

The Creation of Solo Piano Compositions *from Khaen Melodies "Thamnong Khaen"*

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Abstract

This paper aims to present Khaen melodies (an Isan musical instrument) by analyzing the original notes and arranging them for piano, using Western music composition theory to adapt the notes to suit beginner-level piano players. Based on qualitative research and creative music research, the creative process emphasizes preserving the original accents and primary melodies of the Khaen. Additionally, it develops the musical structure and harmonies to align with contemporary Western classical music. The analysis of the original Khaen melodies reveals rapid note values and rhythms, as well as harmonies with more than one voice, accompanied by irregular interval jumps throughout the melody. To make the piano arrangement suitable for both beginners and general enthusiasts to appreciate Isan music's distinctive sound, the following strategies are used: 1) changing the time signature, expanding rhythm values, and adjusting the placement of notes in certain measures; 2) re-arranging Khaen melodies following Western practices including phrases, cadence, motif, and repetition; 3) arranging accompaniment with basso ostinato from drone; and 4) creating chords and progression from solo Khaen melodies. In addition, this music creation supports the development of contemporary piano with Isan attributes and promotes the value of folk music culture in the area. By raising awareness among beginner piano learners or interested individuals, this arrangement makes the music more accessible through easier practice with these notes.

Keywords: *Khaen Melodies, Molam, Creation, Piano Pieces, Isan Folk Music, Contemporary Music Composition, Thai Traditional Music*

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Introduction

The Khaen is a key instrument used to accompany Molam performances or klon lam singing, a traditional form of performance art from Isan (northeastern Thailand) (Champadaeng et al., 2014: 718; Office of the National Cultural Commission, 2009:48-53; Miller & Shahriari, 2017:270; Dekievit, 2017:33,40; Binson & Pornprasit, 2010:4-5; Boonrod, 2021:366). Molam culture is one of three major music cultures in Isan, the others being Kan Trum music, and Korat music. Molam belongs to the largest ethnic group in the Isan region, consequently making the Khaen the most widely popular instrument in this area (Kingkaew, 2016). Khaen is a woodwind instrument made from bamboo with free-reed mouth-organ (Yaowapan, 2014:255). Originally, Khaen and Khaen performance comprise melody and drone, both of which are based on five of notes. These notes are divided into two tonal groups, traditionally known as *thang san* (short) and *thang yao* (long), each with its own harmonic notes, known as a drone. The groups feature unique melodic harmonies composed of intervals, including the 4th, 5th, and 8th intervals, along with the main melody (Miller & Shahriari, 2017:264; Klangprasri, 2010). Therefore, Khaen is considered to be a musical instrument that can accompany the melody in the same way that the accordion or the pipe organ can (Adler, 2023:2). Sample drone notes in each mode (called “Lai” in Thai Isan folk music) are as follows:






Thang Yao mode	Thang San mode
 drones of Lai Yai mode	 drones of Lai Soi mode
 drones of Lai Noi mode	 drones of Lai Sut Sanaen mode
 drones of Lai Se mode	

Figure 1. The sample excerpt of drone in each mode (called “lai” in Northeastern Thai traditional music).

The Khaen is used in three types of performances, which are: 1) Khaen to accompany singing (Kingkaew, 2016:34-35; DeKievit, 2017:37; Binson & Pornprasit, 2010:2; 2) Khaen solo (Adler, 2023:10-13; Walker, 2020) the melodies of solo Khaen performances are adapted or used in traditional folk music performances, such as Khaen bands, Pin or Pong Lang bands, and Molam; and 3) Khaen to accompany other music cultures such as ASEAN music bands, popular music bands, and orchestras (Casean Channel, 2016; Walker, 2016).

In addition, Khaen solos and the unique characteristics of the Khaen are rearranged into new compositions using Western composition techniques and are performed with Western musical instruments, particularly the piano. An example of this is the composition *Lai Lam Piano: The Isan Piano Melodies* by Akapong Phulaiyaw, which adapts traditional Isan folk melodies, including Khaen melodies used in Molam performances, such as Pong Lang Lai, Tang Wai Lam, and Mae-Hang Klom Luk Lai. These melodies have been arranged for piano using Western composition techniques (Phulaiyaw, 2021:1-12). This type of music reflects the mixture of music from different cultures, where the melodic structure of the local music or traditional music is the main component of the new music arranged with Western theory and techniques. This preserves important features of music of each region (Lee, 2006:22-71; Scheibert, 2017; Ong, 2011; Socratianurak, 2005: 540–553; Lin, 2018; Bonnin,

2008; Huan, 2020:1-4; Yilmaz, 2014:3021–3025; Khurmatullina, & Salpykova, 2014:29–41; Adjahoe, 2017: 94–114). Examples of cross-cultural musical fusion in piano compositions have emerged in various areas outside Western music traditions. For instance: (a) Berkant Gençkal drew on the melodies of Turkey's Bursa folk songs to arrange piano for four hands (Demirci, 2016:1986–2001); (b) local Indonesian music was incorporated in children's piano lessons (Pelawi, Sagala, & Beratio, 2017:114); (c) the development of contemporary Turkish piano compositions incorporates elements of traditional Turkish music, drawing from the unique makam scales of traditional Turkish music; (d) the integration of the national pentatonic mode in Chinese piano compositions enhances their distinctiveness (Chen & Zhang, 2019:20–27); (e) the development of Korean music involves blending specific modes of traditional Korean music with the key relationships found in Western music; for example, *pyeongjo* and major keys convey calmness and freshness, and *gyemyeongjo* and minor keys signify sadness (The Korea Foundation, 2011:13); (f) Copland incorporated Anglo-American folk music into his contemporary compositions by using popular and distinctive folk melodies, such as the *orquesta típica* and *canción ranchera*. He used segments of these melodies and fragments as melodic-rhythmic motifs in his compositions, creating harmonies, melodic development, and form, as well as managing rhythm in his unique modernist style (Murchison, 2012:196, 197).

