4 and 8, while the dancer is standing on one foot, the other foot should be raised to the front and a hand gesture is added in which the dancer, with their arms out to the sides of their bodies to maintain balance (elbows bent), moves their hands in a circular motion at the wrist only so that their palms face outward (away from their bodies) on each side. This is a dance movement common to many cultures in Southeast Asia.

Beginning position: each dancer will stand on different side of the bamboo

beat 1 - put your right foot in the middle of the bamboo

beat 2 - replace the right foot with the left

beat 3 - step out of the bamboo by placing right foot on the floor
and clap the hand

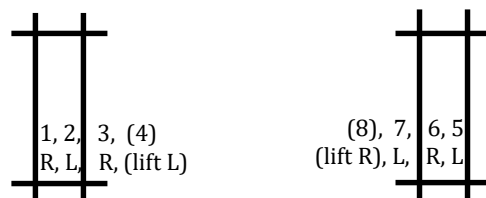
beat 4 - hand gesture with left foot lifting to the front

beat 5 - put the left foot in the middle of the bamboo

beat 6 - replace the left foot with the right

beat 7 - step out of the bamboo by placing the left foot on the floor
and clap the hand

beat 8 - hand gesture with the right foot lifting to the front



5. With music, start dancing to match the pattern with bamboo clapping

Thai *Lao Kra-tob mai*

Lao Kra-tob mai is developed from the pestle dance, one of the popular folk dances in the Northeastern part of Thailand. Similar to the Cambodian pestle dance, it imitates the lifestyle of agricultural workers among Thais and many ethnic minorities residing in Thailand. Each region calls the pestle dance differently including *Saek ten saak*, and *Rueam am-re*. In 1957, the Fine Arts Department of the Government of Thailand modified the dance pattern and song accompanying the dance in order to annex the gracefulness of Thai classical dance with its regional folk dance framework. Since then, *Lao Kra-tob mai* has become the bamboo dance of Thailand and is performed at any festive events. This version of bamboo dance is less active and more graceful than the previous versions learned, with the dancers only stepping in and out of the bamboo on beats 7 and 1.

Lao Kra-tob mai Song

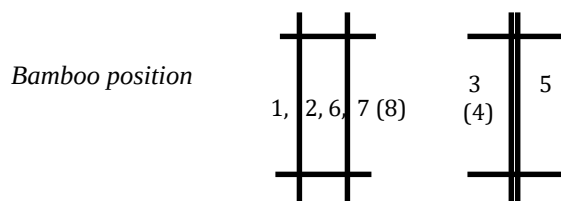
The song *Lao Kra-tob mai* is written in duple time (moderate tempo) with the pentatonic scale (C-D-E-G-A). The term *Lao* in the song title refers to the Lao rhythmic pattern, one of the fundamental rhythmic patterns in Thai rhythm.

Dance pattern: (8-beat pattern)

Rhythm	1	2	3	4	5	6	7	8
Bamboo	Out	Out	In	-	In	Out	Out	-
	(tap)	(tap)	(clap)	-	(clap)	(tap)	(tap)	-

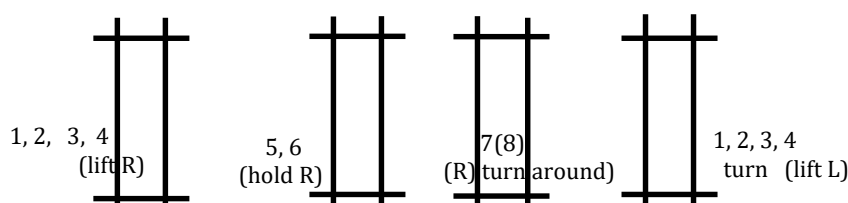
How to play:

1. Listen to the *Lao Kra-tob mai* song; teach students to feel the 4-beat group in 8-beat pattern, and clap their hands while counting beats 1-4 (clap on 3 and hold their hands on beat 4), then counting 5-8 (clap on 5, 6, and 7, hold their hands on beat 8).
2. Listen to *Lao Kra-tob mai* song, counting 8-beat pattern by tapping both hands on the front of their legs (beat 1-2) and clap their hands on beat 3 (hold it while counting 4). Then, reverse the pattern on beat 5-8 (clap on 5, then tap on the legs while counting 6 and 7, and hold it while counting 8)
3. Repeat step 2 with the bamboo on the 8-beat pattern. Beat 1 and 2, 6 and 7 are done by tabbing on the wooden board and 3 and 5 are done by clapping it together (4 and 8 are done by keeping the pole in its current position but no clapping on the beat).



4. Practice dancing without music (first time without moving the bamboo, second time with the bamboo clapping)

Beginning position: each dancer will stand on different sides of the bamboo



beat 1-3 Hands at the center of the chest (thumb and index fingers of each hand touch each other while the rest spread out like wings, palms up)

beat 4 Lift the right knee to the front while spreading both hands to each side of the body in the shape of a half-circle (hands are now open, fingers spread, with palms facing out)

beat 5-6 Hold the same posture

beat 7 The leg that is lifted (right) will step in the center of the bamboo in a turning position (90° clockwise) - hands moving back to the center of the chest as before

beat 8 Hold the same position on beat 7 (now right foot will be in the center of the bamboo while left foot is slightly lifted)

beat 1-3 The left foot steps out of the bamboo and completes the turn around (2-3)

beat 4 Lifting the left knee up-front while spreading both hands to each side of the body in the shape of a half-circle

beat 5-6 Hold the same posture

beat 7 The leg that is lifted (left) will step in the center of the bamboo in a turning position- hands moving to the center of the chest

beat 8 Hand gesture remains with the right foot lifting upfront

The next cycle begins with the right foot stepping out of the bamboo on beat 1, completing the turn around, then being raised on beat 4 with the outward hand gesture.

5. Practice with music and moving the bamboo

Songs and Games

1) *Kagome Kagome*

The Japanese children's song called *Kagome* is sung by children while playing this game, usually without instrumental accompaniment. Other popular children's songs are *Toryanse*, *Warabe Uta*, *Teru-teru-bozu*, etc.

Purpose of "Kagome Kagome:" recognizing the tone color of human voices



How to play:

- 1) Have one person sitting inside a circle formed by the others
- 2) The chosen one will cover his/her eyes with their hands
- 3) Others will sing *Kagome* and move around the circle
- 4) When the song ends, the person who sits in the circle has to

guess the name of the person standing behind his back by recognizing the voice

Melody of "Kagome"

Kagome is written in the *minyo* scale, providing the sense of a minor third and a fourth. Have students sing the *minyo* scale on A (A-C-D-E). *Minyo* is used in many Japanese folksongs.

Kagome Kagome

Musical notation for the song "Kagome Kagome" in treble clef, 4/4 time. The melody is written on three staves. The lyrics are in Japanese and are written below the notes. The first staff contains the first line of the song, the second staff contains the second line, and the third staff contains the third line. The lyrics are: Ka - go-me ka - go-me ka - go no na - ka no to ri - wa It - su it - su de ya - ru Yo - a - ke no ban - ni Tsu - ru to ka - me ga su - bet - ta u - shi - ro no shou - men da - re.

Ka - go-me ka - go-me ka - go no na - ka no to ri - wa It - su it - su

de ya - ru Yo - a - ke no ban - ni Tsu - ru to ka - me ga

su - bet - ta u - shi - ro no shou - men da - re

Translation of *Kagome Kagome*

<i>Kagome Kagome</i>	<i>Kagome Kagome</i>
<i>Kago no naka no tori wa</i>	The bird in the cage
<i>Itsu itsu de yaru</i>	When, when will it come out
<i>Yoake no banni</i>	At night before dawn
<i>Tsuru to kame ga subetta</i>	A crane and a tortoise slip away
<i>Ushiro no shoumen dare?</i>	Who is right behind my back?

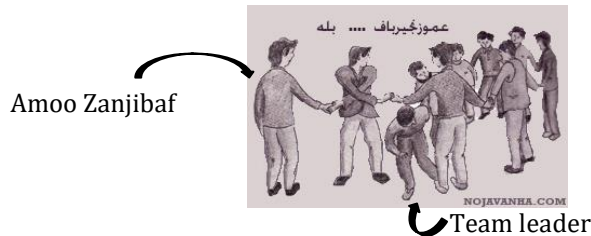
2) Iranian *Amoo Zanjir baf* (Aa-moo Zan-jiir-baf)

Amoo Zanjir baf in Farsi means Uncle Chain-maker. It is one of the traditional children's games in Iran, suitable for children at early ages. The purpose of the game is to learn animal sounds. However, the song and game create a sense of unity and, at the same time, the text can teach children Iranian culture of traditional foods and family relationships. In the past, the game was also related to the Nowruz festival (New Year festival) in March where families and children will sing and play the game outside to celebrate the beginning of Spring.

How to play:

- 1) Select 2 students: one to be *Amoo Zanjir baf* (chain maker) and the other to be the team leader
- 2) The two selected people will hold each other's hands on one side and children will hold their other hands and try to make a circle
- 3) The team leader starts to sing asking questions and then *Amoo Zanjir baf* and the children will answer or play the audio file and let students answer '*bale*' in response to the questions.
- 4) After the song ends with the phrase "*ba sedaye chi*" (ba se-da-ye chi), *Amoo Zanjir baf* will say an animal name, then the team leader along with the children make that animal's sound
- 5) The team leader, then, should let go of *Amoo Zanjir baf*'s hand and pass under the hands that are being held up by *Amoo Zanjir baf* (who stands still and never moves) and the person who holds his other hand. Other students will follow the team leader (still holding their hands) to pass under the lifted hands of *Amoo Zanjir baf* and the person next to him.
- 6) After passing under the hands, the team leader will go back to his previous spot and resume holding the hand of *Amoo Zanjir baf*. Other students who followed the team leader also go back to their previous positions.

- 7) The last person of the chain (which is actually the one who holds the other hand of *Amoo Zanjir baf* will turn around and face outside the circle (see picture). In the process, this person's arms will become crossed in front of them.



- 8) The singing part keeps going on, with the line of children passing under the hands of last person whose arms are crossed each time, until all children have their arms crossed and are facing outside the circle. At this moment, *Amoo Zanjir baf* and the team leader are standing at the different ends of the chain. Then, the team leader and *Amoo Zanjir baf* try to test the strength of the chain. Both will start pulling the hands of the children until the chain will be torn in one spot. Whoever has more children left on their side will be the winner.

Music of *Amoo Zanjir baf*

Amoo Zanjir baf is a children's folksong. The song inherited the microtone note (a note located between A and Ab), which is a major characteristic of Persian music. While European scales are built on half-steps, Middle Eastern and some Asian music use quarter-steps between certain notes, creating pitches that fall between the keys on the piano. To understand microtones, let the students learn to sing the song by listening to the audio file.

Lyric Translation:

Team leader: *Amoo Zanjir baf*, (uncle chain-maker)

Children and Amoo: *bale* (Yes)

T: *Zanjire mano bafty?* (did you make my chain?)

Children and Amoo: *bale* (Yes)

T: *poshte kooch andakhti?* (Did you put it behind the mountains?)

Children and Amoo: *bale* (Yes)

T: *baba umade*, (Father is coming)

Children and Amoo: *chi chi ovrde?* (what did he bring for us?)

T: *Nokhod o kishmish* (chickpea and raisins)

C & A: *Bokhoro bia* (eat it and come to us)

T: *Ba sedaye chi?* (With whose voice?)

Amoo Zanjir baf will say an animal name and children will make the sound of that animal.

Amoo zanjirbaf

A-moo zan jir baf Ba - le - Zan-ji-re ma-no-o baf - ty Ba - le

Posh-te koo an-dakh-ti Ba - le Ba-ba u-ma de Chi chi o-vor-de

No kho - do kish- mish Bo - kho - ro bi - a

Ba se - da - ye chi Ba se - da - ye chi

The songs and dances presented here are examples of the possibilities that music teachers can use in their classes. The purpose of each song, dance, and game should be explained so that students can learn to appreciate the music within the culture that created it. At the same time, they will develop other skills in music such as rhythm, scales, pitches, intervals, ear training, and learning the music theory of each culture. These come along with the learning of cultural context including fundamental facts about the people, language, food, and character in each country.

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ภาคผนวก ข
โน้ตเพลง
The Empires

The Empires

I Bagan...

Symphonic Poem for Orchestra

Narongrit Dhamabutra

A

Allegro molto $\text{♩} = 144$

Piccolo
Flute 1,2
Oboe
English Horn
Clarinet
Bassoon
Contrabassoon
Horn 1,2
Horn 3,4
Trumpet 1,2,3
Trombone 1,2
Trombone 3 + Tuba
Timpani
Vibraphone
Xylophone
Cymbals
Percussion 4
Harp
Violin I
Violin II
Viola
Violoncello
Contrabass

8

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Cym.

Perc.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

f *mf* *ff* *mf*

15

Picc. *f* *mf*

Fl. *f* *mf*

Ob. *f* *mf*

Eng. Hn.

Cl.

Bsn. *f* *a2*

Cbsn.

Hn. *f*

Hn. *f*

Tpt. *f* *mf* *ff*

Tbn. *f* *mf* *ff*

Tba. *f* *mf* *ff*

Timp. *ff* *mf* *ff*

Vib.

Xyl.

Cym.

Perc.

Hp. *mf*

Vln. I *pizz.* *mp* *pizz.* *arco* *mf* *arco*

Vln. II *pizz.* *mp* *pizz.* *arco* *mf* *arco*

Vla. *pizz.* *mp* *pizz.* *arco* *mf* *arco*

Vc. *pizz.* *mp* *pizz.* *arco* *mf* *arco*

Cb. *pizz.* *mf*

24

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Cym.

Perc.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

E

32

Picc. *f*

Fl. *mp* *a2* *f*

Ob. *mp* *a2* *mf* *f*

Eng. Hn. *mp* *f*

Cl. *mp* *mf* *f*

Bsn. *mp* *mf* *f*

Cbsn. *f* *mf* *f* arco

Hn. *mp* *mf* *f*

Hn. *f*

Tpt. *mf* *f*

Tbn. *mp* *mf*

Tba. *mf*

Timp. *p* *mf*

Vib. *f*

Xyl. *f*

Cym. *f*

Perc. *f*

Hp. *mf*

Vln. I *p* *f* *mf* *f*

Vln. II *p* *f* *mf* *f*

Vla. *p* *f* *mf* *f*

Vc. *p* *mf* *f*

Cb. *p* *f* *mf* *f* arco

39

Picc. *ff*

Fl. *ff*

Ob. *ff*

Eng. Hn. *ff*

Cl. *ff* a2 *f*

Bsn. *ff* a2 *f*

Cbsn. *ff*

Hn. *ff* *f*

Hn. *ff* *mf*

Tpt. *ff* 1.2 *mf*

Tbn. *ff* 1.2 *mf*

Tba. *ff*

Timp. *mf* *ff* *mf* *ff* *mf* *ff*

Vib. *f* *ff* *f*

Xyl. *mf* *ff* *mf* *ff* *mf* *f*

Cym. *f*

Perc. Chimes 1.2

Hp. *f*

Vln. I *ff* *f*

Vln. II *ff* *f*

Vla. *ff* *f*

Vc. *ff* pizz. arco

Cb. *ff* pizz. arco

47

The musical score is arranged in a system of staves. The instruments and their parts are as follows:

- Picc.**: Piccolo, starting in measure 47 with a *mf* dynamic.
- Fl.**: Flute, starting in measure 47 with a *mf* dynamic.
- Ob.**: Oboe, starting in measure 47 with a *mf* dynamic.
- Eng. Hn.**: English Horn, starting in measure 47 with a *mf* dynamic.
- Cl.**: Clarinet, starting in measure 47 with a *mf* dynamic.
- Bsn.**: Bassoon, starting in measure 47 with a *mf* dynamic.
- Cbsn.**: Contrabassoon, starting in measure 47 with a *mf* dynamic.
- Hn.**: Horns, starting in measure 47 with a *mf* dynamic.
- Tpt.**: Trumpets, starting in measure 47 with a *mf* dynamic.
- Tbn.**: Trombones, starting in measure 47 with a *mf* dynamic.
- Tba.**: Tuba, starting in measure 47 with a *mf* dynamic.
- Timp.**: Timpani, starting in measure 47 with a *mf* dynamic.
- Vib.**: Vibraphone, starting in measure 47 with a *mf* dynamic.
- Xyl.**: Xylophone, starting in measure 47 with a *mf* dynamic.
- Cym.**: Cymbals, starting in measure 47 with a *mf* dynamic.
- Chim.**: Chimes, starting in measure 47 with a *mf* dynamic.
- Hp.**: Harp, starting in measure 47 with a *mf* dynamic.
- Vln. I**: Violin I, starting in measure 47 with a *mf* dynamic.
- Vln. II**: Violin II, starting in measure 47 with a *mf* dynamic.
- Vla.**: Viola, starting in measure 47 with a *mf* dynamic.
- Vc.**: Violoncello, starting in measure 47 with a *mf* dynamic.
- Cb.**: Contrabass, starting in measure 47 with a *mf* dynamic.

The score includes various musical notations such as notes, rests, and dynamics (*mf*, *f*). The key signature is one flat (B-flat), and the time signature is 4/4.

I

56

Picc. *ff*

Fl. *ff*

Ob. *ff*

Eng. Hn. *ff*

Cl. *ff*

Bsn. *ff*

Cbsn. *ff*

Hn. *ff*

Hn. *ff*

Tpt. *ff* 1,2 3

Tbn. *ff* 1,2 3

Tba. *ff*

Timp. *ff*

Vib. *ff*

Xyl. *ff*

Cym. *ff*

Chim. *ff*

Hp. *gliss.*

Vln. I *ff*

Vln. II *ff*

Vla. *ff*

Vcl. *ff*

Cb. *ff*

J molto accel. 9

62

Picc. *Simile*

Fl.

Ob. *a2*

Eng. Hn.

Cl. *a2*

Bsn.

Cbsn.

Hr.

Hr.

Tpt. *1, 2*

Tbn. *3*

Tba.

Timp.

Vib.

Xyl. *Simile*

Cym. *ff*

Bass Drum

Chim. *ff*

Hp.

Vln. I *molto accel.* *Simile*

Vln. II *Simile*

Vla. *Simile*

Vc.

Cb.

K II Dvaravati...

68 Adagio $\text{♩} = 56$

Picc. *espress.* 1 *mp*

Fl. *espress.* 1 *mp*

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn. *molto espress.* 1 solo *mp*

Hn.

Tpt.

Tbn.

Tba.

Timp. *pp*

Vib. *p*

Xyl. To Chim. Chimes *p*

Cym.

B. D.

Hp. *p*

Vln. I Adagio $\text{♩} = 56$

Vln. II

Vla.

Vc. *pp* *gliss.* *mf*

Cb. *pp*

76 **L**

Picc. *mp*

Fl.

Ob. *mp*

Eng. Hn.

Cl. *mp* solo *molto espress.*

Bsn. *pp*

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib. *p* To Glock.

Chim. *p*

Cym.

B. D.

Hp.

Vln. I *p*

Vln. II *p*

Vla. *p*

Vc. *p*

Cb. *pp*

59

89 **Più mosso** $\text{♩} = 66$

Picc. *mp* *p*

Fl. *mp* *p* *a2* *mf*

Ob. *mp* *p*

Eng. Hn. *mp* *p*

Cl. *mp* *p*

Bsn. *mp* *p*

Cbsn. *mp* *p*

Hn. *p*

Hn. *p*

Tpt. *p*

Tbn. *p*

Tba. *p*

Timp. *p* *mp*

Vib. *mf*

Chim. *mf*

Cym. *mf*

S. D. *p*

Hp. *mf* *p*

Vln. I *pp* *pizz* *mf* *arco*

Vln. II *pp* *mf* *mf*

Vla. *mf*

Vc. *mf*

Cb. *mf*

Più mosso $\text{♩} = 66$

97

Picc. *f*

Fl. *a2* *mf* *f*

Ob. *a2* *mf* *f*

Eng. Hn.

