

## Thai-Contemporary Music Composition "The Charm of Thai Folk Music Across the West" for Violin and Cello

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### Abstract

This creative project is born from a scholarly fascination with the convergence of traditional Thai string instruments and Western classical string instruments, particularly the violin and cello. By delving into the musical characteristics and performance techniques of the *saw khmer* and *saw sam sai*—three-stringed fiddles, we have conceived a unique composition for duo violin and cello. The primary goal is to fuse traditional Thai musical idioms with Western instrumental techniques, promoting a hybrid performance practice that is both culturally informed and pedagogically valuable. These compositions, designed as instructional materials for intermediate to advanced violin and cello students, provide a platform for the exploration of Thai and Western musical aesthetics. Moreover, this project facilitates cross-cultural dialogue between Thai and Western music traditions. It provides performers with a deeper understanding of Thai folk melodies, ornamentation, and interpretative techniques. By blending these diverse elements, the study contributes to the expansion of contemporary Thai repertoire and offers innovative pedagogical approaches for string education within both academic and professional contexts.

*Keywords: violin, cello, composition, saw sam sai, saw khmer*

## Introduction

This academic creative composition examines the *saw Khmer* (ซอเขมร) of Southern Isaan and the *saw sam sai* (ซอสามสาย), to generate new works for violin and cello performance. The study was conducted through literature review and field research with master musicians specializing in these instruments. The collected data serves both to support the preservation of Thai folk music and to inform the adaptation and development of new compositions for violin and cello. This process provides a framework for contemporary Thai composition and contributes to the advancement of violin and cello performance skills at the intermediate to advanced levels.

## Purpose of the study

The study has two main purposes, which are as follows:

- 1) To create contemporary Thai music for violin and cello playing that can improve violin playing skills and is suitable for learning violin at intermediate to advanced levels.
- 2) To provide a guideline for the conservation and development of Thai folk songs in the form of application of knowledge between Thai and Western music.

## Literature Review

In the Southern Isaan region, traditional bowed string instruments include the *saw Khmer*—also known as *tro* (ตั่ว)—and the *saw kantrum* (ซอกันตรึม). The *saw kantrum* has long been the principal instrument in the *kantrum ensemble*. It is also incorporated into *kantrum*, *chreang* (เจรียง), and *aiyai* (อาไย) ensembles, as well as accompanying various dances. It is especially popular in the provinces of Sisaket, Surin, and Buriram. Performances typically take place during festive occasions, traditional celebrations, and ritual ceremonies.

Khiantongkul (1991) explained that the *saw Khmer* (also called *tro* or *saw kantrum*) is a bowed string instrument made of wood. It generally exists in three sizes: *tro chi* (ตั่วจี)—small-sized; *tro ek* (ตั่วเอก)—medium-sized; and *tro thom* (ตั่วธม)—large-sized. Historically, the *saw kantrum* has long been used as the principal instrument in the *kantrum ensemble*. In the past, it was performed only for folk music, but later it was influenced to some extent by the Central Thai musical tradition.

During the Sukhothai period (1778–1981 B.E.) (Piyabhani, 2016), when Sukhothai was the capital, its influence expanded across the northern, central, and southern regions. The Siamese people, who already had their own

culture, came into contact and interacted with other cultural groups such as Lanna (ล้านนา), Khmer (เขมร), Mon (มอญ), and Srivijaya (ศรีวิชัย). This resulted in cultural exchange and the adoption of external influences, which were then adapted to harmonize with Thai society and culture.

According to the *Encyclopedia of Thai Music Terminology* (Royal Institute, 2002), the term *saw sam sai* refers to an ancient type of Thai fiddle, assumed to be the same as the *saw phung to* (ซอพุงตอ) from the Sukhothai period. It is considered a prestigious instrument, traditionally used in the royal court for entertainment and ceremonial purposes.

The basic performance techniques of Thai fiddles (*saw*) can be broadly categorized into two main areas: bowing techniques and left-hand fingering techniques. For the *saw duang* (ซอด้วง), *saw u* (ซออู้), and *saw sam sai*, the fundamental bowing practice requires producing a consistent sound by controlling both up-bow and down-bow strokes. A key principle is that each musical phrase, sentence, or section must conclude with an up-bow stroke. The basic bowing techniques include *kan-chak-neung* (คันชักหนึ่ง) – détaché; *kan-chak-song* (คันชักสอง) – slurred; *kan-chak-si* (คันชักสี่) – long tone in one bow, and *sabat khanchak* (สะบัดคันชัก) – fast détaché. Additionally, the *Saw sam sai* features its own distinctive bowing techniques, which are considered advanced-level skills.