Cl. *f*

Bsn. *a2* *f*

Cbsn.

Hn. *mf* *f*

Hn.

Tpt.

Tbn. *mf*

Tba. *mf*

Timp. *f* *mf*

Vib.

Chim.

Cym.

S. D.

Hp. *mf* *f* *mf* *f*

Vln. I *f*

Vln. II *f*

Vla. *f*

Vc. *f*

Cb. *f*

0

103

Picc. *ff*

Fl. *ff* *f* *a2*

Ob. *ff* *f* *a2*

Eng. Hn. *ff* *f*

Cl. *ff* *f* *a2*

Bsn. *f* *a2*

Cbsn. *ff* *f* *p* *f*

Hn. *mp*

Hn. *mp*

Tpt.

Tbn. *f* *mp*

Tba. *f*

Timp.

Vib.

Chim. *ff* Glockenspiel

Cym.

S. D.

Hp. *mf* *f* *gliss.* *mf* *f*

Vln. I *ff* *f* *p* *f*

Vln. II *ff* *f* *p* *f*

Vla. *ff* *f* *p* *f*

Vc. *ff* *f* *p* *f*

Cb. *ff* *f* *p* *f*

63

116 **Q**

Picc. *p* *mf*

Fl. *p*

Ob. *mf*

Eng. Hn. *f* *mf*

Cl. *p*

Bsn. *p*

Cbsn. *f*

Hn. 1. *mf*

Hn. *mf*

Tpt. *mf*

Tbn. *mf*

Tba. *mf*

Timp. *mp*

Vib. *mp*

Glock. *mp*

Cym. *mp*

S. D. *mp*

Hp. *mp*

Vln. I *f*

Vln. II *f*

Vla. *f*

Vc. *f*

Cb. *f*

121

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Glock.

Cym.

S. D.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

Adagio $\text{♩} = 54$

128 S rall. 19

Picc. *p*

Fl. *p*

Ob. *p*

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp. *pp*

Vib.

Glock.

Cym.

S. D. (Snare off) *pp*

Hp. *p*

Vln. I *p* *rall. pizz.* *sul tasto*

Vln. II *pp*

Vla.

Vc. *pizz.*

Cb. *gloss.*

T III Lan Xang...

Lento = 56

135

Picc. *pp*

Fl. *pp*

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Glock.

Cym.

S. D.

Hp.

Lento = 56

T

Vln. I

Vln. II

Vla.

Vc.

Cb.

pp *mf* *f*

pp *mf* *f*

Chings

Chimes

This musical score is for a section titled 'T III Lan Xang...'. It is marked 'Lento = 56' and includes a rehearsal mark '135'. The score is arranged for a large orchestra and includes percussion, woodwinds, brass, strings, and keyboard instruments. The percussion section includes Piccolo, Flute, Oboe, English Horn, Clarinet, Bassoon, Contrabassoon, Horns, Trumpets, Trombones, Tubas, Timpani, Vibraphone, Glockenspiel, Cymbals, and Snare Drum. The woodwind section includes Piccolo, Flute, Oboe, English Horn, Clarinet, Bassoon, Contrabassoon, Horns, Trumpets, Trombones, and Tubas. The brass section includes Horns, Trumpets, Trombones, and Tubas. The string section includes Violins I and II, Viola, Violoncello, and Contrabass. The keyboard section includes Harp. The score features a variety of dynamics, including *pp* (pianissimo), *mf* (mezzo-forte), and *f* (forte). There are also markings for 'Chings' and 'Chimes' in the percussion section. The score is written in a single system with multiple staves for each instrument.

140 **U**

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Tri.

Chim.

S. D.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

U

arco *pp* *arco* *molto espress.* *mf* *f* *mp* *f*

pp *molto espress.* *mf* *f* *mp* *f*

pp *molto espress.* *mf* *f* *mp* *f*

pp *molto espress.* *mf* *f* *mp* *f*

p *div. 4 pizz.* *p* *div. 4 pizz.* *p* *div. 4 pizz.* *p*

146 V

Picc. *mf*

Fl. *p* *mf*

Ob. *p* *mf*

Eng. Hn. *f*

Cl.

Bsn. *pp*

Cbsn. *pp*

Hn. *pp*

Hn. *pp*

Tpt.

Tbn. *pp*

Tba.

Timp. *pp* *mf* *p*

Vib. *p*

Tri. *p*

Chim. *p*

T.-t. *p*

Hp. *p*

Vln. I *pp* *f*

Vln. II *pp* *f*

Vla. *pp* *f*

Vc. *f*

Cb. *f*

151

W

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Tri.

Chim.

T.-t.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

arco

f

pizz.

f

X

26 **Y**

165

Picc. 

Fl. 

Ob. 

Eng. Hn. 

Cl. 

Bsn. 

Cbsn. 

Hn. 

Hn. 

Tpt. 

Tbn. 

Tba. 

Timp. 

Vib. 

Tri. 

Chim. 

T.-t. 

Hp. 

Y

Vln. I 

Vln. II 

Vla. 

Vc. 

Cb. 

ff

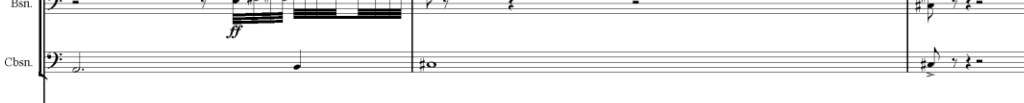
169

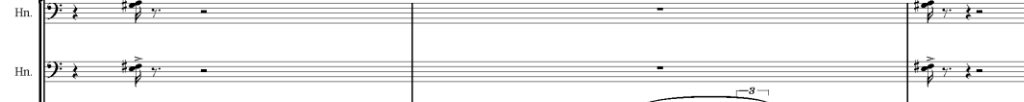
Picc.  **Z**

Fl.  **ff**

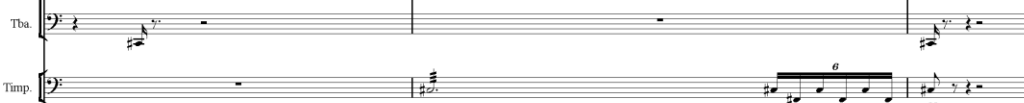
Ob.  **ff**

Eng. Hn.  **ff**

Cl.  **ff**

Bsn.  **ff**

Cbsn.  **ff**

Hn.  **ff**

Hn.  **ff**

Tpt.  **ff**

Tbn.  **ff**

Tba.  **ff**

Timp.  **ff**

Vib.  **ff**

Tri.  **ff**

Chim.  **ff**

T.-t.  **ff**

Hp.  **ff**

Vln. I **ff**

Vln. II **ff**

Vla. **ff**

Vc. **ff**

Cb. **ff**

172

Picc. Fl. Ob. Eng. Hn. Cl. Bsn. Cbsn. Hn. Hn. Tpt. Tbn. Tba. Timp. Vib. Glock. Chim. T.-t. Hp. Vln. I Vln. II Vla. Vc. Cb.

gliss.

ff *mp*

IV Angkor...

29

AA **BB** Lento $\text{♩} = 54$

Picc. 177

Fl.

Ob. f

Eng. Hn.

Cl.

Bsn.

Cbsn. mp

Hn. p pp

Hn.

Tpt.

Tbn. mf p mp

Tba. mp

Timp. mp

Vib. mf $dim.$

Glock. mf $dim.$

Chim. mf $dim.$

T.-t. Bass Drum p

Hp. p

AA **BB** Lento $\text{♩} = 54$

Vln. I f mf $dim.$ pp pp

Vln. II f mf $dim.$ pp pp

Vla. f mf $dim.$ pp pp

Vc. f mf $dim.$ pp pp

Cb. f mf $dim.$ pp pp $div. 4$ mp

183

Picc. Fl. Ob. Eng. Hn. Cl. Bsn. Cbsn. Hn. Hn. Tpt. Tbn. Tba. Timp. Vib. Glock. Chim. B. D. Hp. Vln. I Vln. II Vla. Vc. Cb.

niente *niente* *niente* *mp* *p* *mp* *mf* *f* *f* *mp*

(Hindu Chant)

199

Picc. -

Fl. -

Ob. -

Eng. Hn. -

Cl. -

Bsn. -

Cbsn. -

Hn. -

Hn. -

Tpt. -

Tbn. *niente*

Tba. *niente*

Timp. *niente*

Vib. -

Glock. *p*

Chim. -

B. D. -

Hp. -

Vln. I *mf*

Vln. II *mf*

Vla. *f*

Vc. *mf*

Cb. -

Measures 199-203 of the musical score. The score includes staves for Piccolo, Flute, Oboe, English Horn, Clarinet, Bassoon, Contrabassoon, Horns, Trumpets, Trombones, Tubas, Timpani, Vibraphone, Glockenspiel, Chimes, Bells, Harp, Violins I and II, Viola, Violoncello, and Contrabass. Measures 199-200 show various instruments with rests or 'niente' markings. Measure 201 features a complex rhythmic pattern in the Glockenspiel and Viola. Measures 202-203 show the Violins and Viola playing melodic lines, while the Contrabass plays a sustained low note.

79

201

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Glock.

Chim.

B. D.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

on the body

simile

simile

simile

207 **DD**

Picc. *f*

Fl. *f*

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Glock.

Chim. To Glock.

B. D.

Hp.

DD

Vln. I

Vln. II

Vla.

Vc.

Cb.

35

223 **FF** 37

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Glock.

B. D.

Hp.

FF

Vln. I

Vln. II

Vla.

Vc.

Cb.

228 **Andante** ♩ = 66

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Glock.

B. D.

Hp.

Andante ♩ = 66

Vln. I

Vln. II

Vla.

Vc.

Cb.

arco *pizz.* *arco* *arco* *pizz.* *arco* *arco* *pizz.* *arco* *pp* *arco* *pp* *mp* *mp* *pizz.* *p*

234 HH 39

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Glock.

B. D.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

mp

p

pp

mf

pp subito

mf

pp subito

mf

pp subito

mf

pp subito

mf

arco

pp subito

mf

241

Picc. *mp* *mf*

Fl. *mp* *mf*

Ob.

Eng. Hn. *mf* *f*

Cl. *mp* *mf*

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib. *8* *7*

Xyl. *8* *5*

Glock. *8*

B. D.

Hp.

Vln. I *p pp* *8* *8*

Vln. II *p pp* *8* *8*

Vla. *p pp* *8* *8*

Vc. *p pp*

Cb. *p* *pizz.* *arco*

88

257

The musical score for measures 257-262 is written for a large orchestra. The key signature has two flats (B-flat and E-flat), and the time signature is 3/4. The score includes parts for the following instruments:

- Picc.** (Piccolo): Silent throughout.
- Fl.** (Flute): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *p*, *f*, and *mf*.
- Ob.** (Oboe): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *p*, *f*, and *mf*.
- Eng. Hn.** (English Horn): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *f* and *mf*.
- Cl.** (Clarinet): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mf* and *f*.
- Bsn.** (Bassoon): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mf* and *f*.
- Cbsn.** (Contrabassoon): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mf* and *f*.
- Hn.** (Horn): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mf* and *f*.
- Tpt.** (Trumpet): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- Tbn.** (Trombone): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- Tba.** (Tuba): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- Timp.** (Timpani): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- Vib.** (Vibraphone): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- Xyl.** (Xylophone): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- Glock.** (Glockenspiel): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- B. D.** (Bass Drum): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- Hp.** (Harp): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- Vln. I** (Violin I): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- Vln. II** (Violin II): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mp* and *f*.
- Vla.** (Viola): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *p* and *mf*.
- Vc.** (Violoncello): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *p* and *mf*.
- Cb.** (Contrabass): Measures 257-258 have a whole rest. Measures 259-262 play a melodic line with dynamics *mf* and *f*.

258 KK 43

Picc. *mp* *mf*

Fl. *mp* *mf*

Ob.

Eng. Hn.

Cl. *mf* *f* *mp* *mf*

Bsn. *mf*

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Glock.

B. D.

Hp. *p*

Vln. I *p* div.

Vln. II *p* div.

Vla. *p*

Vc. *p*

Cb. *p*

263 LL

Picc. *mp* *6* *3* *7*

Fl. *mp* *3*

Ob. *mp*

Eng. Hn. *ff* *a2*

Cl. *a2* *p* *cresc.* *ff*

Bsn. *a2* *mp* *mf* *cresc.* *ff*

Cbsn. *mp* *mf* *cresc.* *ff*

Hn. *p* *cresc.* *f*

Hn. *p* *cresc.* *f*

Tpt. *p* *cresc.* *f*

Tbn. *mp* *pp* *p* *cresc.* *f*

Tba. *mp* *pp* *mf* *cresc.* *f*

Timp. *mp* *pp* *cresc.* *f*

Vib.

Xyl.

Glock.

B. D.

Hp.

Vln. I *p* *cresc.* *ff*

Vln. II *p* *cresc.* *ff*

Vla. *p* *cresc.* *ff*

Vc. *mp* *mf* *cresc.* *ff*

Cb. *mp* *mf* *cresc.* *ff*

LL

274

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Glock.

B. D.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

281 **NN** 47

Picc. *p*
 Fl. *p*
 Ob.
 Eng. Hn.
 Cl. *mf* *f*
 Bsn.
 Cbsn. *pp*
 Hn.
 Hn.
 Tpt. *1.*
 Tbn.
 Tba.
 Timp.
 Vib.
 Xyl.
 Glock.
 B. D.
 Hp. *mp* *p*
 Vln. I *p* *ppp*
 Vln. II *p* *ppp*
 Vla. *p* *ppp*
 Vc. *p* *ppp*
 Cb. *p* *ppp*

48 V Champa...
Allegro molto Quasi Presto ♩ = 144

297

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hr.

Hr.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Glock.

B. D.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

Claves

Allegro molto Quasi Presto ♩ = 144

00

296

Picc. *mf* *f* *ff*

Fl. *mf* *f*

Ob. *mf* *f* *ff*

Eng. Hn. *mf* *f*

Cl. *mf* *f*

Bsn. *ff* a2

Cbsn. *ff*

Hn. *ff*

Hn. *ff*

Tpt. *f* *ff*

Tbn. *f* *ff*

Tba. *ff*

Timp. *mf* *f* *ff*

Vib. *mf*

Xyl. *mf*

Glockenspiel

Clv. *mf*

B. D. *ff*

Hp. *mf*

00

Vln. I *f* *pizz* *arco* *mf*

Vln. II *f* *pizz* *arco* *mf*

Vla. *f* *pizz* *arco* *mf*

Vc. *f* *arco* *ff* *pizz* *arco* *mf*

Cb. *f* *arco* *ff* *pizz* *arco* *mf*

303 **PP**

Picc.
 Fl.
 Ob.
 Eng. Hn.
 Cl.
 Bsn.
 Cbsn.
 Hn.
 Hn.
 Tpt.
 Tbn.
 Tba.
 Timp.
 Vib.
 Xyl.
 Glock.
 B. D.
 Hp.
 Vln. I
 Vln. II
 Vla.
 Vc.
 Cb.

315 **QQ**

Picc. 315

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Glock.

Clv.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

arco

arco

arco

RR

325

Picc. *mf* *ff* **SS**

Fl. *mf* *ff*

Ob. *mf* *ff*

Eng. Hn. *mf* *ff*

Cl. *mf* *ff*

Bsn. *p* *ff*

Cbsn. *p* *ff*

Hn. *p* *ff* a2

Hn. *ff* a2

Tpt. *ff*

Tbn. *ff*

Tba. *p* *ff*

Timp. *p* *ff*

Vib.

Xyl.

Glock.

B. D. *p*

Hp. *ff*

Vln. I *pp* *ff*

Vln. II *pp* *ff*

Vla. *pp* *ff*

Vc. *pizz normale* *ff* *unis.* *arco*

Cb. *pizz normale* *ff* *unis.* *arco*

p

338

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Anv.

B. D.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

342 **UU** 57

The musical score for measures 342-346 is arranged in a standard orchestral format. The woodwind section (Piccolo, Flute, Oboe, English Horn, Clarinet, Bassoon, Contrabassoon) and brass section (Horn, Trumpet, Trombone, Tuba) are in the upper staves. The percussion section (Timpani, Vibraphone, Xylophone, Anvil, Bass Drum) follows. The harp (Hp.) is positioned above the string section. The string section (Violin I, Violin II, Viola, Violoncello, Contrabass) is at the bottom. The score features complex rhythmic patterns, including sixteenth and thirty-second notes, and dynamic markings such as *sfz* (sforzando) and *sf* (sforzando). A rehearsal mark **UU** is placed above the Piccolo staff at measure 342. The key signature has one flat (B-flat), and the time signature is 4/4. The score concludes with a double bar line at measure 346.

347 **VV**

Picc.

Fl.

Ob.

Eng. Hn.

Cl.

Bsn.

Cbsn.

Hn.

Hn.

Tpt.

Tbn.

Tba.

Timp.

Vib.

Xyl.

Anv.

Chim.

Hp.

Vln. I

Vln. II

Vla.

Vc.

Cb.

p

f

a2

f

353

WW

Picc. *ff*

Fl. *ff*

Ob. *a2*

Eng. Hn. *a2*

Cl. *a2*

Bsn. *a2* *p*

Cbsn. *a2* *p*

Hn. *a2* *p*

Hn. *a2* *p*

Tpt. *p*

Tbn. *p*

Tba. *p*

Timp. *p*

Vib. *ff*

Xyl. *ff*

Anv. *ff*

Chim. *ff*

Hp. *to Bass Drum*

Vln. I *f* *arco* *p* *cresc.*

Vln. II *f* *arco* *p* *cresc.*

Vla. *f* *arco* *p* *cresc.*

Vc. *f* *arco* *p* *cresc.*

Cb. *f* *arco* *p* *cresc.*

361 XX

Picc. *ff*

Fl. *ff*

Ob. *ff*

Eng. Hn. *ff*

Cl. *ff*

Bsn. *ff* ^{a2}

Cbsn. *ff*

Hn. *f* *ff*

Hn. *f* *ff*

Tpt. *f* *ff*

Tbn. *f* *ff* ^{a3}

Tba. *ff*

Timp. *ff*

Vib. *ff*

Xyl. *ff*

Anv. *ff* to Chimes

B. D. *ff* Bass Drum

Hp. *ff*

Vln. I *ff*

Vln. II *ff*

Vla. *ff*

Vc. *ff*

Cb. *ff*

367 **YY** **Feroce** $\text{♩} = 84$ 61

Picc. f ff f ff

Fl. f ff f ff

Ob. f ff f ff

Eng. Hn. f ff f ff

Cl. f ff f ff

Bsn. f ff f ff

Cbsn. f ff f ff

Hn. f ff f ff

Hn. f ff f ff

Tpt. mf ff mf ff

Tbn. f ff f ff

Tba. f ff f ff

Timp. f ff f ff

Vib. f ff f ff

Xyl. f ff f ff

Anv. f ff f ff

B. D. f ff f ff

Hp. f ff f ff

Vln. I f ff f ff

Vln. II f ff f ff

Vla. f ff f ff

Vc. f ff f ff

Cb. f ff f ff

YY **Feroce** $\text{♩} = 84$

62

This page contains the musical notation for measures 372 through 380 of "The Firebird Suite" by Igor Stravinsky. The score is arranged in systems for various instruments:

- Piccolo (Picc.):** Measures 372-379 feature complex rhythmic patterns with triplets and sixteenth notes, starting at measure 372.
- Flute (Fl.):** Similar to the piccolo, playing octaves higher or lower as indicated.
- Oboe (Ob.):** Playing similar rhythmic figures.
- English Horn (Eng. Hn.):** Provides harmonic support with sustained notes and moving lines.
- Clarinet (Cl.):** Similar to the English horn.
- Bassoon (Bsn.):** Plays a steady eighth-note accompaniment.
- Contrabassoon (Cbssn.):** Similar to the bassoon.
- Horn I & II (Hn.):** Measure 372 has a melodic line; measures 373-379 have sustained notes.
- Trombone I & II (Tbn.):** Measure 372 has a melodic line; measures 373-379 have sustained notes.
- Tuba (Tba.):** Measure 372 has a melodic line; measures 373-379 have sustained notes.
- Timpani (Timp.):** Features a prominent melody in measures 372-379, marked with accents and dynamic markings like *f* and *ff*.
- Vibraphone (Vib.):** Similar to the timpani.
- Xylophone (Xyl.):** Similar to the vibraphone.
- Chimes (Chim.):** Similar to the xylophone.
- Bell (B.D.):** Plays a simple rhythmic pattern.
- Harp (Hp.):** Features glissando effects in measures 372, 373, and 379.
- Violin I & II (Vln. I, Vln. II):** Play rapid sixteenth-note passages throughout the section.
- Viola (Vla.):** Similar to the violins.
- Cello (Vc.):** Similar to the viola.
- Double Bass (Cb.):** Provides a steady eighth-note accompaniment.

The score includes various musical notations such as dynamics (*f*, *ff*), articulation marks, and performance instructions like "gliss". A rehearsal mark "ZZ" appears above the strings in measure 379.

379 63

Picc. *f* *ff*

Fl. *f* *ff*

Ob. *f* *ff*

Eng. Hn. *f* *ff*

Cl. *f* *ff*

Bsn. *f* *ff* *ffp* *ff*

Cbsn. *f* *ff* *ffp* *ff*

Hn. *ff* *ffp* *ff*

Hn. *ff* *ffp* *ff*

Tpt. 1,2 *f*

Tbn. *f* *ffp* *ff*

Tba. *f* *ffp* *ff*

Timp. *ff*

Vib. *ff*

Xyl. *ff*

Chim. *ff*

B. D. *ff*

Hp. *ff*

Vln. I *f* *ff*

Vln. II *f* *ff*

Vla. *f* *ff*

Vc. *f* *ff*

Cb. *f* *ff*

111

ภาคผนวก ค

หนังสือ Southeast Asian Musical Material for Contemporary Composition, Book I,
The Mainland (เฉพาะบทที่ 2, 3, 4)

Chapter II

Burmese Musical Materials

Burmese Music

The music of Myanmar is not a music that stands alone referring only to music of the Burmese since their traditional music had long been intertwined with the music of several cultures and ethnicities that resided in the land for centuries. The Pagan kingdom of Myanmar flourished in the eleventh century with the unification of Mon and Pyu, and later with Arakan, and Shan.

Since the geography of Myanmar set the kingdom close to the borders of China, India, Bangladesh, Thailand, and Laos, cultural influences of South Asia and China are strongly diffused with diverse ethnic minorities of Kachin, Chin, Shan, Mon, Karen, Arakan, Chinese, etc. Throughout the history of the country, wars, trade, and religions have added in other cultural influences including Siamese cultures and the cultures of other ethnic minorities.

One example of the cultural diffusions in music is the Burmese harp, *Saung Guak*, which came from ancient India around the fifth century¹ and later performed in the court of Cambodia.² However, neither India nor Cambodia³ could retain the survival of their harp. It was only through the Burmese music that this harp performed a significant role alongside the history of their Monarchy system. Among the earliest evidence about music is the ninth century diplomatic record between the Burmese court and the Tang dynasty of China in which

¹ Judith Becker, *The Migration of the Arched Harp from India to Burma*, 17.

² Smithsonian, *Myanmar: Music by the Hsaing Waing Orchestra*, 8.

³ Cambodia just revived their harp based on the study of Burmese *Saung Guak* and the iconography of their historical ruins.

various Burmese court instruments such as harp and mouth organ were sent to the Chinese court.⁴

In A.D.802 the King of Sri Kstra, a Pyu City Kingdom in Central Myanmar dispatched a diplomatic mission to the Court of the Chinese Emperor of the Tang Dynasty (A.D.618-907) at the Capital Chang-an. Led by the Pyu Crown Prince Sunanda, who was accompanied by Minister Nakya Konra and General Maha Thena, the mission took with it a cultural troupe of 35 performing artistes... At one transit, while the Pyu artistes were rehearsing their programmes, one Chinese musician of the Royal Music Academy overheard their songs and music. He wrote them down in Chinese musical notes and proceeded to the Capital to teach the Court musicians.⁵

This Chinese record provides information on the early instruments of Burma, of which some of them have disappeared in modern Burmese music, such as the *tayo* and *hnyin* (bowed fiddle and mouth organ).⁶ The fall of the Ayutthaya kingdom (Siam) to Burma in 1767 brought many musicians and artists to the Burmese court when Siamese music and repertoire were annexed with Burmese music. When the British colonized Burma in the nineteenth century, the Burmese court moved to Mandalay, carrying along their musical heritage including musicians, poets, singers, and repertoire.⁷ However, Burmese

⁴ (Grove,3).

⁵ *Khin Maung Nyunt*, The Myanmar Performing Arts Of The Pyu Period (Monday, November 12, 2001)

<https://nyiwin.wordpress.com/2010/07/12/the-myanmar-performing-arts-of-the-pyu-period/>

⁶ Ward Keeler, *The Garland Handbook of Southeast Asian Music*, ed. by Terry E. Miller (Routledge, 2008), 200.

⁷ Smithsonian, Myanmar: Music by the Hsaing Waing Orchestra, 2.

musical heritage had to cease its practice during military dictatorship and political uprising in Myanmar.

Burmese ensembles and their functions in the society

Indoor Ensemble

The *Anyeint* is a chamber music. The majority of musical instruments performed indoors consisted of plucked and bowed string instruments, bamboo flutes, and wooden xylophones. These formed a small ensemble comprised of a harp (*Saung*), a zither (*Migyuang*), a bowed-string instrument (*Tayaw*), a flute (*Pakwei*), a mouth organ (*Hnyin*), and a wooden xylophone (*Pattala*). However, the harp is the most popular instrument, therefore it performs as a solo instrument most of the time. A common practices were a chamber ensembles consisting of pattala and a singer (see figure 1), who will control the rhythm by performing a pair of percussion instruments, bell and clapper (*si-wa*), or a *saung guak* player and a singer. Sometime the harpist is also acted as a singer. Indoor ensembles mostly functioned at the Royal court before the British Colonization in the nineteenth century. Court chamber music is very strict in its theoretical practices.



Figure 1 Pattala and Singer

Outdoor Ensembles

Traditional outdoor ensembles consisted of instruments from all categories: strings, winds, and percussion. The most significant outdoor ensemble is the *Hsaing waing* ensemble (see Figure 2). Instruments in the ensemble comprises a folk oboe (*Nhe*), gongs in a wooden circular frame (*Kyi waing*), gongs in a wooden rectangle frame, drums in a circle frame (*Pat waing*), a rhythmic section of six tunable drums (*chauk lon pat*), a small drum (*byauk*), a wooden clapper (*walet-hkok*), medium size cymbals (*yagwin*), a large gong (*maung*), and a pair of hand-bells (*si*). Occasionally, the wooden xylophone and harp were included in the *Hsaing waing* ensemble. Outdoor ensembles functioned in the royal ceremonies, Buddhist ceremonies, such as monk ordination and pagoda ceremony, worshipping the indigenous spirit of Nats, government state ceremonies, festivals, girls's ear-piercing ceremonies, and theatrical arts performance.



Figure 2 *Hsaing waing* ensemble at the National University of Arts and Culture

Burmese musical instruments and their techniques

According to Burmese Instrument classification, instruments can be classified into six categories: *Thaye*, *Kyey*, *Kyo*, *Lei*, *Let Khoke*, and *Patala*. The *Thaye* are instruments that are made from animal skin. *Kyey* are instruments that are made from metal similar to the category of metallophone. *Kyo* is any instrument in which the sound is produced by the vibration of the string, categorized as chordophone instruments. *Lei*, similar to the aerophone category, refers to all wind instruments. *Let Khoke* is defined as instruments which have the role of a time keeper in the ensemble. Lastly, *Patala*, a wooden xylophone, is equivalent to an idiophone category.

In Burmese music, each instrument maintains their own techniques that are passed down from oral tradition. Each instrument has its own role in the ensemble as either a melodic instrument, a contra-melodic interpolation, or a rhythmic provider.

1. Aerophone (*Lei*)

1.1 *Hne*

Tracing back the origin of the Burmese *Hne* (see figure 3), the Indian *Sarunei* was found to be its precursor as well as the Mon *Sanay*. *Hne* is a double reed folk oboe with a large metal bell attached at the end. The bell is tied loosely to the body with the red cord. The reed is made of young toddy-palm leaf, smoked, cut and fold with seven to eight layers.⁸

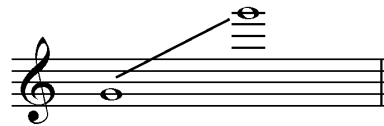
⁸ Johk Okell, The Burmese Double Reed “Nhai,” 26.



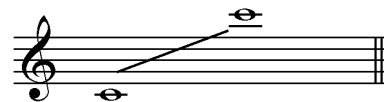
Figure 3 The Burmese folk oboe *Hne*

The length of *hne* is varied and can be adjusted to create various keys. Generally, there are two sizes of *hne*, each sounding a fifth apart. Both have seven finger holes and a thumb hole (at the back). The range of *hne* is two octaves for both sizes.

Range of small *hne* is from G4 to G6



Range of large *hne* is from C4 to C6



The sound quality of *hne* is nasal, harsh, and loud. There are differences in the tone color between the larger *hne* and the smaller *hne*. The larger *hne* projects a more mellow tone; likewise, it is usually played in slow tempo repertoire. The smaller *hne*, on the other hand, plays in a joyous and lively tune at a faster tempo.⁹ *Hne* plays closely with the

⁹ Johk Okell, *The Burmese Double Reed “Nhai,”* 27.

voice, which is the fundamental melody. However at the same time, coloring upon the melody differs from the voice, often playing a rapid passage full of variation, and, in a free rhythmic motion, differs from the rhythm of the percussion section.¹⁰

Hne is used in both smaller ensembles as well as large ensembles; however, always outdoors due to its large volume of sound. In the small ensemble, *hne* is played with drums, cymbals, and bamboo clapper; occasionally a singer or dancer will be included in the ensemble as well as other choices of instrument. *Hne* is considered a leader when played in a smaller ensemble, in contrast to the *Hsaing-waing* ensemble where the twenty-one drums are the leader. *Hne* functions in various ceremonies: court ceremony, religious ceremony, as well as festivals of official and folk cultures.¹¹

Fundamental techniques in playing *nhe* include the use of circular breathing, **xxxxxx, xxxxxx**

1.2 *Palwei*

Palwei is a Burmese end-blown bamboo flute with seven finger holes at the front and a thumb hole at the back. There are two types of *palwei* that come with different sizes and features: *khin palwei* and *kyaw palwei* (see figure 4). *Khin palwei* is a reed-flute in a smaller size than *kyaw palwei* and is more frequently performed than the *kyaw palwei*.

¹⁰ Johk Okell, The Burmese Double Reed “Nhai,” 29.

¹¹ Johk Okell, The Burmese Double Reed “Nhai,” 28.



Figure 4 *Khin palwei* (reed bamboo flute) (front)
and *kyaw palwei* (bamboo flute)

The range of *palwei* is xxx octave range with the lowest pitch on Gx?, from pitch xxx to xxx.

Range of *Palwei*

2. Chordophone (*Kyo*)

1.1 *Saung gauk*



Figure 4 The Burmese harp *Saung Gauk*

Saung Gauk (see figure 5) is the Burmese harp in an arch shape made of wood with thirteen to sixteen strings. The strings were originally made of silk, and later nylon. The earliest account of Burmese harp appeared in the record of the Chinese Tang dynasty in the early ninth century saying that the harp was played in the Pyu kingdom. Music performed on the harp was circulated on the Buddhist theme.¹² It is considered an instrument associated with Burmese court music, played only indoors and functioning in the chamber ensemble. Usually *Saung Gauk* is performed with a vocalist; however, it can also be played as a solo instrument and in chamber music with the wooden xylophone (*patala*).¹³

The tone color of *Saung Gauk* is soft, delicate, and gentle. Rubato rhythm and syncopation are commonly used by the harpist. The texture of *Saung Gauk* can be in two-voices, creating a main melodic line and secondary line.

The tuning of *Saung Gauk* is aligned with the five main pitches of each mode. While performing *Saung Gauk*, the harpist adds secondary pitches by pressing on the strings. The fundamental pitches are played in the lower octave, while the secondary pitches are played as harmonics in the higher range.¹⁴ The main repertoire played the Burmese harp is the *Kyo* repertoire. Modes commonly used by the harpist are *Hynin Lone* having its main pitch on C, *Auk Pyan* on F, *Pale* on B and *Myin saing* on E (see example 1).¹⁵ Modulation can happen within the same tuning. Since the Burmese harp comes with 13, 14, and 16 strings, the lowest strings (strings 15 and 16) and the highest (string 1) are missing on the 13-stringed harp.¹⁶

¹² Becker, Burmese harp, 18.

¹³ Grove 8

¹⁴ Robert Garfius, Mode, 42.

¹⁵ Robert Garfius, Mode, 47.

¹⁶ Inuoe, 66.

Hynin Lone



Auk Pyan



Pale



Myin saing



Example 1 Tuning for Harp repertoires

The range of *Saung guak* is three octaves for the sixteen-string harp and two octaves for the thirteen-string harp.

Range of 16-string harp



Tuning of 16-string harp in *Hyinloun* Mode



In performing *Saung Guak*, the index finger and the thumb of the right hand pluck the strings separately to create melodies or pluck at the same time to provide intervals. Intervals that are commonly created by *Saung Guak* are the fourth, fifth, and octave, with occasionally use of the sixth, seven, and ninth. Occasionally appoggiatura and suspension are added to the melody. Virtuoso playing is employed with fast tempos and vivid cadenzas.¹⁷ Williamson wrote on the techniques of Burmese harp that it includes five methods in performing harp: creating a full-tone by applying the index finger to pluck the string upward to the next string (*let-kat*); creating a ‘thin sharp tone’ with a harmonic note by applying the index finger to pluck the string outward and upward (*karw*); two-pitch intervals by applying the index finger and the thumb on different strings; the thumb plucks the string while the index plucks the string upward and rests on the next string, having the middle finger stop the string (*zone*); damping tone by applying the palm of the hand to stop the string (*tat*); and creating a double octave sound by using the thumb of the left hand to press the string from inside and having the thumb and the index finger of the right hand playing other two notes (see figure 5).



Figure 5 Applying the thumb of the left hand and the thumb/index finger of the right hand

¹⁷ Grove, 6)



Example 2 Basic techniques: playing two notes together
or separate with thumb and index finger

Melodies can be modified in various ways. For example, this straight forward melody C-E can be played with rhythmic syncopation and octave displacement (see example 3).



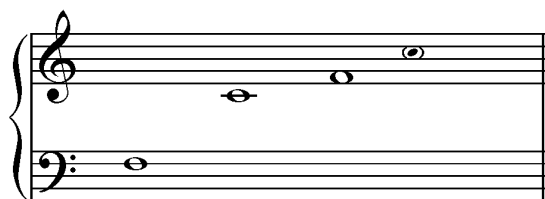
Example 3 Melody in syncopation

Other techniques are applying ornamentation including trills, long turns, mordents, grace notes, and tremolo in a rapid tempo.

1.2 *Mi-gyung*

Mi-gyung (figure 6) is a plucked zither shaped like a crocodile, originally developed in Mon culture that spread throughout the mainland of Southeast Asia. There are three-strings crossing over the body from the head to the tail of the crocodile. The strings are tied with the tuning pegs at the end of the crocodile tail. Lying over the crocodile's back are ten movable frets. Two types of strings are used in *mi-gyung*: brass for lowest string and nylon for the other two. Plucking *mi-gyung* is done with a plectrum made from hardwood. The left hand moves along the frets, pressing on the strings to execute the melody.

Each string is tuned with the pitches F, C, and F. The range of *mi-gyuang* is approximately two octaves, from F3 to C5. Fundamental techniques in performing *mi-gyuang* are tremolo, mordent, trill, and triplet.



Example 4 Tuning of the 3-strings and the range of the crocodile zither



Figure 6 Mon/Burmese crocodile zither *Mi-gyuang*

3. Idiophone/ metallophone

1.1 Wooden xylophone *Patala*

Patala is a xylophone having twenty-four wooden bars (bamboo) tied over a wooden boat-shape resonator (figure 7). The bamboo bars are cut to different sizes, arrayed from largest (left hand of the performer) to the smallest (right hand of the performer).

Generally the performance technique of *patala* is very straight forward. Melody is played alternately with both hands and also played together with both hands at the intervals of octave, fourth, and fifth as well as the third and the second. Oblique motion is also used with the lower pitch providing the fundamental note while the right hand plays a higher melody in a running passage. *Patala* plays melody in a slow to moderate tempo with the goal of maintaining and retaining a gracefully melody, not virtuosic playing or showing off. Ornamentation is applied occasionally with grace notes and mordents. At the beginning and the ending of the melody, the *patala* player will add an introductory passage as well as a cadential passage.

The following are *patala* techniques applied to the melody: (1) play the melody alternating by octaves (2) applying intervals of parallel fourths and fifths to the melody (3) Fill in the melodic gap by adding passing notes in the form of grace notes (example 6).

(1) Alternate the melody by octaves



(2) Application of the fourth and fifth interval to the melody



(3) Filling the gap by applying passing tones in a form of grace notes



Example 6 Basic techniques in performing the melody

1.2 Bell and wooden clapper (*Si and wa*)

Si is a pair of small handbells and *wa* (figure 7) is a small wooden clapper (similar to the sound of a castanet). Both provide rhythmic structure to the repertoire. Usually the *si* and *wa* is used in chamber music to provide rhythm for the singer, harpist, and xylophonist. The singer will hold the bells with their right hand while holding the clapper with the left hand. The bells strike each other by holding the edge of the thread that connects them and wrapping the thread around the ring finger so that the two bells are facing each other and can be struck with a simple movement of the fingers toward the thumb. The sound of *si* is similar to the sound of a triangle in a western percussion instruments.

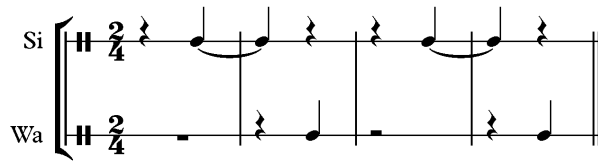


Figure 7 Hand bells (*si*) and wooden clapper (*wa*)

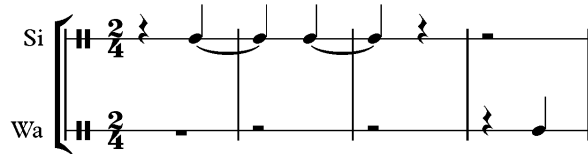
There are three different patterns of *si* and *wa*. In an eight-beat phrase, the first pattern has *si* play on beats 2 and 6 while alternating with *wa* on beats 4 and 8. The second pattern uses *si* on beats 2 and 4 and applying *wa* on beat 8. In the last pattern, *si* strikes on beats 4 and 6 and *wa* on beat 8 (see example 7). *Wa* is always applied at the end of the phrase.¹⁹

¹⁹ kindle210.

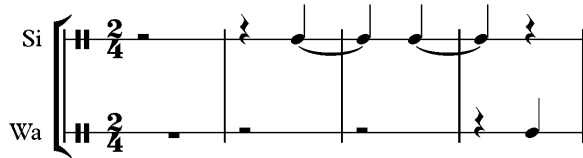
Pattern I



Pattern II



Pattern III



Example 7 Three patterns of *si* and *wa*

4. Metallophone (*Kyey*)

4.1 Gongs in acircular frame (*Kyi waing*)

Kyi waing (see figure 8) is a set of small 21 knobbed gongs laid in two rows of a half-circular wooden frame. The range of *Kyi waing* from lowest to highest is xxxxxx. *Kyi waing* is played using two bass drum sticks.