Chappanrat (2016) explained that there are two types of *sabat* (สะบัด) techniques of fast passage playing on the *saw u*, the first is *sabat niao* (สะบัดนิ้ว) – mordent, which involves playing a single up-bow or down-bow stroke while the left-hand finger rapidly taps to produce three notes at a moderate speed. The second is *sabat khanchak*, which requires moving the bow in a quick sequence of “up-down-up.”

Left-hand fingering techniques are primarily used to ornament the melody, enhancing its beauty and expressiveness. The fundamental techniques include *phrom* (พรหม) – trill-like ornamentation and *pra* (ประ) – a grace note, both considered essential to *saw* performance. These techniques vary in complexity depending on the difficulty of the repertoire. In solo pieces which showcase the performer’s virtuosity, advanced left-hand techniques are often employed and require high levels of skill. According to the *Encyclopedia of Thai Music Terminology* (Royal Institute, 2002), *phrom* is defined as a technique used on instruments controlled by the fingers, such as *saw* and *pi* (ปี่). To produce a flowing, tremulous sound, the fingertip rapidly taps the string to create alternating pitches between the original tone and a higher pitch, ending on the original tone. The resulting sound is finer and longer-lasting than that produced by *pra*.

Regarding the history of bowed string instruments in Europe, *The Cambridge Companion to the Violin* (Stowell, 1992) explains that archaeological evidence, including paintings and carvings, indicates the

presence of bowed instruments in Europe around 900 C.E. These instruments can be categorized into four major groups: (1) the *rebec*, (2) the medieval and Renaissance fiddle, (3) the *lira da braccio*, and (4) the viol. In terms of performance techniques, *Principles of Violin Playing & Teaching* by Galamian (1985) discusses violin technique in two principal areas: left-hand techniques and right-hand techniques. When these techniques are considered, it becomes evident that both Thai *saw* instruments and Western bowed strings share corresponding methods that can be adapted and applied in complementary ways.

Regarding the principles of Thai music composition, Phancharoen (2016) emphasized that the most important aspect is establishing the main structure of the piece. This structure may follow a diatonic or chromatic scale, depending on the harmonic context at that point. The notes can be arranged in ascending or descending sequences. Similarly, in *Fundamentals of Musical Composition*, Schoenberg (1988) discussed the essential foundations of composition, including the concept of form, the construction of musical phrases, and the development of motives as the basic units of a musical work.

## Methodology

The creation of this work consists of two key parts: a study of *Saw sam sai* and *Khmer Tro* (fiddle) music, and the development of knowledge gained from this study into the creation of compositions for violin and cello performance. The study of *Saw sam sai* and *Khmer Tro* music was carried out through the review of documents related to musical and cultural foundations, as well as knowledge of Thai string instruments belonging to the *Saw* family, combined with fieldwork and data collection from experts. The collected information was then categorized into two main areas: musical data and other related knowledge. These data sets were analyzed both in terms of specific issues and from an overall perspective, with particular emphasis on musical aspects. The integrated findings were ultimately applied to the creation of new compositions for violin and cello, resulting in new knowledge that contributes to the development of performance skills and the advancement of Thai-Western contemporary music learning.

## Composing Techniques and Song Analysis

For the composition of the *Largo* section, inspiration was drawn from the study of *Saw sam sai* repertoire and performance techniques. The piece is written in 4/4 meter and employs the B minor hexatonic scale, consisting of six pitches with the sixth degree omitted. This scale is used consistently throughout the piece without modulation. The tempo is set at *Largo* (quarter note = 45 BPM),

evoking a vocal-like character, and is maintained without tempo changes for the entirety of the section. At the beginning, thematic material is adapted from *Nakboriphat* (นาคบริพัตร), a traditional piece studied during the research process. In addition, the technique of modified repetitions is applied in measures 5–8, serving as a method for generating variations. In this approach, certain parts of the melody are altered while the essential identity of the main theme is preserved, as illustrated in the example shown in Figure 1.

Example of melodic adaptation  
from *Nākboriphat*, arranged by the author

Violin

Violoncello

V

Vln.

Vc.

Figure 1 Largo section  
Source: Sreewan Wathawathana

In Section A, an imitative technique is employed, beginning with the melodic line in the violin at the opening. This is followed by the cello, which imitates the initial melodic idea. As the imitation unfolds, the violin line is transformed into a secondary melody, performed using the technique of double stops (see Figure 2).

A

Vln.

Vc.

Imitated theme by the cello

Vln.

Vc.

Figure 2 Section A  
Source: Sreewan Wathawathana

In Section B, the violin employs the technique of harmonics, producing pitches that sound higher than the fundamental tone. This approach corresponds to the *niew kong* (นิ้วก้อง) – harmonics technique of the *Saw Sam Sai*, a distinctive and specialized playing method. Meanwhile, the cello part utilizes the pizzicato technique, in which the strings are plucked rather than bowed (see Figure 3).