Figure 8 Burmese circular framed gongs *Kyi waing*

4.2 Rectangular framed gongs (*Maun sain*)

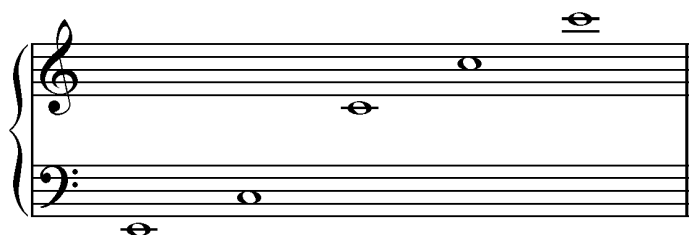
Maun sain (figure 9) is a set of 19 knobbed gongs in a rectangular wooden frame.



Figure 9 Rectangular wooden framed gongs (*Muan sain*)

The range of *muan sain* is approximately three octaves (see example 8). Each gong in a rectangular frame is removable for pitch adjustment. Modern *maun sain* instruments can have pitches compatible with the half steps of western tuning; therefore, it can play western

scales, both major and minor. There are seven to eight rectangular wooden frames connected to each other. Each frame consists of 2-5 gongs of different pitches which can be replaced or expanded to support the repertoire performed. Typically *maun sain* shares the same role as *pat waing* (framed drums) in performing the main melody in the *hsaing wain* ensemble.



Example 8 Range of *maun sain*

5. Membranophone (*Thaye*)

Burmese membranophones consist of several types of drums, varied in both the size and their functions in the ensemble. In contrast to other typical drums of Southeast Asia that provide rhythm to the ensemble, the main Burmese drum, *Pat waing*, serves as a main melodic instrument while other drums of several sizes form a section for rhythmic control and patterns.

5.1 *Pat waing*

Pat waing (figure 10) is the most significant drum in Burmese music. The role of *Pat waing* in the ensemble is to provide the main melody. *Pat waing* is a set of 21 drums in a different sizes from small to large hanging in a circular frame. The drums are arranged in order of pitch, ranging from high to low. The highest pitch is placed at the far right drum (the smallest drum) of the circular frame, then gradually descends by increasing the size of the drum. Thus, the far left is the largest drum which provides the lowest pitch. The range of *Pat waing* is

in three octaves. The player of *pat waing* will sit on a stool at the center of the circle.²⁰ He is regarded as *saign saya* or the leader of the *Hsaing waing* ensemble.



Figure 10 The 21-drums, *Pat waing*

Pat waing is different from other types of drum in Southeast Asia in that it provides the main melody to the ensemble, not the rhythm. In *Hsaing waing* ensemble, *Pat waing* and *Maun Sain*, a set of gongs in a rectangular wooden frame are the instruments that play the main melody in the ensemble. As such, they are the leaders of the ensemble. The tuning of the drums are adjusted by using a removable paste made from a mixture of rice and ash called *pa sa*, attached to the bottom of the drum. The adjustment of the pitch depends on the scale each repertoire

²⁰ (Grove, 2).

is based on. Performing *Pat waing* is done with bare hands and finger tips, struck on several part of the drum head.²¹ *Pat waing* techniques include playing the melody with intervals.

When tuning *Pat-waing*, the higher pitches remain the same while the lower pitches have to retune to match the mode of the repertoire.²²

Therefore, the last five low-pitch drums have to be retuned to match different repertoire that has different mode. Below is the example of *Pat-waing* tuned in *pasabou* mode (C, D, E, G, A) (example 9).



Example 9 The tuning of twenty-one drum *pat-waing* in *pasabou* mode, arranged from lowest pitched drum to highest-pitched drum

5.2 Set of six drums (*Chauklon Pat*)

A set of six drums, *chauklon pat* (figure 11) is used in the *Hsaing waing* ensemble. In addition to the six drums of different sizes that are set vertically are another two large drums: *sahkhun* and *patma*. *Sahkhun* is set horizontally on a short wooden leg and *patma* is hanging horizontally on a luxurious pole. Together, the six drum-set can provide the fundamental melody as well as sustain the fundamental tones.²³

²¹ Smithsonian, Myanmar: Music by the Hsaing Waing Orchestra, 3.

²² Robert Garfius, mode, 40.

²³ Smithsonian, Myanmar: Music by the Hsaing Waing Orchestra, 3.



Figure 11 The six drum *chauklon pat* (vertical setting) and *shakun* (large barrel drum in horizontal setting) - top figure; *patma* (lower figure)

There are other types of drums that function in different ensembles besides the chamber and *hsaign waign* ensemble, such as folk ensemble, dance, and processions.

The following example is the pattern of the drum sections in the Nat repertoire, for the song Ko Gyi Kyaw.

Ko Gyi Kyaw

The musical score for 'Ko Gyi Kyaw' is presented in three systems. The first system (measures 1-4) features Chauklan Pat and Patma with rests, while Cymbal and Si Wa play a rhythmic pattern. The second system (measures 5-10) shows all instruments playing. The third system (measures 11-16) shows a more complex rhythmic arrangement. The score is written in 2/4 time and includes various musical notations such as eighth notes, quarter notes, and rests.

5.3 *Si-daw*

Si-daw (figure 12) is a pair of drums functioning at the royal court. Historically, the paired drums would perform to signal the presence of the king and queen during their audience, at their entrance in theatrical art performance at the court, and during the ploughing ceremony. In modern times, *si-daw* is played at the water festival, *Thingyan*.²⁴

²⁴ (Grove, 3).



Figure 2 Paired drums, *si-daw* (top left of the picture) during the royal ploughing ceremony

5.5 *O-zi*

O-zi (see figure 13) is a long goblet drum with a strap hanging around a musician's chest. *O-zi* usually plays in a group during the pagoda festival. *O-zi* often performs as a group dance in a very driving rhythm.



Figure 13 *O-zi* dancers at the school of Fine Arts, Yangon

5.6 A horizontal barrel drum, *Do-bat*

Do-bat is a small double headed-drum. Usually the *Do-bat* is played in a procession in the festival as well as pagoda festival. Also, *Do-bat* performs in folk culture in the rain-calling ceremony. Being a two-headed drum, one side is considered female and the other male. The female is tuned with the fundamental pitch while the male drum is tuned a fifth higher.

Burmese scales and tuning

Burmese music theory was believed for a long time to be rooted in Indian music theory that was derived from Buddhist monks and traders.²⁵ The Burmese scale is a seven-pitch scale in a descending motion.²⁶ Garfius mentioned that those seven pitches are equivalent to the Indian pitch names: *sa, re, ga, ma, pa, dha, ni*.²⁷ Similar to Indian pitches, the name of the pitch is connected with the sound of an animal: elephant (C), cock (F), cow (G), etc. The third and the seventh note of the scales are not fixed. Hence, this creates various modes and colors.²⁸

There are two tuning systems used by different Burmese ensembles: one for the chamber music, for the harp (*Saung guak*) and the wooden xylophone (*patala*), and the other one for the *Hsaing waing* (an outdoor ensemble).²⁹ The seven pitches derive from the sound of *Nhe*, the oboe. As such, that instrument is used as a standard pitch for the ensemble to tune their sound. Also mentioned by Garfius, the *Hsaing waing* ensemble tunes their fundamental pitch one tone lower than the

²⁵ (Becker, anatomy of mode, 269

²⁶ Robert Garfius, Preliminary thoughts on Burmese Modes, 39.

²⁷

²⁸ Smithsonian, Myanmar: Music by the Hsaing Waing Orchestra, 9.

²⁹ Robert Garfius, 39.

chamber players.³⁰ If the fundamental pitch of the chamber instruments is D, then the *Hsaing-waing* is tuned lower, closer to C#. ³¹

When compared with the western scale, the third and seventh of the Burmese pitches are lower while the fourth is higher. ³² On harp, the names of the seven pitches are *hnyinloun* (C), *pale* (B), *durakadwei* (A), *pyidarw-pyan* (G), *aukpyan* (F), *myinzain* (E), and *chauk-twe-nyun* (D), which can be explained as approximately a western descending scale from C down to D. Presently in Burmese music, only the pitches C, B, F, and E are used as the tonic of scales (p.65). The B and E sounds are neutral tones located halfway between the natural and flat. However, the theory refers only to chamber music tuning, not to the *hsaing waing* tuning.

Importantly, the concept of absolute pitch is not a part of Burmese musical culture. The pitch can be transposed up and down to suit the range of the vocalist. For the tuning practices of Burmese instruments, the *pat-waing* and harp have to be retuned to match the mode (*athan*) of each repertoire. Other instruments, including *Kyi-waing*, *Maung-zaing*, and *Pattala* do not need to change the tuning. However, they have to avoid specific pitches in order to match the main five notes of each mode.³³

Becker had classified Burmese repertoire with four modes: *Hyninlone*, *Aukpyan*, *Pule*, and *Myinsaing*.³⁴ Inoue refers to these as four tuning systems which can be divided into two groups (see example 10).³⁵ The four tuning systems can be divided into two patterns based on their structure (1-6-5-4-2-1, and 1-7-6-4-3-1). Of all the four tunings,

³⁰ Robert Garfius, Preliminary thoughts on Burmese Modes, 39.

³¹ (Grove, 7).

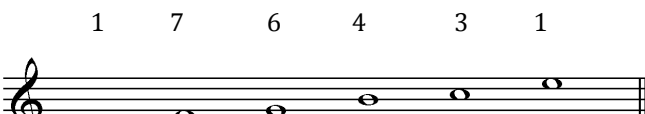
³² Sayuri Inoue, 64.

³³ (Grove, 7)

³⁴ (Becker, mode 269).

³⁵ Inor, 11.

Williamson stated that *hnyinloun* is the oldest tuning of Burmese music that was used in the Konbaung dynasty.³⁶

<i>hnyinloun</i>	
<i>aukpyan</i>	
<i>pale</i>	
<i>myinzain</i>	

Example 10 The four Bumese modes

Besides the names of the pitches being varied in each instrument category, the name of the modes are different between chamber music and music of *Hsaing-waing*.³⁷ In *Hsaing-waing*, the pentatonic notes that are drawn from the seven pitches can be arranged into 3 patterns: 13457, 12356, and 12456 (see Table 1) This adjustable pitch is made to suit the vocal range of the singer. Therefore, Burmese music is considered a transposable scale.³⁸ However, the decision of transposition depends on

³⁶ Williamson, 69.

³⁷ (Grove, 7)

³⁸ (Grove, 8).

the composition itself and whether it can maintain the fundamental melodic structure.³⁹

Table 1 Modes for *Hsaing-Waing* Ensemble⁴⁰

Mode	Pitches Pattern				
	1	3	4	5	7
Than-yo chauk-pauk	C	E	F	G	B
Khun-nathan-gyi	G	B	C	D	F
	1	2	3	5	6
Pat-sabo	C	D	E	G	A
Nga-bauk	F	G	A	C	D
Hsit-kyi	B	C	D	F	G
Lei-bauk auk	G	A	B	D	E
	1	2	4	5	6
Than-yo hnapauk	B	C	E	F	G
	1	3	4	5	6
Nga-bauk auk-pyan	F	A	B	C	D

Inoue stated that each mode is associated with specific repertoire (see Table 2).⁴¹ Williamson pointed that *Kyo*, *Bwe*, and *Tachingan* repertoires are in *hyninlone* mode, *Pat-pyo* repertoire was composed with *aukpyan* tuning, *yodaya* repertoire was composed with *Pale* tuning, *Tei-dat* repertoire was in *myinzain* tuning, etc.⁴² Becker added that *Loka-nat-than*, and *leidwei-than-kat* were composed in *aukpyan* tuning; *talian*, *mon*,

³⁹ Robert Garfius, Mode, 46.

⁴⁰ Grove8-9

⁴¹ Inoue, 9.

⁴² Williamson 71-2.

bole, and *than-zan* were composed on Pale tuning; and lastly, *hsithse-paw*, and *dein-than* were composed with *myinzain* mode.⁴³

Table 2 Relationship between modes and Burmese repertoire

Mode		Repertoire
1	Hynin-lon	kyo, bwe, tachin-gan
2	Auk-pyan	pat-pyo, law-ka-nat-than, lei-dwei than-gat
3	Pale	yo-daya, talaing, mon, baw-le, than-zan
4	Myin-zaing	tei-dat, shit-hse-baw, dein-than

The choice of mode depends on the ensemble. The *Hsaing waing* ensemble has a tendency to tune their ensemble with four modes: *Than Yo Chauk pauk*, *Hkun Hnathan Gyi*, *Nga bauk*, and *Patt sa bou*.⁴⁴

Characteristics of Burmese music

Texture and melodic characteristics

Typically, Burmese instruments, when performed, are providing polyphonic as well as heterophonic texture. Each instrument contains both high and low range in which the low range is played within the skeleton of the scale in longer note values, while the upper range adds

⁴³ Becker 74,

⁴⁴ Robert Garfius, mode, 42.

ornamentation in a flexible motion, bringing more colors outside their primary scale and adding layers to the fundamental melody.⁴⁵

Consonant sounds occur by the practice of adding the fifth below. Also, it is used to create cadential progressions.⁴⁶ Commonly, the octave, fourth, and fifth are considered preferred intervals to add to the melody.⁴⁷

The structure of the composition

Since Burmese music originated as vocal repertoire, the length of the poem determined the structure of the composition.⁴⁸ Basically composition structure comprises three parts: introductory passage, main melody in AABB form with interludes between stanzas, and a concluding passage or cadential formula.

Another compositional technique is to have two melodic lines. The main melody and secondary melody are intertwined with each other and this is commonly found in music for *Saung Guak*, *Pattala*, *Pat waing*, and other gong instruments. Besides the pitches of the main melody, the microtone is added to the secondary pitches when performing with *Hne*, *Palwe*, and voice.⁴⁹

Burmese songs have similar structure using the binary form with introduction passage introducing the rhythm used in the song. The second repeat is a melodic variation or embellishment from the simple version played the first time through. Similar to the concept of melody in the mainland Southeast Asia, the main melody exists only in the performer's heart; None of the performers play it exactly the same way.

⁴⁵ Smithsonian, Myanmar: Music by the Hsaing Waing Orchestra, 10.

⁴⁶ Robert Garfius, mode, 49.

⁴⁷ Cox, disser, 27.

⁴⁸ Smithsonian, Myanmar: Music by the Hsaing Waing Orchestra, 10.

⁴⁹ Grove 9

If a written version is made, it is a collective melody that exists only for the purpose of preservation and never played as written.

The cadential formula is called *atarw* and is played at the end of each stanza.⁵⁰ To create a cadential phrase, the interval of a fifth is added below the melody.⁵¹ This cadential phrase is played as an improvisation by the performer.⁵² The example below is the concluding passage performed by the *patala* player at the Gitameit Institution, Yangon.

Example 11 Conclusion passage by xxxxx, *patala* player at the Gitameit Institution, Yangon.

⁵⁰ Grove 6.

⁵¹ Robert Garfius, *Mode*, 49.

⁵² Grove 6.

Burmese repertoire

Vocal music has been the fundamental music of the royal court since the ancient kingdom. Each dynasty cultivated more repertoires of ceremonial music, love songs, and other entertainment pieces. One of the major collections of Burmese music is *Maha Gita* or *Thachingyi* (the great songs). It is the main repertoire for Burmese classical music cultivated and developed in the the fifteenth century of the Konbuang period. All Burmese musicians have to learn *Maha Gita*⁵³ before they begin studying their instrument. Approximately, one hundred and sixty nine songs are actually performed and taught at the State School of Music and Drama and the University of Culture. The songs are categorized into genres based on tuning system, rhythmic patterns, melodic figures, fixed prelude, and fixed postlude.⁵⁴ All songs of the *Maha Gita* are vocal with instrumental accompaniment. Only the lyrics of the *Maha Gita* were preserved in the palm-leaf manuscript. The melody and instrumental parts were passed down through oral transmission.⁵⁵

The collection of songs in *Maha Gita* encompass approximately twenty genres. Some of the songs in the collection survive only in the text version.⁵⁶ These genres are distributed as follows: *Kyo* songs = 55 songs, *Saung Guak* string, *Bwe* songs = 36 songs, *Tachin Hkan* (verse of songs) = 29 songs, *Pat pyo* songs (hitting songs, *Yodaya Songs*, *Bole*, *Loung Chin*, *Lei Dwei Than Kat*, *Myin Gin*, *Nat Chin (Meidani)*) = 37 songs, and *Talaing Than*. The first three repertoires: *Kyo* songs, *Bwe* songs, and *Tachin Hkan* are considered the oldest part of *Maha Gita* that comprises great number of songs. Songs under these three repertoires, are composed with *Hhyin-lon*, the basic Burmese mode.⁵⁷ *Kalabaw* are

⁵³ Grove 4.

⁵⁴ Inoue 63.

⁵⁵ Grove4.

⁵⁶ Inoue, 2.

⁵⁷ grove 4.

songs composed at the beginning of twentieth century for film and commercial purpose.⁵⁸

Patt Pyou is a popular repertoire at the court, so it contains the largest number of songs in Maha Gita. *Patt Pyou* is derived from the mixture of music from Ayutthaya (called *Yodia*) and Burmese melodies. Songs under this genre begin with the introduction of *Pat-lone* (p4). *Loung Chin* is a longing repertoire. *Lei Dwei Than Kat* is a group of two special songs.

Myin Gin is a repertoire for making the horse dance. *Nat Chin* is songs from the repertoire of the worship and propitiation of the 37 Nats, a native Burmese religion which exists alongside and in harmony with Buddhism.

Yodaya repertoire are songs from the Ayutthaya period of Siam that have been adopted by the Burmese since the eighteenth century. Songs in this repertoire were composed in *Pale* mode (*Patsabo*).⁵⁹ New songs in the *Yodaya* repertoire are compositions created to imitate the Ayutthaya style. *Talaing Than* are repertoire from the Morn people of Burma. Lastly, *Bole* are lament songs. Many songs share same melodies but with different lyrics.

The example below contains details of one of the significant repertoires — *Nat-than thachin* for worshiping the spirit of Nats. The songs for the 37 nats (spirits) were compiled and transcribed by U Sa, a court musician in the reign of King Bagyidaw (1819-1837). Nat songs are performed during the Nat ceremony.⁶⁰ Each nat has his/her own tune played by the *Saigh waing* ensemble at the entrance of the dance depicting each spirit.⁶¹

⁵⁸ Inoue 20.

⁵⁹ Grove 5.

⁶⁰ Inoue 31.

⁶¹ Grove 3.

The palm-leaf manuscript displayed the information of the Nat repertoire and its performance in 1805:

In the waxing of the moon 5th, Dazaunmon month 1167 (October 26, 1805] the ceremony was held at marquee, and people danced and played music for the 37 nats that has been traditionally held. It was necessary to ask the nat shrine sentinel [nat htein nat nei] and players, and it was necessary to transcribe, how to play and dance along with the *pat* [drum], *hne* [oboe], *lagwin* [cymbal], and what kind of clothes to wear. According to the order of the glorious crown prince, the *hsaing* [drum circle] player *Nga Myattha*, *Tayouk*, and other people were asked about them and about being made to play. Then, it was transcribed what to wear and how to play. In the waxing of the moon 4th, Dhadingyut month 1182 [September 10, 1820], the minister of the interior in the palace, *Myawadi Myoza*, who holds the title of *Maha Zeiya Thura*, *Mingyi Maha Thiha Thura*, discussed with the nat shrine sentinel [nat htein gyi] *Karwi Deirwa Kyaw*, who has knowledge of the chronicle of kings [smudged]. Then he transcribed and collected the list of 37 nat indentities, details on how to dress, and how to play *nat than* [nat songs].⁶²

Becker identified the mode of *Nat-chin* as mode 4 under the Dainthan repertoire.