The image shows a musical score for Section B, measures 17-20. It is arranged in two systems. The first system (measures 17-18) features a Violin (Vln.) part in the upper staff and a Cello (Vc.) part in the lower staff. The Violin part is marked with a box labeled 'B' and the text 'Harmonics technique'. The Cello part is marked with 'pizz' and 'mp Pizzicato technique'. The second system (measures 19-20) continues the Violin and Cello parts. The Violin part starts with a dynamic marking of 'p' and includes a 'cresc.' marking. The Cello part also includes a 'cresc.' marking.

Figure 3 Section B  
Source: Sreewan Wathawathana

In Section C, shown in Figure 4, the melodic material is adapted from the folk song *Nok Khamin* (นกดขมิ้น), which was studied as part of the research. The melody is further developed to achieve greater clarity, closely modeled after the contour and phrasing of the vocal line, preserving the expressive nuances of the original song. In this section, the cello assumes the principal melodic role, utilizing both legato and glissando techniques to emulate the characteristic performance style of the *Saw Sam Sai*. Notably, the playing position of the cello held between the knees with the bow drawn across the strings bears a physical similarity to the posture of the *saw sam sai* player. This similarity in hand positioning and bowing angle contributes to the effectiveness of the glissando technique on the cello, allowing it to replicate the smooth, continuous slides and ornamental inflections that are distinctive to the *saw*'s technique called *rood sieng* (รูดเสียง).

The material is adapted from Nok Khamin

Slow Glissando technique

Figure 4 Section C  
Source: Sreewan Wathawathana

In Section D, the opening melodic material returns, reintroducing the themes from the beginning. Section E employs a technique known in *saw sam sai* performance as double-string playing, while in the violin and cello, this corresponds to double stops, where two strings are played simultaneously. This technique is called *sai khu* (สายคู่) in *saw sam sai*. The double-stop technique requires extensive practice, particularly in controlling the bowing pressure and speed, as well as ensuring that the left hand produces accurate and in-tune pitches (Jensen & Chung, 2017). This produces a richer and more resonant sound, as illustrated in Figure 5.

Double stops technique

Figure 5 Section D and E  
Source: Sreewan Wathawathana

The Moderato section is composed based on the study of the *Khmer Tro* repertoire and performance techniques. The piece is written in 2/4 meter and utilizes both the C Dorian mode as the primary scale and the C major pentatonic scale. C Dorian serves as the primary mode throughout the piece, while modulation occurs in Section F to C major pentatonic (see Figure 6), returning to C Dorian in Section G (see Figure 7). The tempo is Moderato (quarter note = 90 BPM) with a steady, precise rhythm (Tempo Giusto). At the end of the section, the tempo shifts to Largo. At the beginning, thematic material is adapted from a Khmer dance melody called *Rabum* (រ៉ាប៉ូម), employing transposition to maintain the intervallic relationships while shifting the key.

**F** The material is adapted from Khmer dance

Figure 6 Section F  
Source: Sreewan Wathawathana

In Section G, the mode returns to C Dorian, with the cello carrying the main melodic line. The violin employs the tremolo bowing technique, creating a sustained background texture that supports the melody. This tremolo technique is similar to the *rua kan chak* (ราวคันชัก) technique in Thai saw instruments.

114

Vln.

Vc.

120

Tremolo bowing technique

Vln.

Vc.

Figure 7 Section G  
Source: Sreewan Wathawathana

In the ending section of the piece, the melody's ornamentation employs a trill technique, similar to the *phrom* used in Thai fiddle. The tempo changes from Moderato to a much slower Largo and further slows down near the very end with a ritardando in C Major chord (see Figure 8).

145

Vln.

Vc.

Largo

f

legato

rit.

Figure 8 Ending section  
Source: Sreewan Wathawathana

## Results

The study resulted in a contemporary composition for violin and cello that integrates techniques from traditional Thai string instruments (*saw sam sai* and *saw Khmer*) with Western classical performance practices. Section A employs imitation, with the violin introducing the melodic line and the cello echoing it, while the violin transforms into a secondary melody using double stops. Section B demonstrates violin harmonics, corresponding to the *niew kong* (นิ้วก้อง) technique, and cello pizzicato, creating contrasting textures. Section C adapts the folk song *Nok Khamin* (นกกขมิ้น), with the cello performing

the principal melody using legato and glissando, taking advantage of a playing position similar to that of *saw sam sai* players, allowing for expressive slides and ornamentation. Sections D and E reintroduce earlier themes and incorporate double-stops playing (*sai khu*), requiring precise bowing and left-hand control. The Moderato section, inspired by Khmer Tro repertoire, explores C Dorian and C major pentatonic scales, with rhythmic stability and modulation between modes, while Section G emphasizes tremolo (*rua kan chak*), trills, slides, glissandi, and grace notes, demonstrating advanced ornamentation techniques derived from Thai fiddle performance.