⁶² Inoue, 31.

CHAPTER III

Cambodian Musical Materials

Cambodian Music, Its heritage, and Functions

Just for a glance, it is difficult to draw the line to separate Cambodian musical instruments from those of the Thais and Laos since the root of the three countries had been tied up together politically and culturally since the time of their ancient civilization. Contradict to Myanmar that displays different group of instrument and repertoire since its geography has provided Myanmar a gigantic mountain range of Tenasserim separating her from Thai, Laos, and Cambodia.

History of Cambodia unfolds the story of an Indian Brahmin, Kaundinya who traveled by sea to Funan empire (1st-6th CE) from Tamil Nadu. He then, sized the kingdom and married queen Soma, a Naga princess. Together, they founded the kingdom of Angkor. The story of Kaundinya and Soma appeared in several versions in the folktale and music repertoires of Southeast Asia (Phra Thong and Nang Nark in Thailand or Phrea Thong and Neang Neak in Cambodia). This indicates the diffusion of Indian culture on music and arts of Cambodia, Thailand, and Laos. Since Kaundinya is from the south of India, carnatic music has paid great influences in the music of Southeast Asia. Music of Cambodian today was a product of multi-cultural manifesting since the ancient civilization of the Funan and Angkor. The influences of Indian and Chinese cultures were kept in the Chinese record along with the evidence carved on the historical sites of Cambodia.

During the Funan period, Chinese records stated the connection with the Chinese court. The Kang Tai's record had indicated that in the year 263 BC., Funanian musicians were sent to perform their music and dance for the Chinese emperor in which he had strongly appreciated in

their music and requested the replication of it to be established in Nanking.¹

Cambodia in their golden age before the French colonization in the nineteenth century has cultivated and established their performing arts that merged along with indigenous culture and cultural diffusion from neighboring kingdoms. Since the early 9th century, the Khmer empire was founded by King Jayavarman II (c. 770-850), and had marked the absolute monarchy system to the land. Iconography from stone palace had displayed evidences of musicians, musical instruments, choreography of the dance, and musical functions in the ancient time (see figure 1-3).



¹ (D.R.Sardesai, Southeast Asia: Past And Present, 3rd ed. 1994, Westview Press, ISBN 978-0-8133-1706-9, p.23).

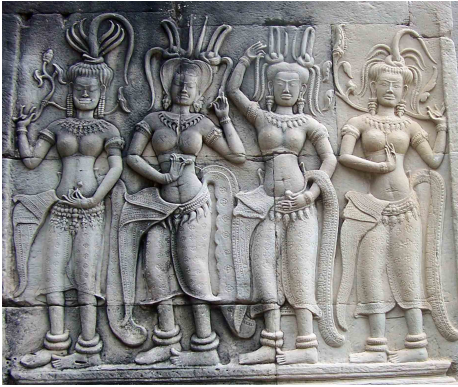


Figure 1-3 Stone relief at Angkor wat depicting pictures of musicians, their instruments, and dancers.

Cambodian ensembles and their functions in the society

Sam-Ang Sam stated that the history of Pin-peat are dated back to the Khmer empire. Firstly developed during the Funan empire in the fourth century where the Indian Brahmin Kaundinya married to the Khmer Queen Soma. In the eight century, the Khmer King, Jayavarman II (772-835) found the Angkorean kingdom. From the ninth to fifteenth century, the Khmer empire extended its power over the lands considered Thai and Laos in this modern day. The musical cultures and the oldest evidence of Pin-peat ensemble are displayed in the stone relief in Angkor Wat in Cambodia (see Figure 1-3).²

Carved on the walls of various temples in the Angkor vicinity were figures of the apsara (celestial nymphs or dancers), along with various musical instruments, namely the sralai [sralai] (quadruple-reed oboe), hong [gah] (gong), chhing [jhiri] (small cymbals),

² Sam-Ang Sam, *The Pin-peat Ensemble: Its History, Music, and Context*, Ph.D. Dissertation, Wesleyan University, 1998, 16-17.

sampho [sambhor] (small barrel drum), and skor thorn [sgar dham] (large barrel drum).

Cambodian social system and beliefs define function of the instrument and the ensemble. Before the change of political revolution, music serves at the royal court and everyday life of the people. Till the political change in 1975, music and arts along with their artists were destroyed by the Khmer Rouge. The time after 1979 became period of restoration of cultural identity. Several instruments and ensemble have to be reproduced and modified to maintain the national treasure as well as serve the people and the society.

According to Sam-Ang Sam, author of *Musical Instruments of Cambodia* (2002), there are altogether thirteen ensembles functioning in Cambodia.³ However some of them were not active in the life of Cambodia and some were an outcome of foreign influences. The information here presents four major ensembles and their instruments that are actives in Cambodia.

1. Arak (Aa-rak)

Arak ensemble (figure 4) is considered one of the oldest ensembles in Cambodia. *Arak* refers to the spirit who protects those who are worshippers. It associates with indigenous belief in spirits of the people before Hindu and Buddhist entered the land. Arak music plays an important role in people's lives. The sounds functioned as a trigger to get the shaman into a trance state. In said state, the shaman can communicate directly with the spirit to discover the source of the troubles the villagers have and the shaman can help them. The process of the ritual consists of inducing a trance state for a medium, and healing sickness. The instruments in the ensemble includes of one-stringed gourd instrument (Khsae muoy), a three-stringed fiddle (Tror Khmer), a

³ Sam-Ang Sam, *Musical Instruments of Cambodia* (National Museum of Ethnology, Osaka, 2002), 143-152.

plucking harp (Chapey dang veng), folk oboe (Pey prabauh), a pair of goblet drum (Skor arak), a pair of small cymbal (Ching), and a singer (Chamrieng).



Figure 4 Arak ensemble

2. Kar

The *Kar* ensemble (see figure 5) is the most popular ensemble of Cambodia since it serves mainly in Cambodian wedding ceremony. For Cambodian, wedding ceremony is counted as a big event and is treated as a significant tradition in the society that can last for three days. However, in a contemporary culture, several procedures are eliminated to match the budget of the family, remains only three important stage: hair cutting, thread tiding, and holding the scarf. Instruments in the Kar ensemble includes of a leaf (Slekk), a double-reed horizontal oboe (Pey prabauh), a pluckin monochord with gourd (Khsae muoy), a three-stringed fiddle (Tror Khmer), long-necked lute (Chapey dang veng), small cymbal (Chhing), a pair of goblet drums (Skor arakk), and a singer (Chamrieng). Similar to *Arak*, *Kar* is also considered an old Cambodian ensemble.



Figure 5 Modern *Kar* ensemble

However, in modern day Cambodian Wedding, the full ensemble of *Kar* with a leaf (*Slekk*), monochord with gourd (*Khsae muoy*), and others are barely seen. Modern practices wedding ensemble comprise of flute (*khloy*), zither (*krapeu*), fiddles (*tror*), hammered dulcimer (*khimm*), hand cymbals (*ching*), a goblet drum (*skor arak*), and a singer (*chamrieng*).⁴

3. Pin peat

Pin peat ensemble (figure 6) has its root in the royal court, thus it functioned in court ceremony, courtly dance, as well as theatrical art performances mostly Ramayana stories and courtly dances. Instruments comprises of high and low pitch instruments of the same type set in pairs (oboe, wooden xylophone, metallophone, gongs, and percussion instrument) including of high-pitched quadruple reed oboe (*Sralai tauch*), low-pitched quadruple reed oboe (*Sralai thom*), high-pitched wooden xylophone (*Roneat aek*), low-pitched wooden xylophone (*Roneat thung*), high-pitched metallophone (*Roneat daek*), high-pitched circular frame gongs (*Korng tauch*), low-pitched circular frame gongs (*Korng thom*), small cymbal (*Ching*), small two-headed drum (*Sampho*), large two-

⁴ Sam-Ang Sam, *Musical Instruments of Cambodia* (National Museum of Ethnology, 2002), 145.

headed drum (Skor thomm), and singer (Chamrieng). Pin-peat is the ensemble appeared in the Angkor Wat and many ancient ruins.

Among the instruments in the ensemble, *Roneat-ek* has the leading role to the ensemble since he is the one who manages all the advance skill. Pin-peat repertoire can be divided into two categories: the action repertoire accompanied by drum pattern and vocal repertoire.



Figure 6 Pin-peat ensemble

4. Mohori

Mohori ensemble (figure 7) encompasses various instruments of winds, strings, and percussion. The function of Mahori ensemble is to provide music for entertainment such as folk dance, banquets, lullaby, love songs, and for leisure listening. Instruments in the Mahori ensemble includes of high-pitched wooden xylophone (Roneat aek), low-pitched wooden xylophone (Roneat thung), bamboo flute (Khloy), high-pitched two-stringed fiddle (Tro che), medium high-pitched two-stringed fiddle (Tror so tauch), medium low-pitched two-stringed fiddle (Tror so thomm), low-pitched two-stringed fiddle (Tror ou), three-stringed zither (Krapeu), hammer dulcimer (Khim), small cymbal (Ching), a pair of goblet and framed drums: Thaun-Rumanea, and a singer (Chamrieng).

Besides these four ensemble, there are several combination of instruments set as ensemble functions in specific function, for example the Korng skor ensemble is a drum ensemble functioning in a funeral; the Skor Chnneah is a victory drum ensemble which is presently used in a funeral procession; the Pey Keo ensemble is used in ancestor worshipping; the Pradall ensemble consists of folk oboe and drums functioning in boxing, etc.



Figure 7 *Mohori* ensemble

Cambodian musical instruments and their techniques

1. Aerophone

The Cambodian aerophone instruments comprises from leaf, buffalo horn, conch shell, various kind of bamboo flutes and folk oboes.

1.1 Leaf



Figure 8

The leaf or *Slek* (figure 8) is one of the instruments performs as a solo instrument or plays at the wedding ceremony. Musician chooses leaf that possesses thickness quality in order for it create vibration when blows through the edge of the leaf.

1.2 Conch shell

Played by the Brahmin, the conch shell or *Saing* is one of the ancient instruments derived from India. It has been used in Hindu rituals, Buddhist ceremonies, and royal ceremonies.

1.3 Bamboo flute



Figure 9 Bamboo flute *Khloy*

Bamboo flute in Cambodia is an end-blown vertical fipple flute, called *Khloy*. *Khloy* functions in Kar and Mahori ensemble. There are 2 kind of *Khloy* varied by its range and size: small-high range *Khloy* is called *Khloy aek* and normal size by 15 inches called *Khloy thom* with 6-7 holes and a thumb hole. The range for khloy is approximately 2 octaves (see example 1)

The range of *Khloy thom* is D₄ – C₆.



The range of *Khloy aek* is xxxxx

Example 1 Range of Khloy

Fundamental techniques in playing khloy include circular breathing, fingering techniques, upper register, tonging, trill, vibrato, alternate fingering.

1.4 Reed flute



Figure 10 Pey pork

The boomboo flute Pey pork is the horizontal bronzed-reed (see figure 10) functioning in the Arak ensemble. To perform pey pork, the musician has to have the reed inside the mouth. It contains 7 finger holes and one thumb hole with a range approximately an octave from D4 to D5 (see example 2). P



Example 2 The range of *Pey pork*

1.5 Reed bamboo pipe *Pey prabauh*



Figure 11 *Pey prabauh*

Cambodian reed bamboo pipe is called *Pey prabauh* (figure 11). The length of the pipe is approximately a foot with a long thick reed of three inches. The body is made from bamboo with a range of a foot and its reed is about 3 inches in length. *Pey prabauh* is the instrument of the Arak and Kar ensemble and serves as a tuner for other instruments. The Pey prabauh produces sound similar to Korean *Piri* and Japanese

Hichiriki. The range of *Pey prabauh* is approximately about an octave from F4 to Ab5. According to Vann Molyvann, *Pey prabauh* can produce nine pitches.⁵ (see example 3)



Example 3 The range and pitches of *Pey prabauh*

1.6 Quadruple reed oboe *Sralai*



Figure 12 Quadruple reed oboe *Sralai*

Quadruple reed oboe *Sralai* (figure 12) is used in the *Pin peat* ensemble. *Sralai* comes in two sizes with different range: the small *Sralai tauch*, approximately in 12.5-13 inches in length with the range from E4 to C6 and the large *Sralai thom* in the length of 16-16.75 and a range of C4-B5 (example 4). Usually both are performed together in the *Pin peat* ensemble. The body of *Sralai* is different from the flute that it is made of hard wood or ivory with the reed made from palm leaf. *Sralai* contains 6

⁵ Vann Molyvann, *Musique Khmère* (Phnom Penh, 1969), 69.

finger-holes. When play together in *Pin peat* ensemble, the *Sralai tauch* has a solo role over *Sralai thom*.

The range of *Sralai tauch*



The range of *Sralai thom*



Example 4 The range of *Sralai tauch* and *Sralai thom*

The fundamental technique in performing Cambodian aerophone instruments is the circular breathing and other techniques similar to Khloy.

2. Chordophone

Several Cambodian chordophone instruments have a long history dated back to the great Khmer empire since the ninth century. Instruments of plucking as well as bowed instruments appeared as the relief on the wall of the Angkor wat, Angkor thom, and Bayon. Some of the instruments still functioned in the ensemble and some had disappeared such as the Cambodian harp which has been recently reconstructed.

2.1 Plucking instrument

2.1.1 Harp

The harp or *Pin* is considered one of the ancient instruments of Cambodia. From the stone relief of the historical ruin, Pin was a significant instrument in courtly life (see Figure 13)



Figure 13 Harp at the Bayon palace

2.1.2 One-stringed gourd harp

A Cambodian monochord plucking instrument is called *Ksaemuoy* or *Ksea Div* (figure 14), literary means “one string.”



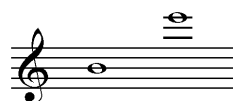
Figure 14 One-stringed gourd harp *Ksaemuoy*

It is played as solo instrument with vocalist or as part of the Arak ensemble. When performed, the sliced dried gourd is placed at the left chest of the performer while right hand plucks a plectrum on the metallic string or brass string and shake the instrument to create a vibration. The instrument creates a very unique sound through the techniques of damping the string simultaneously after plucking on it. The pitch is struck before or after the beat. The range of *Ksaemuoy* is about an octave and a half (see example 5)

The range of *Ksaemuoy* with metallic string



The range of *Ksaemuoy* with brass string



Example 5 The range of *Ksaemuoy* with two different types of string

Fundamental techniques in performing *Ksaemuoy* include producing a harmonic sound by vibrate the gourd to resonate with the chest of the player, pitch sliding and bending, vibrato, and pizzicato effect.

2.1.3 Long-neck fretted lute *Chapey dang veng*

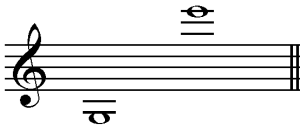
The long-neck fretted lute is called *Chapey dang veng* (see figure 15), an instrument of the *Arak* and *Kar* ensemble or a solo instrument with voice.



Figure 15 *Chapey dang veng*

The body of the lute is closed to a rectangular shape with curve at the four sides. There are twelve frets on the neck with two double courses of strings made from gut or nylon. Each set is tuned a fourth

apart (G-C). The range of *Chapey dang veng* is about two octaves and a half, from G3 to E6 (see example 6)



Example 6 Range and tuning of *Chapey dang veng*

Fundamental techniques in performing *Chapey dang veng* include tremolo, pitch bending by pushing the strings, sliding tone, gace note, trill, and slur.

2.1.4 Hammered dulcimer

Cambodian hammered dulcimer is called *Khim* (figure 16). *Khim* in Cambodia comes with two sizes: one possesses high register called *Khim tauch* with its role in providing main melody in *Mahori* ensemble or *Kar* ensemble and lower register dulcimer is called *Khim thom*, plays counter melody. Both *khim* also function in Chinese theater *Basak* due to its Chinese heritage. The number of bridges in for *Khim tauch* and *Khim thom* are varied. There smallest number of bridge is 8, 9, and 12.



Figure 16 Cambodian Khim

The range of *Khim tauch* and *Khim thom* are approximately three octaves (see example 7).

The range of *Khim tauch*

The range of *Khim thom*

Example 7 The range of *Khim tauch* and *Khim thom*

Fundamental techniques in performing *Khim* include tremolo, trill, grace note, slur, and mordent.

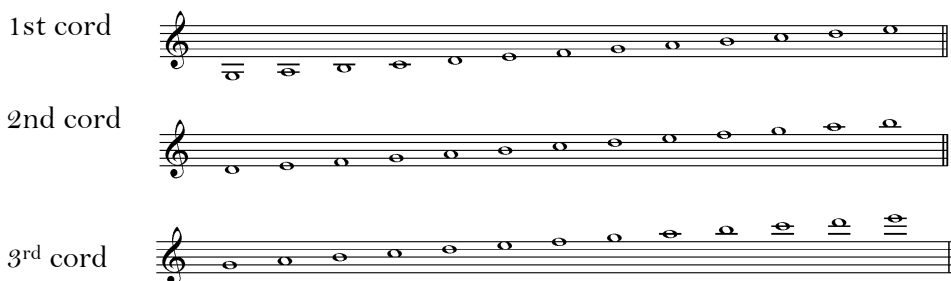
2.1.5 Three-stringed zither *Krapeu*

The Cambodian three-stringed zither is called *Krapeu* (see figure 17). The strings are made from different materials. The high and medium string are made of gut or nylon while the low string is made of metal, having a function of drone. The twelve frets are placed below the three strings. The high string is tuned with G, medium string is tuned with D, and the low string is tuned with G.



Figure 17 Three-stringed zither *Krapeu*

The range of *Krapeu* is almost three octaves, from G3 to E6. Each string can play up to an octave and a half (see example 8).



Example 8 Rang and tuning of *Krapeu*

Fundamental techniques in performing *Krapeu* include prominent application of tremolo (almost at the end of the phrase), turn, and two grace note connected to one long note.

2.2 Bowed instrument

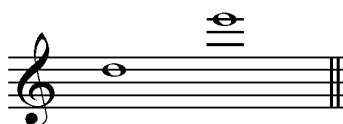
The bowed instrument in Cambodia contains both the two-stringed fiddle and three-stringed fiddle. The two-stringed fiddle is derived from China and the three-stringed from Persia. As for the two-stringed fiddle, Cambodia has developed seven kind of the fiddles to cover all range from high to low, closed to human voice. The bow of all kind of fiddles are made from horse hair or nylon. There are different in plaing three-string fiddle and two-string fiddle of Cambodia that the three-string fiddle will use the tip of the finger to press on the string. As for the result, using the finger tip bring clear nad bright sound than the more nasal sound of the two-string fiddle.⁶

2.2.1 High pitch two-stringed fiddle *Tro che*

The highest pitch two-stringed fiddle is called *Tro che* (see figure 18) or *Tro aek*. The two strings are made of metal and tuned a fifth apart (D-A).

⁶ Sam-Ang Sam, personal interview, December 2017.

Figure 18 Two-stringed fiddle *Tro che*



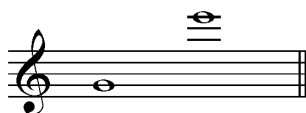
Example 9 The range of *Tro che*

2.2.2 Medium high pitched two-stringed fiddle *Tro so tauch*

Tro so tauch (see figure 19) is the medium high pitched two-stringed fiddle. It is the leading instrument in the Mahori, Arak, and Kar ensemble. String are made of metal and is tuned a fifth apart (G-D).



Figure 19 Two-stringed fiddle *Tro so tauch*

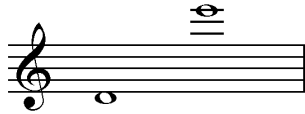


Example 10 The range of *Tro so tauch*

2.2.3 Medium low pitched two-stringed fiddle *Tro so thom*

The medium low pitched two-stringed fiddle is called *Tro so thom* (see figure 20). Strings are made from metal and is tuned similar to *Tro che* but having an octave lower (D-A). It functions in the Mahori ensemble with a subordinate role.

Figure 20 Medium low pitched two-stringed fiddle *Tro so thom*



Example 11 The range of *Tro so thom*

2.2.4 Low pitch two-stringed fiddle *Tro ou*

The low pitch two-stringed fiddle is called *Tro ou* (figure 21). Different from the above two-stringed fiddle that its string is made of silk, gut, or nylon instead of metal. The body is made of coconut shell instead of wood, and is functioning in Mahori ensemble. *Tro ou* is tuned a fifth apart (C-G) (see example 12).

Figure 20 *Tro ou*



Example 12 The range of *Tro ou*



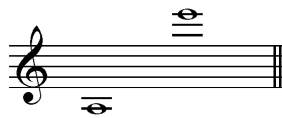
2.2.5 Three-stringed fiddle *Tro Khmer*

Three-stringed fiddle is called *Tro Khmer* (see figure 21), used in the *Arak* and *Kar* ensemble. The resonator is made from coconut shell with a silk or nylon strings. The three strings comprises of G on the high string, D on the middle string, and A on the low string.



Figure 21 Three-stringed fiddle *Tro Khmer*

The range of *Tro Khmer* is about two octaves and a half from A₃ to E₆ (see example 13)



Example 13 The range of *Tro Khmer*

Fundamental techniques in performing *Tro* including of trill on the interval of the second and third, vibrato (some musicians), prominent application of slur, legato, melismatic, staccato, and occasionally tremolo.

3. Idiophone

Cambodian idiophone instruments consist of bronze drum, wooden xylophone, metallic xylophone, and gongs. Both the xylophone and gongs come in a pair of high and low pitch with different role in the ensemble.

3.1 Wooden xylophone *Roneat*

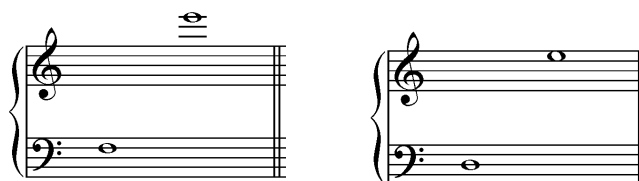
Cambodian xylophone is called *Roneat*. *Roneat* is made from bamboo or hard wood, carved in a form of a bar. There are altogether 21 bars made is the same width but different in length and thickness. The overall range spans over three octaves. The wooden bars are arranged in a row and hanged above a wooden resonator box made in a form of a boat. Each bar is tuned with different portion of led mixed with beeswax, called *pramor*. There are two types of mallet to strike on the bar: a pair of soft mallet for an indoor performance and a pair of hard mallet for an outdoor performance. A set of wooden xylophone played in *Pin peat* ensemble comprises of *Roneat aek* and *Roneat thom* (figure 22).



Figure 22 *Roneat aek* and *Roneat thom*

Roneat aek has a main role as a leader of the *pin peat* ensemble due to the lead-in function in the ensemble, then provides a melodic variation with elaboration through several techniques. *Roneat thom* is different from the *Roneat aek* in its larger size, lower range and two-octave span. To create a subordinate role to *Roneat aek*, *Roneat thom* is performed only with soft mallet, providing a counter melody to the *Roneat aek*.

The range of *Roneat aek* is almost three octaves from F3 to E6 while the range of , *Roneat thom* is about two octaves from D3 to E5 (see example 14).



Example 14 Range of *Roneat aek* (left) and *Roneat thom* (right)

Techniques in performing *Roneat aek* include adding interval of fourth, fifth, octave and the third to the melody, glissando, tremolo, triplet, grace note in pentatonic set (CDE-G) (see example 15)

Example 15 Three grace note in pentatonic set



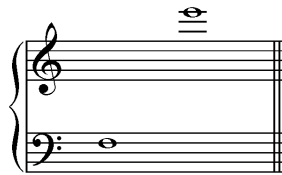
Techniques in performing *Roneat thom* includes syncopation, legato, and can apply a mixture of styles with more freedom in interpreting the music.⁷

3.2 Metallic xylophone (Metallophone)

In contrast with *Roneat aek* and *Roneat thom*, the twenty-one bar of *Roneat daek* (see figure 23) is made from bronze plate of different length, arranged directly on the rectangular wooden resonator. The application of *Roneat daek* is only happened in largest outdoor ensemble only. Fundamental techniques of *Roneat daek* is similar to *Roneat aek*. The range of *Roneat daek* is also similar to *Roneat aek* (see example 16)



Figure 23 Metallic xylophone *Roneat daek*



Example 16 Range of *Roneat daek*

3.3 Gongs

There are several types of gongs used in Cambodian music. The knob gongs and the flat gongs. A set of small bossed gongs of different

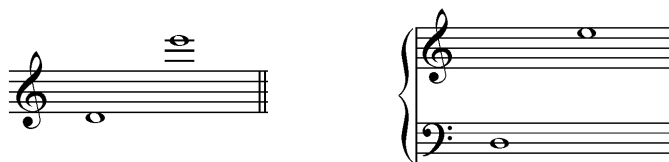
⁷ Sam-Ang Sam, personal interview, December 2017.

sizes that are arranged on a circle wooden frame, having a performer sit at the center of the frame is called *Kong vung*. This circular framed gong is called *Kong vung tauch* which provides high pitch, performed together with its pair of lower pitches range instrument, *Kong vung thom*. The number of gongs is varied from sixteen to twenty-one gongs. Each gong is tuned with *pramor* (lead mixed with beeswax). Similar to the mallet used for the *Roneat*, both the soft and hard mallet are applied in the same way in performing *Kong vung*. Both the *Kong vung tauch* and *Kong vung thom* (see figure 23) are instruments in the *Pin peat* ensemble. The role of *Kong vung tauch* in the ensemble is to provide a melodic variation. On the other hand, *Kong vung thom*, its lower range pair is performed in alignment with *Roneat thom*.



Figure 23 *Kong vung tauch* and *Kong vung thom*

The range of *Kong vung tauch* and *Kong vung thom* is approximately two octaves from D4-E6 and D3-E5 which is similar to the range of *Roneat thom* (see example 17).



Example 17 Range of *Kong vung tauch* (left) and *Kong vung thom* (right)

Fundamental techniques in performing *Kong vung* is to play consecutive note in a rhythmic drive that alternate between left hand and right hand.

3.4 Small hand cymbal

Small hand cymbal made of bronze is called *Ching* (figure 24). The cymbal comes in pair connect to each other by the thin rope. One cymbal play by left hand and the other on the right. When performed together produces an open and damp sound notated as + and o. The open sound is created by using the cymbal on the right hand strikes on the top rim of the cymbal of the left-hand *Ching* while the damped sound, is created by using the right hand *Ching* strike over the top of the left hand *Ching*. *Ching* serves as a time keeper of the ensemble.



Figure 24 Ching

4. Membranophone

Cambodian drums comprise of one-headed drum and two-headed drum with different sizes and shape including barrel drum and goblet drum.

4.1 Two-headed barrel drum



Figure 25 Double-headed barrel drum *Sampho*

The double-headed barrel drum in the *Pin peat* ensemble is called *Sampho* (see figure 25). *Sampho* is a medium size drum played by hands. Both the two heads of the drum are covered with cowhide. Each is carved which one side smaller than the other to provide the contrast of high and low. At the center of the drum's head is paste made with rice and ash for tuning the drum. *Sampho* is the instrument of Pin peat ensemble, regarded as a sacred instrument associates with sacred rituals.

The choice of rhythmic pattern for *Sampho* depends on the repertoire and function of the performance. The rhythmic pattern of the drum consists of an eight-beat cycle and sixteenth-beat cycle (Example 18).

The eight-beat cycle

The sixteenth-beat cycle

Example 18 The rhythmic cycle of Sampho

4.2 Large two-headed barrel drum

The large two-headed barrel drum is called *Skor thom*. *Skor thom* (see figure 26) image appeared at the Angkor wat. In the past, it was used in the battlefield and providing signals in the military and temple. Cowhide or buffalohide is used for covering the two heads of the drum. Each side of the hide is adjusted differently to create a different tone. However during the performance, the drum is set vertically that only

one side is played; therefore, a pair of drum is used in the performance. Both drums are played by wooden beater.



Figure 26 Large barrel drum *Skor thom*

Example 18 The rhythmic pattern of *Skor thom*

4.3 Two-headed cylindrical drum

The two-headed cylindrical drum is called *Skor klang khaek* (figure 27)

Figure 27 *Skor klang khaek*

4.4 One-headed goblet drum *Skor Arak*

The one-headed goblet drum is called *Skor Arak* (figure 28). The head of the drum is covered with snake skin on the goblet shape body made of wood or clay. *Skor Arak* is played by bare hand functioning in Arak, Kar, and Mahori ensemble. When performed in the rituals, the pair

of *Skor Arak* is used; however, for the wedding ceremony, only one Arak drum is performed in the ensemble.



Figure 28 One-headed goblet drum *Skor Arak*

4.5 Goblet and framed drums *Thaun* and *Rumanea*

A pair of hand drums, one is similar to *Skor Arak* that it is in the shape of goblet and made from either clay or wood. The other is a flat small framed drum. The goblet drum is called *Thaun* and is placed on the right lap of the performer while the framed drum, *Rumanea* is placed on the left lap of the performer. Both *Thaun* and *Rumanea* (see figure 29) are performed together and together they create rhythmic patterns.



Figure 29 *Thaun* and *Rumanea*

Example 19 The rhythmic pattern of *Thaun* and *Rumanea*

Cambodian mode and tuning system

The Khmer empire history had paved the influences of Cambodian music with Chinese and Indian cultures, which is not only evident in the influence on musical instruments, but also upon its sound system. The nature of the pentatonic scale which is rooted in Chinese tradition and has become one of the Cambodia's musical structures along with the heptatonic scale derived from India. Pentatonic scales are used in cultivating *Pin peat* and *Mohori* repertoire while the heptatonic is found in the *Arak* and *Kar* repertoire. The pentatonic scale is considered in the category of anhemitonic pentatonic scale (a scale without a semitone).⁸ In the heptatonic scale, only six notes create the melody.

Although the heptatonic indicates that there can be up to seven pitches in a scale, when one tunes the seven-pitches, they are approximately equidistant but not perfectly equal since different ensembles can tune in different ways. Also, there is no concept of standard pitch in Cambodian music. The tuning varies from one musician to another. Therefore, the same type of instrument can sound completely different from each other.

Contrary to western music theory where the structure of major and minor scales provide a pattern of fixed intervals and any piece could be perform in any key with the same pattern, Cambodian music has to begin on specific pitches. If not, the result will turn the melody into a different structure of intervals. Thus, it becomes a distorted melody.

According to the nature of Cambodian music, each repertoire needs to begin their piece with a specific pitch, so the *Pin peat* repertoire is using the G as the beginning pitch and *Mohori* repertoire must make their beginning pitch on C. When performing the repertoire, Khmer music has to begin on specific pitch. If performed with transposition, the color of the melodic intervals can be changed, resulting in a different melody based on a different mode.

⁸ Sam-Ang Sam, *Musical Instrument of Cambodia*, 6-7.



The pentatonic scale comprises notes 1 2 3 5 6 and 8 of the western scale or M2 M2 m3 M2. Any piece that is constructed with the pentatonic scale will have the 4th and the 7th as a passing note, not the main melody. The heptatonic scale, on the other hand, has all seven notes available for the main melody.



The concept of modulation is also different from western music because modulation refers to changing key or tonic center. Instead Cambodian music applies the technique of transposition where the pitch is transposed up a fourth or a fifth. The structure of Khmer composition is based on phrase structure and the cadential point.

Cambodian melodic characteristic and structure

Cambodian melodies are based on either pentatonic or heptatonic scales. Musicians memorize the melody and it is passed down from generation to generation by aural transmission. However, when performed, the melody is modified and embellished, maintaining only its skeleton. Cambodian music is functional music that serves the life of people from birth to death as well as functioning as entertainment.

There are three types of Cambodian music composition: vocal music, instrumental music, and music with dance. Since Cambodian music was passed down through aural transmission, many Cambodian compositions have disappeared from the modern repertoire. In terms of musical texture, heterophony and polyphony are the terms to describe the texture of Cambodian music. Since all musicians perform variations on

the main melody that they keep in their mind, there is a wide divergence between all the different versions of the melody being played at the same time.

Concept of Rhythm

The nature of rhythm, meter, and tempo in Cambodian music is different from western music. First, the rhythm is not a style but a rhythmic cycle or rhythmic phrase comprised of several rhythmic units of short-long note sets with variance of sounds induced by hand and finger techniques. Second, the meter in Cambodian music is set in 4/4. Third, there is no tempo marking as in western music; however, Cambodian musicians know the compositions in their mind including which piece was composed with slow, moderate, or fast tempos. Then, the drummer will be the one who sets the tempo for the performance.

Example of eight beats cycle (Muoy Choan)

Example of sixteen beats cycle (Pi Choan)

Example of thirty-two beat cycle (bey Choan)

Concept of musical structure

sam-chan, song-chan, and chan-deo

Cambodian music 4/4 and 2/4 in Thai

Cadential formula

Cambodian rhythmic pattern

Cambodian Repertoire

song repertoire – Mahori

Mahori – folk dance is used
Rule

Accent song

Mahori lakon – Develop on particular on theme ex. hunter

Xylophone -

Interviewee:

**Sak Sothea: All fixed instru. Kong Wong Thom, Roneat
Run Vanny: winds instru. Sralai, Khloy. Tro, Kapeau, Skor
Phan Chamroeun: Tror**

Chapter IV

Thai Musical Materials

Thai Music

Thailand has been a home for many westerners and Asians for many centuries. The Thais, therefore, have opportunities to hear music of others and have been familiar with instruments outside their tradition. The early records of music practiced in Siam (former name of the country that was changed to Thailand in 1939) can be found in literature, palace law, stone relief, stone inscriptions, and records of missionaries and westerners residing in Siam, as well as merchants travelling back and forth to the land. These records reveal the information about ensembles, instruments, repertoire, as well as how music functioned in Thailand.

Similar to other Southeast Asian countries that gain major influences from Indo-Chinese cultures, Thai music has roots in the instruments and performance practice of Indian and China. As such, their musical function can be related to Hinduism and Buddhism from India. However, its instruments, once adopted by the country, were modified and developed from time to time, creating new appearances while shadowing their Indo-Chinese precursor.

Thai ensembles and their functions in the society

The classification of Thai musical instruments as mentioned by Thai music master, Montri Tramote is based on the Indian scripture. The musical instruments are divided into four groups according to the method in performing the instrument: plucking, bowing, striking, and blowing. Some are suitable to play outdoors more than indoors; therefore, the types of ensemble are built upon the function and the venue of the performance.

The indoor ensemble can range from a single musician to a large number of musicians. In the ancient kingdom of Dvaravati (6th-15th C.),

the ensemble of five musicians carved on the stone relief discovered at the *Khu-bua* city displays five ladies performing with a plucked monochord instrument, a flute, a wood clapper, a hand cymbal, and a singer. This type of ensemble is considered a precursor of chamber music practiced at the court in Sukhothai (13-14th C.) and Ayutthaya (15-18th C.). Two to three plucked and bowed strings with a singer, called *Ban-leng pin* was a typical ensemble of the fourteenth century, which was later developed into a *Mahori* ensemble in the Ayutthaya period, comprised of four to six musicians.

The outdoor ensemble is used in grand ceremonial music of the royal court and Buddhist ceremonies. Similar to the indoor ensemble, the size of the outdoor ensemble was expanded and developed in the Ayutthaya period. Hence, the *Pii-phat* ensemble was developed in this period and still functions in present day Buddhist ceremonies as well as all theatrical art performances of Thailand.

The only ensemble that maintains its role as in ancient times is the conch-shell/horn ensemble that functions in the royal court for signaling the royal procession or announcing the beginning of the ceremony.

Indoor ensemble

There are two major indoor ensembles that are active in modern Thai society. Both are considered Thai classical ensemble: the *Krueng-sai* ensemble and the *Mahori* ensemble. Generally, all the instruments of both ensembles are traditional Thai instruments. However, since the twentieth century, western instruments such as piano, violin, organ, etc. have been integrated into the ensemble, creating a mixed ensemble and modernizing the sonority.

1. Thai string ensemble (*Krueng-sai*)

Krueng-sai means string instrument in Thai, which indicates that the main instruments of the ensemble are string instruments, both

plucked and bowed, along with aerophone instruments and percussion instruments. The plucked strings include a crocodile-shape zither (*Ja-ke*) and a hammer dulcimer (*Khim*). Bowed instruments consist of two types of high and low pitched two-stringed fiddle: *Saw-duang* (high pitch) and *Saw-uu* (low pitch). One or two bamboo flutes (*Klui*) are added. The rhythmic section includes a pair of one-headed drums. One is in the shape of a goblet called *Tone* and the other is a small circular framed drum called *Ramana*. Other percussive instruments are a pair of hand cymbals with an onomatopoeic name (*ching*). The choice of adding a singer to the ensemble depends on whether the instruments intend to perform vocal or instrumental repertoire.

The *Krueng-sai* ensemble's function is for entertainment purposes such as banquets, wedding ceremonies, and any auspicious event. (see figure 1).

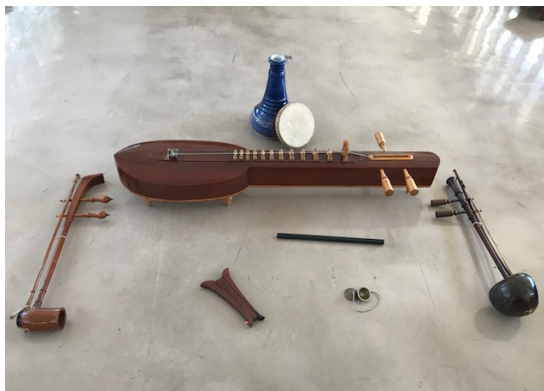


Figure 1 Thai string ensemble, Faculty of Fine and Applied Arts, Chulalongkorn University

2. *Mahori* ensemble

Thai *Mahori* ensemble is one of the ancient ensembles of Thailand that was developed since the fifteenth century. Once it developed to the modern *Mahori* ensemble, the functions has changed

from the ancient practice in the royal court to public performances. The choices of instruments from ancient ensemble to the modern ensemble are also different from each other. The ancient *Mahori* ensemble, which was developed from the *Khab-mai* ensemble and *Ban-leng pin* ensemble comprised four instruments: three-stringed fiddle (*Saw sam-sai*), a plucked string instrument (*Kra-jab pii*), a goblet drum (*Tone*), and a singer with a set of wooden clappers. Later on, in the Ayutthaya period, the ensemble expanded to six instruments, adding a bamboo flute (*Klui*) and a framed drum (*Ramana*) (see figure 2). This type of Mahori ensemble is called *Mahori-luang* due to its function in the royal court.

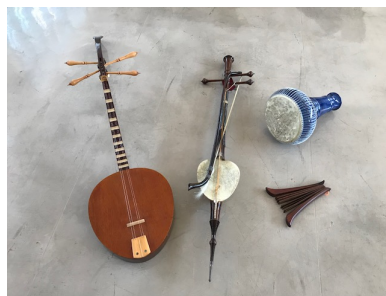


Figure 2 *Mahori luang*, Faculty of Fine and Applied Arts,
Chulalongkorn University

The modern *Mahori* ensemble (figure 3) was a modern development in the Ratanakosin period (19th-century), having a different function from *Mahori luang* in its role to serve the public and common people. In the new development, the *Mahori* is a combination of instruments drawn from the Thai string ensemble and Pii-phat ensemble. The modern *Mahori*, therefore, is comprised of a wooden xylophone (*Ranard-ek*), a half-circular set of framed gongs (*Kong wong yai*), a three-stringed fiddle (*Saw sam-sai*), a low and a high pitched two-stringed fiddle (*Saw-uu* and *Saw-duang*), a bamboo flute (*Klui*), a three-

stringed plucked zither (*Ja-ke*), a pair of hand cymbals (*Ching*), a goblet drum (*Tone*), a circular framed drum (*Ramana*), and a set of wooden clappers (*Krap-puang*). These choices of instruments create a small size modern Mahori ensemble, which can be expanded to a larger size by doubling the instruments or adding more instruments, such as a low pitched wooden xylophone (*Ranard-thum*), metallic xylophone (*Ranard-lek*), high pitched half-circular framed gongs (*Kong wong lek*) and additional ranges of bamboo flutes (*Klui-lib* or *klui-uu*), a pair of medium-sized cymbals (*Chab*), a hanging gong (*Mong*), and a pair of two-headed drums (*Klong kaek*).