## Discussion

The composition illustrates a successful fusion of Thai and Western string techniques, highlighting how traditional melodies and ornamentation can be adapted for violin and cello performance. The use of imitation, harmonics, and pizzicato expands the textural possibilities, while the adaptation of *Nakboriphat*, *Nok Khamin*, and *Rabum* melodies preserves the expressive character of Thai folk music. Techniques such as double stops and glissandi emulate the performance style of Thai fiddles, and the cello's playing posture enhances the effectiveness of these techniques. The study demonstrates that Thai performance techniques, including *sai khu*, *phrom*, *rood sieng*, *niew kong*, and *rua kan chak*, can be pedagogically applied to Western string instruments, providing performers with new technical and interpretative challenges. The integration of these elements supports the development of contemporary Thai-Western repertoire and enriches the educational resources available to intermediate and advanced violin and cello students.

## Conclusion

This project successfully produced a culturally informed composition for violin and cello that integrates traditional Thai performance techniques with Western classical string practices. By incorporating ornamentation, glissandi, tremolo, double stops, and modal adaptations inspired by *saw sam sai* and *saw Khmer* repertoire, the study demonstrates how Thai folk music can be preserved and adapted within contemporary string pedagogy. The composition provides a valuable resource for intermediate and advanced students, enhancing both technical proficiency and interpretative skills while promoting cross-cultural musical understanding.

For further study, it is recommended exploring the integration of other Thai folk instruments and regional musical idioms into Western string performance, as well as the development of ensemble works that combine multiple Thai and Western instruments. Additional research could also

investigate the pedagogical effectiveness of these hybrid compositions in conservatory or classroom settings, examining how they impact the technical development, cultural awareness, and interpretative creativity of students. Such studies would contribute to expanding the contemporary repertoire and fostering continued innovation in Thai–Western musical collaboration.

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## Biography

Associate Professor Dr Sreewan Wathawathana graduated with a PhD (Music) from Bangkokthonburi University, a Master’s Degree in Arts (Music) from the College of Music, Mahidol University and a Bachelor’s Degree in Music from Mahidol University with first-class honors in 2009. Currently, she is a full-time music instructor in the Western Music Department at the College of Music, Bansomdejchaopraya Rajabhat University (BSRU), and a part-time music instructor at Assumption University (ABAC). She was a member of the Thailand Philharmonic Orchestra (TPO) as a first violinist from 2005–2014 and from 2018 to the present. She received five Gold Medal Prizes (Outstanding Music Performer) at the Settrade Thai Youth Musician Competition in 1999, 2003, 2005, 2006, and 2007. In 2005, she won First Prize at the International Youth Chamber Music Competition (IYCC) in

Interlaken, Switzerland, as concertmaster of the Dr Sax Chamber Orchestra. In 2008, she won Second Prize at the Second National Beethoven Competition for Young String Players (age group 18–24). Sreewan has also had numerous opportunities to attend masterclasses and perform with well-known musicians, including Midori Goto, Mischa Maisky, Lucia Aliberti, Andrea Bocelli, and Vanessa Mae.

Dr Smatya Wathawathana is a cellist, an expert in music therapy, and a renowned educator in Thailand's music industry. She completed her doctoral degree in Development Administration at Suan Sunandha Rajabhat University, a master's degree in Music Therapy from the College of Music, Mahidol University, and a bachelor's degree in Western Music from the Faculty of Fine and Applied Arts, Chulalongkorn University, graduating with first-class honours and a gold medal. In her musical career, Dr Smatya has received international recognition, including First Prize at the Princess Galyani Vadhana International Ensemble Competition in 2015 and First Prize at the International Youth Chamber Music Competition in Interlaken, Switzerland, in 2005. She has performed in various countries, including the UK, Germany, Austria, Hungary, Poland, and Canada. After completing her PhD, Dr Smatya pursued specialised training in Neurologic Music Therapy and earned certification in Professional Himalayan Singing Bowl Therapy, Sound Healing, and Meditation. In her teaching career, she plays a significant role in teaching and training string instruments. In 2024, she served as a low-string tutor for the World Youth Orchestra in Vietnam, organised by the World Youth Orchestra of Italy. She also has teaching experience in cello at the Faculty of Fine and Applied Arts, Chulalongkorn University, and in music therapy at the College of Music, Mahidol University, as well as at Assumption University (ABAC).

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