Figure 3 Mahori (a mixture of string ensemble, xylophone, and a circular framed gongs), Faculty of Fine and Applied Arts, Chulalongkorn University

Outdoor Ensemble

Pii-part ensemble is a major ensemble of Thai music. The role of *Pii-part* ensemble is to perform in royal court ceremonial music, Buddhist ceremonial music, and theatrical art performances. The ensemble itself dating back to the Ayutthaya period, consisted of only five instruments, which was later expanded to a large size outdoor ensemble as well as separating into several types of *pui-part* ensembles

for their specific roles. The smaller size ensemble is comprised of a high pitched wooden xylophone (*Ranard-ek*), a low pitch half-circular framed gongs (*Kong wong yai*), a folk oboe (*Pii-nai*), a double headed drum (*Ta-pone*), a pair of large drums (*Klong-tad*), and a pair of hand cymbals (*Ching*). Other types of *Pii-phat* ensembles can add another range of folk oboe (*Pii-nok*), a low pitched wooden xylophone (*Ranard-thum*), a high pitch half-circular framed gongs (*Kong wong lek*), a pair of medium-sized cymbals (*Chab*), a hanging gong (*Mong*), and a pair of two-headed drums (*Klong kaek*). As for the largest ensemble (*Pii-part krueng yai*), the metallic xylophone is added (see figure 4).



Figure 4 Pii-phat ensemble

With a very large size ensemble, each instrument in the *Pii-phat* ensemble has their own role and performs with their own styles. The leading instruments are a high pitch wooden xylophone (*Ranard-ek*) and a folk oboe (*Pii-nai*). The main melody is played by the low-pitch half-circular framed gongs (*Kong wong yai*). Supportive instruments are another folk oboe (*Pii no-ok*), metallic xylophone (*Ranard lek*), and a high pitch half-circular framed gongs (*Kong wong lek*).

Thai musical instruments and their techniques

Chordophone

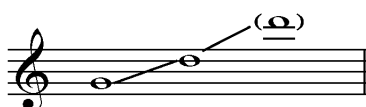
1. Two-stringed fiddle

There are two types of two stringed fiddles: the high pitch and low pitch. The high pitch is called *Saw-duang* and the low pitch is called *Saw-uu* (see figure 5). The range of both fiddles can cover two octaves, in which *Saw-duang* is a fifth higher than the *Saw-uu*. The tuning for *Saw-duang* is G on the lower string and D on the high string. As for *Saw-uu*, the low string is tuned to C while the high string is tuned to G (see example 1).



Figure 4. *Saw-duang* (left) and *saw-uu* (right)

Range of *Saw-duang*



Range of *Saw-uu*



Example 1 Range and tuning of high and low two stringed fiddle

The techniques in performing both *Saw-duang* and *Saw-uu* are similar. Each school provides additional techniques expanding from the

fundamental fiddle techniques. Besides playing straight melody, the techniques provide musicians ways to modify the melody with ornamentation and melodic embellishment such as trills, grace notes, slurs, triplets, melismas, turns, vibrato, and tremolo (see example 4.2-4.8).

To apply a trill on the specific note, the pitch higher than the main pitch is played at the start of the trill but the ending note has to be the main pitch. For example, the trill on A begins with B but ends on A (example 2)



Example 2 Application of trill on structural pitch A
on the two stringed fiddle.

The triplet is done by repeating the same pitch or playing three different pitches in a stepwise motion (example 3). A slur, on the other hand, is not rhythmically even and is applied with three different pitches that are not moving in a stepwise motion; therefore, it is combined with two grace notes that are connected to the main note (example 4).



Example 4 Triplet and slur ornamentation

Grace note is common in ornamenting Thai melody. Generally, grace note is applied by using three different pitches. The first two are grace notes that are connected to the main pitch by slur (example 5).

Grace note with slur
(called *sa-bad*)



Example 5 Application of two grace notes to the main note 'E'

Besides trills and grace notes, mordent is another ornamentation applied to Thai melodies. The mordent, when used, is combined with a triplet and connects together with a slur (example 6).

Example 6
mordent, triplet, grace note
and slur



As for the bowing technique, one bow can play one note or two notes. Vibrato and tremolo are applied according to styles and legacy of each school (example 7).

Example 7 vibrato



2. Three-stringed fiddle

The three-stringed fiddle is called *saw sam-sai* in Thai (see figure 5). The instrument was developed from the Persian instruments, *Kamanche* and *Rebab*. The Thai three-stringed fiddle is a type of spike fiddle, much like the endpin on a cello. The three strings are tuned with the interval of a fourth apart: A on the low string, D on the middle string, and G on the high string (see example 8).

Example 8
Range of saw sam-sai

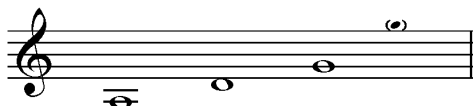




Figure 5 Three-stringed fiddle *Saw sam-sai*

Fundamental techniques include double stops, trills, vibrato, slides, grace notes, and slurs. The double stop is created by adding the harmonized pitch above or below the main melodic pitch (see example 9).

Adding pitch below the main pitch



Adding pitch above the main pitch



Example 9 Double stop by adding an interval of a fourth above or below the main pitch

3. Hammer dulcimer (*Khim*)

The hammer dulcimer is known as *Khim* in Thailand. *Khim* has its origins in China. Historical evidence indicated that the instrument was well-known in Thailand during the reign of King Rama IV (d. 1868). There are two types of *Khim*: the butterfly shape and the

trapezoid shape. Both are different in terms of body, sound quality, materials, and tone color (see figure 6).

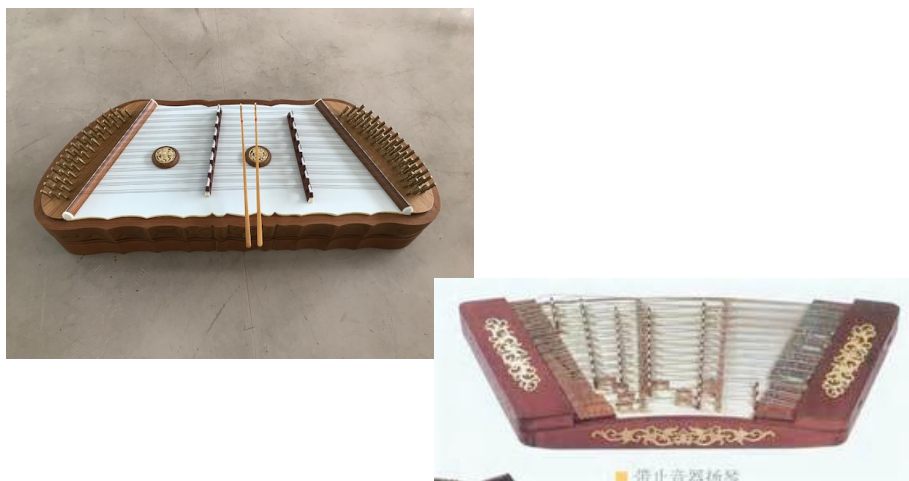


Figure 6 The butterfly-shape *Khim* and the trapezoid shape

As for the range of *Khim*, it varies from two to three octaves (example 10) depending on the number of bridges which are seven-bridges, nine-bridges, or eleven-bridges. The seven-bridges are the most common one. However, the seven-bridge *Khim* requires an additional bridge inserted to accommodate different keys. For new music composition, the nine-bridge *Khim* is more suitable to accommodate wider ranges harmonic exploration.



Example 10 Range of *Khim* (seven-bridge)

Khim is performed using many techniques that include playing the melody one note at a time (called *Geb* style), playing two notes at the same time or alternating pitches at the octave, and playing the melody with added intervals of a third, a sixth, or a fourth above or below the melodic pitch. Ornamentation includes grace notes, tremolos, trills, and slurs. (see example 11).

Play straightforward melody without adding ornaments



Play melody at octave by alternating



Play melody by octave at the same time



Example 11 Techniques in performing *khim*

Adding intervals to the melody is done by applying the interval of the third, the fourth, the fifth, or an octave. When performed with intervals, the tremolo is applied. This technique is a popular technique of *Khim*, called *Grau* in Thai (example 12).



Example 12 Application of tremolo when playing interval

The *grace note* is applied in a set of three different pitches, having the first two notes as grace note that move in either ascending or descending motion toward the main melodic pitch (example 13).



Example 13 Application of grace notes (called *sa-bat*)

A single pitch can be played with triplet rhythm. This technique is common in Thai music and is called *sa-dau*. (example 14)



Example 14 The triplet is applied on the single pitch (called *sa-dau*)

The other technique used commonly in Thai music is based on Thai a compositional method in connecting one musical phrase to the next. The technique is called *thao* which is applied where there is a space between melodic phrases or to sustain the pitch. The note one tone higher than the ending pitch is applied in a set of six notes in a long-short-short-short-short-long pattern (see example 15)



Example 16 The application of *thao* at the end of the melodic phrase

Typically, *Khim* when performed as solo instrument, tends to be most expressive in a minor mode; ex. *Nang kruan* (The weeping of a Lady) (example 17).

Nang Kruan



Example 17 Melody of *Nang kruan* in a minor mode

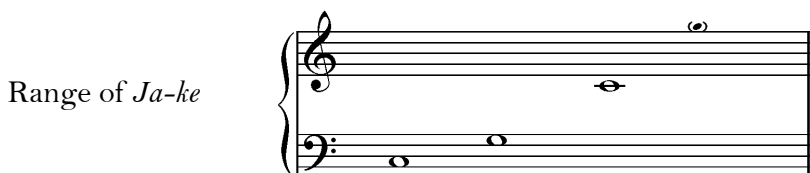
4. Crocodile zither (*Ja-ke*)



Figure 7 *Ja-ke*, three-string plucked zither

Rooted in Mon-Khmer culture, *Ja-ke* (see figure 7), the plucked zither is made in the shape of a crocodile and is part of the string family in Myanmar, Cambodia, Laos, and Thailand. *Ja-ke* means crocodile in Thai. It has been used since the Ayutthaya period and it was mentioned in the Palace law that it is forbidden for ordinary people to play the instrument in the palace area.

The instrument itself has three strings tied with three tuning pegs, two strings being made from silk or nylon while the lowest one is made of metal. The three-strings stretch across the top of eleven frets. They are tuned with a fifth and a fourth (C-G-C) (see example 18). The range of pitches each string can produced is an octave plus a fifth (C3-G4, G3-D5, and C4-G5). *Ja-ke* is played with plectrum made of bone, wood, or ivory having thread for tying it to the index finger of the player.



Example 18 Tuning and range of *Ja-ke*

Fundamental techniques of the instrument include tremolo, striking all three strings, triplet on the same pitch, grace note on three different pitches in ascending or descending stepwise motion, and mordent.

Aerophone

1. Bamboo flute

Bamboo flute or *Klui* in Thai, is considered one of the earliest instruments socialized in every classes of Thai society. Since the sound of the bamboo flute is soft, it is suitable to perform with an indoor ensemble, such as the string ensemble and *Mahori* ensemble. The role of the flute when functioning in the ensemble is to provide the melody with ornamentation. There are three types of bamboo flutes that produce different registers (see example 19): *klui pieng-ou*, *klui lib*, and *klui-uu* (*klui* means flute in Thai) (figure 8).

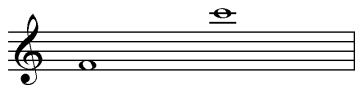


Figure 8 *klui lib* (top), *klui pieng-ou* (middle), and *klui-uu*

The middle range, *Klui pieng-ou* plays in the string ensemble and *Mahori* ensemble. With its lower range and mellow sound, *klui-uu* plays in *pii-part dueng-dam-ban* ensemble, which is the ensemble accompanying indoor plays. On the other hand, *klui-lib*, provides highest register and functions in both the string ensemble and *pii-cha-wa* ensemble. As such, the three types of the bamboo flute can cover the range of soprano, alto,

and tenor in western vocal music classification. The Thai bamboo flute is in the key of Bb.

Range of *Klui lib*



Range of *Klui pieng-ou*



Range of *Klui pieng-uu*



Example 19 Range of three different types of *klui*

Fundamental techniques in performing the bamboo flute include circular breathing, vibrato, grace notes, mordents, slurs, and trills. These techniques when applied with specific fingerings can produce different tone qualities.

Circular breathing is the common technique in performing all aerophone instruments in Thailand. The effect of circular breathing initiates the continued vibration sound to play longer phrases. The performer will store the air in their cheeks to be used when they run out of the air as they take in more air through their nose.

2. Folk oboe

There are three major types of folk oboe currently used in Thai music: *pui-nai*, *pui-nauk*, and *pui-java* (see figure 9). The first two categories have are used for entertainment purposes, especially in theatrical art performance. *Pui-Java*, on the other hand, has its function in the court ceremonies. Both *pui-nai* and *pui-nauk* are the melodic instruments of the *pui-part* ensemble while *pui-java* is reserved for specific occasions such as a royal procession, funeral, and in ensembles playing Persian and Indian repertoire. Beside the three types of pii, *pui-klang*, the

middle size oboe, was used in the shadow puppet shows but lost its popularity in modern culture. Since each type of oboe is distinguished by its size, each produces different pitch. *Pii-nai* is fixed on pitch ‘G,’ *pii-nauk* on ‘C,’ and *pii-klang* on ‘A.’



Figure 9 The three types of Thai folk oboe *pii-nauk* (left), *pii-nai* (third from left), and *pii-java* (right)

2.1 Pii-nai

The quadruple reed oboe, *Pii-nai*, functions in the *Pii-phat* ensemble with the role of providing the melody with rhythmic drive in a fast tempo piece or lyrical melody in sentimental repertoire. The size of *pii-nai* is larger than *pii-nauk*, as such, it produces a lower pitch. The tone color of *Pii-nai* is more subtle than *pii-nauk*. *Pii-nai* has a wide range of approximately twenty two pitches.

2.2 *Pii-nauk*

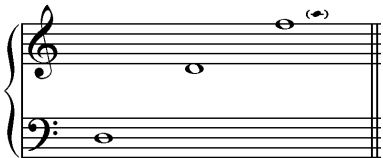
Pii-nauk is another quadruple reed oboe of *Pii-phat* ensemble, playing in dialogue with *Pii-nai*. The size of *pii-nauk* is smaller so it plays in a higher range than *pii-nai*. *Pii-nauk* is used in theatrical art performance along with *pii-nai*.

2.3 *Pii-Java*

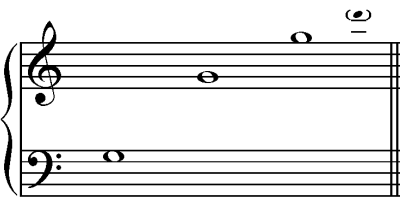
A quadruple reed oboe, *Pii-java* is derived from the Indian folk oboe, *sarunei*. The reed is made of palm leaf. *Pii-java* functions in funeral

ceremonies and royal processions. Of all the range of the three oboes, *pii-nauk* can play the highest pitch. All the three Pii(s) can perform from the lowest pitch of their range up to additional twenty pitches depend on the skill of the performer.

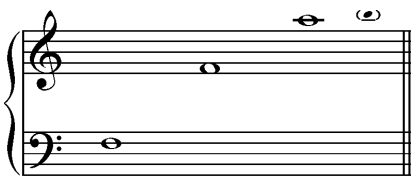
Range of *Pii-nai*



Range of *Pii-nauk*



Range of *Pii-Java*



Example 20 Range of the three types of oboe, *pii-nai*, *pii-nauk*, *pii-java*

Idiophone

1. Wooden xylophone

1.1 High pitch xylophone (*Ranard-ek*)

Ranard-ek (figure 10) is the leading instrument of the Pii-phart ensemble, in which the *Ranard-ek* player directs the ensemble in a variety of styles and characters. The instrument can showcase virtuosic technique by playing with great velocity. It provides a variation of the melody with high technical performance. The tone color of the wooden

xylophone varies depending on the type of wood, which can range from mellow, soft, and delicate, to a bright, echoing sound.



Figure 10 Ranard-ek (high-pitch wooden xylophone)

There are twenty-two wooden bars representing twenty-one pitches covering almost three octaves from G₂ to G₅ (example 21). The pitches are tuned by attaching a paste mixture of lead and bee-wax.



Example 21 The range of *ranard-ek*

Performance techniques for the xylophone include playing the melody in octaves at the same time or alternating octaves in double time. In order to prolong the pitch, the trill is applied, called *grau* in Thai. To play a trill, the starting pitch is the lower pitch alternating with the higher pitch, beginning the trill slowly, then applying a gradual acceleration to the end (see example 22). This technique can be applied with the intervals of the second, third, fourth, fifth, sixth and the octave. Other techniques include applying triplet, slur, mordent, tremolo, and glissando, as well as performing in an oblique motion, which means one

hand repeating the same note while the other hand creates a melodic line;.



Example 22 Trill on ranard-ek

1.2 Low pitch xylophone (*Ra-naad thum*)

The role of the low-pitch xylophone or *ra-naad thum* (see figure 11) is to play a counter-melody to the high-pitch xylophone.



Figure 11 *Ra-naad thum*

Ra-naad thum consists of 17-18 wooden bars, differing from *ra-naad ek* in the larger size of the bar, which provides a lower and mellower sound, while the tone color of *ra-naad ek* is brighter. In contrast to *ra-naad ek* that favors hardwood bars, *ra-naad thum* needs the subtle sound of bamboo wood. The range of the low pitch xylophone is about two octaves and a half, from E2-G4 (example 23). The trill is also applied in the same way as *ra-naad ek* to prolonging the pitch; however, only the intervals of the second, fourth, and octave are used.



Example 23 Range of *ra-naad-thum*

2. Metallic xylophone

2.1 High pitch metallic xylophone (*Ranard-ek Lek*)

The role of the high pitch metallic xylophone *Ranard-ek Lek* (see figure 12) is similar to the high pitch wooden xylophone, *ra-naad ek* in embellishing the melody with rhythmic drive and motion; however, not in the role of the leader of the ensemble. The number of metal bars is the same 21-22 bars as the high pitch wooden xylophone.



Figure 12 Thai high-pitch metallic xylophone *Ranard-ek Lek*

2.2 Low pitch metallic xylophone (*Ranard-thum Lek*)

The role of the low pitch metallic xylophone (figure 13) is to play structural pitches of the melody, which is similar to the low-pitch half circle framed gongs. The number of bars is 16-17, similar to the number of pitches the lower pitch wooden xylophone has.



Figure 13 Thai low-pitch metallic xylophone *Ranard-thum Lek*

3. Gongs in a circular frame

3.1 High pitch gongs (*Kong wong lek*)



Figure 14 A half-circular wooden framed gongs, *Kong wong lek*

The eighteen small knob gongs of *Kong wong lek* (figure 14) are set in a half-circular wooden frame. These gongs are high-pitch gongs that create melodic variation to the main melody, which is played by the low-pitch gongs, *Kong wong yai*. The range of the gongs are approximately two and a half octaves, from B3 to E6 (example 24).



Example 24 Range of *Kong wong lek*

3.2 Low pitch gongs (*Kong wong yai*)

Kong-wong yai (figure 15) is the sixteen bronze gongs arranged in the half-circle wooden frame, functioning in *pui-phat* ensemble and *mahori*

ensemble. It has a significant role in *pui-phat* ensemble by providing the main melody, and it is the first Thai instrument that any of the Thai *pui-phat* musicians learn. The range of *Kong wong yai* is approximately two octave from D3 to E5 (example 25).



Figure 15 A low-pitch half-circular wooden framed gongs, *Kong wong yai*



Example 25 Range of *Kong wong yai*

4. Percussive idiophone

Each Thai percussive idiophone instrument is associated with a different ensemble. Their roles are different in each ensemble.

4.1 Pair of hand cymbals (*ching*)

The role of *ching* (figure 16) in the ensemble is to keep time in the smallest unit of strong and weak beats. There are two types of *ching*: small ones used for string and *Mahori* ensembles (circumference around 5.5 cm.) and the larger size (circumference around 6.5 cm.) for *pui-phat* ensemble. There are two sounds that the hand cymbal can produce: open and damp sound. The open sound is created by striking the rim of one

cymbal with the rim of another cymbal creating a bright, clear, resonant bell tone. The damp sound is created by covering one cymbal with the other cymbal, which produces a short, muffled noise.

Figure 16 *Ching*



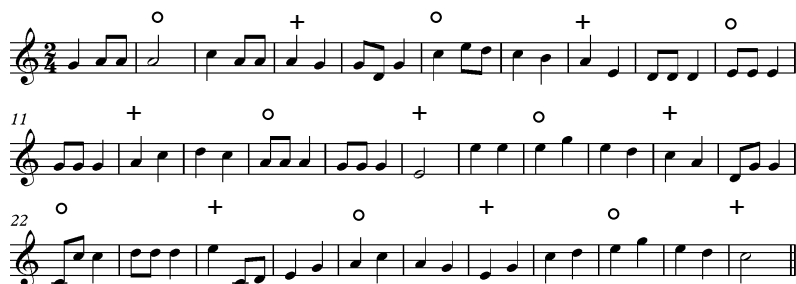
Ching regulates the smallest unit of strong and weak beats. The density of *ching* lies on the structure of the composition and can be grouped into three levels based on same melodic material: *chan deo* (short, fast, and dense), *song chan* (moderate tempo), and *sam chan* (slow and long piece). To clarify the rhythmic roles of *ching*, the melody of the first section of *Kaek bo-ra-tet* is displayed here in all three levels: *chan deo*, *song chan*, and *sam chan* (see example 26.1-3).



Ex. 26.1 The first level: *Kaek bo-ra-tet* (chan deo)



Ex. 26.2 The second level: *Kaek bo-ra-tet* (song chan)



Ex. 26.2 The third level: *Kaek bo-ra-tet* (sam chan)

4.2 Pair of Chinese cymbals (*Chab*)

The Chinese cymbal *chab* (see figure 17) comes in two sizes: small and large. The small size cymbal plays syncopation to other main rhythmic instruments while the large size cymbal punctuates on large rhythmic accents.



Figure 17 *Ching* (bottom) and *chab* (small and large)

4.3 Pair of wood clapper (*Krap*)

There are three types of wooden clappers called *Krap* (see figure 18) for different types of ensemble. The common one is a pair of wooden blocks made from hardwood. Both are cut in an equal lengths of twenty centimeters long and five centimeters width. This type is used in accompanying a vocalist in a specific genre called *khab se-phaa*. The singer will hold each pair of *krap* in both of the hands to provide rhythm while singing.

The second type of wooden clapper, *krap puang*, is a set of several thin pieces of wood alternating with metal pieces cut in a rectangular shape with the outer two pieces of thick wood, connected together with thick thread. When performing *krap puang*, the player will hold the edge

of the instrument with one hand and tap on the palm of the other hand. This function of the instrument is to provide a signal for the appearance of the King at the throne hall or mark the beginning of the royal procession. It also functions in the *pui-phat* ensemble for the theatrical art performance.

The third type of the wooden clapper is called *krap khuu*, which refers to a pair of long, thin bamboo strips cut in a rectangular shape. To perform *krap khuu*, performers hold a piece of wood in each their hands and strike one on the top of the other. This instrument is used only in stage plays.



Figure 18 *krap sepha*, *krap puang*, and *krap khu* (left to right)

Membranophone

1. Double head barrel drum, *Ta-pon*



Figure 19 Double head barrel drum, *Ta-pon*

Ta-pon is a double-headed barrel drum (figure 19), considered the most sacred instrument of the *pui-phat* ensemble and Thai music. The tuning of *ta-pon* is done by applying a paste mixed of rice and ash on the center both sides of the drum head. The right side of the drum is larger than the left. *Ta-pon* is laid horizontally on the short wooden legs and played using the palms of both hands. The role of *Ta-pon* in *pui-phat* ensemble is to provide the main rhythmic pattern of the repertoire. There are two sounds *ta-pon* can produce (see example 27). The first is to play on the right (smaller) side of the drum and the second is to strike the larger head on the left side.

Example 27 Two sounds of *ta-pon*

2. Large pair of barrel drums (*Klong-tad*)

Klong-tad (figure 20) is a large pair of barrel drums, set vertically on the ground. This pair of drum is used in the *pui-phat* ensemble. The right drum is called the male drum while the left is called the female. The male drum has higher pitch than the female drum. In the *pui-phat* ensemble, *klong-tad* provides punctuation to the rhythmic pattern played by *Ta-pon*.



Figure 20 A large pair barrel drums, *klong tad*

3. Goblet drum *Tone* and framed drum *Ramana*

Tone is a goblet drum, usually played along with a small framed drum, *Ramana* (figure 21). Both are rhythmic instruments providing the main rhythmic pattern to the string and *Mahori* ensemble. These patterns require the integration of both drums, usually by one player.

Figure 21 Goblet drum *Tone* and framed drum *Ramana*



Each drum provides two sounds and, when combined together, create four sounds for the drum pattern. The sound of *ramana* includes *ting* and *ja*, by rapping the fingers of the left hand at the rim of the *ramana* drum for *ting*, and tapping on the center of the drum for the *ja* sound. The *tone* creates the *jong* sound sharply striking the fingers on the rim of the drum and *tham* sound by applying the palm of the right hand to the center of the drum. Together these instruments provides soft and deep tones with brighter accents to the rhythmic pattern (see example 28).

Example 28 The four sounds of *Ton* and *Ramana*

5. A pair of small double-headed barrel drums, *Klong kaek*

Klong kaek (figure 22) is a double-headed barrel drum, sounds are produced by applying bare hands on both sides of the drum. Each side produces different pitch: the male side provides higher pitch than the female side. The instrument came from southern India; therefore, it shares similarity with the Indian *dholak* drum. *Klong kaek* is functioning in the *pii-phat nang hong* ensemble (which performs at funerals).



Figure 22 A pair of small double-headed barrel drums *Klong kaek*

6. *Klong song-nha* (double-headed drum)

Klong song-nha in Thai means double headed drum. *Klong song-nha* (figure 23) has a shape similar to *klong kaek* as well as similar history in that both are derived from Indian instruments. *Klong song-nha* has a similar shape to the *maridangam* drum that functions in the carnatic music of Southern India. In Thai, *klong song-nha* functions in the *pii-phat se-pha* ensemble, which is an ensemble performing vocal repertoire of a story telling nature.



Figure 23 Double headed drum *klong song-nha*

Thai scales and tuning

Generally, Thai scales are known to others as seven Equi-distant pitches with melody constructed on pentatonic set. This concept is not exactly accurate to define the Thai musical scale, but can be used as an approximate intervallic measurement since many research have been experimented with measuring the frequencies of the ensemble. Results reveal the inequivalent distance scale and that every ensembles tuned their instruments slightly different from others. This proof that there is no concept of actual standard pitch in Thai music. David Morton wrote *Traditional Music of Thailand* (1975) and was the first who defined the measurement of Thai scale. The 171.4 cents from his research was derived from mathematic calculation of the average intervallic distance between pitches of the Thai scale.¹ Sugree Charoensook, in the year 2003, wrote the book on *Thai Musical Systems* where he measured scale systems of several Thai ensembles. His research proved that the intervals between pitches of Thai scale are not equal.² The table below demonstrates Morton and Charoensook's measurements in comparison with the western scale.

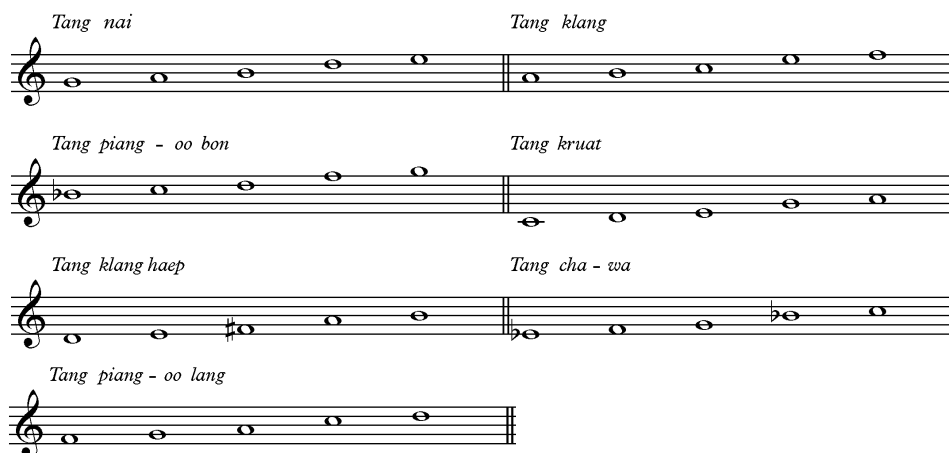
Table 1 Comparison of intervallic frequencies from western equal distance, Mortons' and Charoensook's measurement.

Cent	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	
Equal	C	C#	D	D#	E	F	F#	G	G#	A	A#	B	C	
Morton	0	171.4		342.8		514.2		685.6		857		1028.4		1199.8
(+171.4 for all)	C	D		E		F		G		A		B		C
Charoe n-sook	0	170		313		493		655		827		1013		1200
	C	D		E		F		G		A		B		C

¹ David Moton,

² Sugree Charoensook, [*Thai Musical System*] (Nakonpathom: Mahidol University Press, 2003),134.

The concept of key, called *tang* in Thai music, as mentioned by Miller (1992), are based on the tonal center of the pentatonic scale. There are seven tone centers in Thai music: G, A, Bb, C, D, Eb, and F.³ These seven pitches are derived from the pitch of various types of oboes in Thai music (see example) .



Example 29 The seven keys in Thai music

The key concept is also related to the reperotire. The majority of Thai songs are set in the keys of C pentatonic, G, F, and Bb respectively, and a few are in the keys of Eb and D. Repertoires with ethnic titles such as *Kaek* (Indian or Persian) are set in the key of xx, Thai and Ka-men (Cambodian/Khmere) are in the key of F, Lao in the key of C, and Mon in the key of Bb, etc.⁴ (add more) Generally, most of the *pui-phat* repertoire is tuned to G when played with a hard mallet and F when played with the soft mallet.⁵ The same song, when played by *pui-phat* and *Mahori* ensembles, do not begin on the same pitch. It has to be transposed one tone lower to swtich from *pui-phat* ensemble to *Mahori*

³ Terry Miller, "The Theory and Practices of Thai Musical Notations," *Ethnomusicology* 36/2 (1992), 201.

⁴ *ibid.*, 202.

⁵ *ibid.*, 203.

ensemble in order to tune in with the bamboo flute (*klui*), the aerophone of the *Mahori* ensemble.⁶

Rhythm/ Meter/ and texture

Thai music is transcribed with duple meter (2/4). This concept embraces all Thai repertoire except one song, *Sorapanya*, that is notated with triple meter. The rhythm in Thai music is controlled by the pairs of cymbal called *ching* and the rhythmic pattern of the drum. Each ensemble uses different types of drums; therefore, each drum provides different sounds and patterns in drumming. For example, the *Pii-phat* ensemble uses the paired drums (*klong-tad*) and a double-headed drum (*ta-pone*), while a pair of smaller drums, the goblet drum and framed drum, are designated for string and *Mahori* ensembles.

The two most popular rhythms used in Thai music are the *prob-gai* and *song-mai* patterns. The following examples demonstrate how each type of drums perform in *prob-gai* rhythmic pattern in accordance with the cymbal for *song chan* structure (see example 30).

Example 30 of Prob-gai pattern in the composition of song chan structure

The rhythmic pattern also relates to the structural pitch of the composition. The structural pitch in Thai music is called *look-tok*. *Look-tok* is considered to be the significant pitch of the phrase that holds the musicians together when playing in the ensemble. When performing as

⁶ *ibid.*, 203.

an ensemble, the texture can be either polyphony or heterophony depending on the level of complexity of the melody each instrument in the ensemble plays. Thai composition has the same concept of melody as in Myanmar and Cambodia, that the main melody only exists as a skeleton melody in the mind of the musicians but not in the actual performance. Each instrument has their own performing melody that is passed down from their teacher aurally. As a consequence, the same composition played by two different schools are unlike. However, at each point of the composition, the ensemble will aim toward the same structural pitch which is called *look-tok*. As such, *Look-tok* creates a cadential point of the composition.

The example here is an excerpt transcribed from the ensemble performing the first section of *Lao duang-duang* to display heterophonic structure and structural pitch *look-tok*. Instruments in the transcription include the bamboo flute (klui), two-string fiddles (saw duang) and (saw-uu), and a hammer dulcimer (khim) (see example 4.).

Example 4. x Heterophonic structure and look-tok of the first section of *Lao duang-duang*

Characteristics and structure of Thai music

The structure of Thai songs are varied in terms of musical form depending on the type of the repertoire, which can be composed in a through composed form, binary form, a single section, or a composite form. The length of the composition is also varied. For example, *Sadhukarn*, if performed in a complete version, will be comprised of several repeats with a special ending section.

Based on the tempo and density of the composition, Thai music can be composed in three structures: *chan deo*, *song chan*, and *sam chan*. Each has its own distinctive character and tempo; therefore, a song can be played solely as a single piece, or performed in all three styles consecutively. If performed altogether as a set of three, the suffix *thao* is added at the end of the song title. The differences of the three structures are the tempo and density of the melody, as well as the character and style that is controlled by rhythmic pattern of the drum. All of the three structures (*chan deo*, *song chan*, and *sam chan*) are created on the same melody.

Typically, the *song chan* rhythm was composed first as an original composition that was circulated in Thai music repertoire since the ancient time. Therefore, older compositions tend to be composed with a moderate tempo setting (*song chan*). Later on, Thai music masters developed the composition technique to modify the composition in terms of expansion and reduction to *sam chan* and *chan deo*. Since then, it became popular and has become another style of performance to demonstrate the compositional techniques and performance skills. Modern Thai composers created the idea and methods for developing the compositions into the threefold structure of *thao*.

To explain the technique in the composition structure of *thao*, the melody of *Kaek bo-ra-tet* is used to display a comparison of phrase structure and the rhythmic patterns. The original composition of *Kaek bo-ra-tet* is in *song chan* rhythm has the melodic structure is sixteen measures long. The *song chan* is a composition set in moderate tempo.

The strong and weak beats are accented in every two measures by *Ching* (hand cymbals) and the main rhythm is controlled by the rhythmic pattern played by the drums.

The rhythmic pattern to accompany *Kaek bo-ra-tet* is *prob-gai* pattern, which is eight measures long. Therefore, to accompany the melody of *Kaek bo-ra-tet*, the rhythmic pattern is played twice. The last sound of the pattern marks the main structural pitches of the melody. Likewise, the melody of *Kaek bo-ra-tet* contains two structural pitches (one at measure eight and the second is the last pitch of measure sixteen (see example 29).

Example 29 The melody of *Kaek bo-ra-tet* in song-chan rhythm

The above example indicates the main structural pitches (E and C) that are synchronized with the rhythmic pattern of *prob-gai*. Besides the main structural pitches, there are two additional subordinate pitches that coordinate with the four-phrase structure (A at the beginning of measure 4 and E at the beginning of measure 12).

To create a structure of *chan deo* from *song chan*, the melodic structure of sixteen measures is condensed by half, providing an eight measure melody instead of sixteen. Therefore when applying the

rhythmic pattern of *prob-gai*, which is in an eight-measure pattern, it can be completed in one pattern instead of repeating twice as in *song-chan* structure. The example below (example 30) displays how the same structural pitches (E and C) are maintained in *chan-deo* as well as the increase in the density of strong and weak beats controlled by *Ching*.

Generally, songs composed in ‘chan deo’ structure are set with fast tempo and have a sense of rhythmic driving. Since it is a fast moving forward repertoire, there is a few or none ornamentation applied to the melody.



Example 30 The melody of *Kaek bo-ra-tet* in chan-deo rhythm

With the same theory, the third level of composition, called *sam chan* is in a slow tempo and double the length of ‘song chan.’ Since the song moves in slow rhythm, plenty of ornamentation can be applied. The accent of down beats and up beats is controlled by *ching*, which in *sam chan* fall in four-measure phrases. The example below displays the four structural pitches (measure 8, 16, 24, and 32). The main structural pitches, which are designated inside the square boxes in measures 16 and 32 while the secondary pitches are marked with circles in measures 8 and 24 (see example 31).

When performing all three levels together, the slow rhythmic structure begins the set, followed by the moderate one, and concluding with the fast rhythm of *chan deo*. The composition methods based on the theory of *thao* is related to the theory of diminution and augmentation.

Musical styles and practices

There are two performance styles Thai musician use in creating variations on the melody. First is the rhythmic drive motion, called *geb* in Thai, where all the pitches are played in fast tempo and fills all the space in the melody. The second is *h-waan* style that employs lyrical melody with sentimental expression. These are musical idioms and expressions that musicians from create their interpretation of the same

song. One melody, therefore, can be performed in different styles depending on the school, teacher, and individual musician.

Repertoire

The repertoires in Thai music are varied based on the function of the composition. In a broader category, Thai music can be divided according to its function in an event or how the compositions are performed, which includes overture repertoire (*pleng hom-rong*), ceremonial repertoire (*pleng phi-tii-gam*), theatrical art repertoire (*pleng nha-part*), suite or song cycle repertoire (*pleng rueang*, *pleng tab*), ending repertoire (*pleng hang-krueang*), dialect repertoire (*pleng ook pha-saa*), solo repertoire, vocal repertoire, general repertoire (*pleng bet-ta-let*).

Notable Thai ethnomusicologist Panya Roongruang had classified Thai repertoire into nine genres including *pleng nha-part*, *pleng ruang*, *pleng hom rong*, *pleng tap*, *pleng thao*, *pleng yai*, *pleng dieo*, *pleng la*, and *pleng klet*.⁷

As mentioned, the pentatonic scale is not the only scale in Thai music; hexatonic and heptatonic scales are part of the repertoire that bears the title of other Southeast Asian ethnicities. The collection of repertoires functioning in Thai music consist of Mon, Bama (Burmese), Kaek (Indian), Lao, Jeen (Chinese), Fa-rang (Portuguese), Yaun (Vietnamese), and other foreign names such as *Arum*, *Nerapati*, etc. Each contains different applications of pentatonic, hexatonic, or heptatonic scales, along with specific styles and characteristics. Thai compositions do not contain their nation title like others. Instead, it typically has a name associated with actions, people, nature, or animals, such as “Tao gin phak-bung” (turtle eating the morning glory).

Among all the repertoires, *pleng nha-part* is a highly significant repertoire in Thai music since it relates to Buddhist rituals, ceremonies,

⁷ Panya Roongruang, “Music in the Kingdom of Thailand,” in *Grove Music Online*. Retrieved 10 March 2018, from <http://www.oxfordmusiconline.com.unco.idm.oclc.org/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000027763>.

and theatrical art performance. There are songs that have specific functions in the ceremonies and Thai musicians have to be aware of the order of these songs from the beginning to the end of the ceremony.