In Thailand, empirical evidence and research indicate that the fusion of different musical cultures, specifically Thai music and piano, began during the era of King Rama VI, exemplified by Thai string ensembles combined with piano (Inkhong, 2016:115; Socratianurak, 2005:543-544; Matakunakorn, Amatyakul, Charanyananda, & Natchanawakul, 2018:363). Currently, several composers use traditional Thai melodies to arrange piano pieces in various ways: 1) Sumitra Sucharitkul used Thai traditional music as a major component, complete with accompaniment from Western music; 2) Colonel Chuchart Pitaksakorn weaved many melodies together, including chord progression, use of notes outside of the chord, and accompaniment of Western music (Socratianurak, 2005:543-544; Matakunakorn, Amatyakul, Charanyananda, & Natchanawakul, 2018:364). In Molam music culture, three interesting points are noted: Firstly, arranging Isan folk melodies for beginner-level piano players (level 1-3), while clearly preserving the original structure of these traditional tunes, is still relatively rare. It is found, for instance, in solo piano pieces with Thai string instruments, such as the "Piano Lai Lum" piano set by Akapong Phulaiyaw. (2021). Secondly, some pieces are arranged freely based on the Western practice, with no regard to the practice of Thai Isan folk music (Thuntawech & Boribooviree, 2015:515). Finally, some piano compositions are created using Western musical techniques in various styles, such as French and jazz, which shows a lack of musical creations in this form (Chaumklang & Hirunrax, 2021:128; Suddai, 2019: 298-299).

Objectives

This paper aims to present an arrangement approach for solo Khaen melodies, drawing from original melodies to adapt them for piano and tailoring the notes to suit beginner-level piano players. Using Western music composition theory, it develops a new melodic structure that aligns with Western classical music while emphasizing the preservation of the original accents and main melody of the Khaen. Additionally, it enhances the sound with new harmonies that carry the tone of contemporary Western classical music.

Methodology

This research was carried out with research integrity and ethics approval from the Office of the Committee for Research Ethics (Social Sciences), Mahidol University, with project number MU-SSIRB 2018/007.0901 obtained on January 9, 2018. The main research question of this paper is: How can solo Khaen melodies be used to arrange piano pieces suitable for beginner-level learners? The methodology follows these steps: (1) select popular songs from the Molam music culture; (2) choose solo Khaen melodies from the basic Khaen practice exercises in Klangprasri (2006), selecting pieces with prominent main melodies and consistent melodic movement featuring steady intervals; (3) analyze and synthesize the solo Khaen melodies; (4) examine the scope of music theory and basic piano skills for adult beginners; (5) arrange a total of 17 piano pieces, comprising 12 solo piano pieces and 5 pieces for two pianos; (6) verify the accuracy of the solo Khaen melodies and the appropriateness of the piano arrangements; (7) validate the results through a connoisseurship process with a panel of 10 experts, including scholars of Western music theory, piano performance instructors, traditional Isan folk musicians, and Khaen instructors.

No.	Approaches and Creation	Results
(1)	Changing the time signature to extend note values by expanding to match the original rhythm and in a free form, along with adjusting the pitch of certain notes independently	Changing the time signature from 2/4 (simple duple meter) to 4/4 (simple quadruple), along with extending note values independently of the original structure in some sections, and adjusting certain pitches to better align with the harmony of the chords. This includes modifying the octave of specific notes to direct the melody in a way that allows for smoother or more continuous finger movement.
(2)	New song rearrangement based on Western music practice, including creating phrases and cadence, and using motif and repetition	Developing the original melody to create more symmetrical phrases or clearer question-and-answer phrases, alongside the use of basic chord structures. This approach leads to cadence points following Western musical principles, such as the I-V or half cadence and the V-I or imperfect authentic cadence.
(3)	Accompaniment arrangement with basso ostinato from drone	Harmonies are created from drone notes based on the harmonic structure of folk music and modified with new methods to produce a fresh sound. Harmonizing notes are placed in new positions, often in the left hand on the bass clef of the piano, while the main melody from the original Khaen tune is set in the melody position on the treble clef. This arrangement allows the main melody to be clearly heard alongside a steady and robust harmony.
(4)	Chord and chord progression creation from solo Khaen melodies	The researcher enhanced the tonal color by blending classical music accents, creating harmonies in the form of an Alberti bass accompaniment along with other chords that complement the main melody's structure. This includes seventh chords and other chords within extended tertian harmonies.

Figure 2. Approaches to create solo Khaen melodies for contemporary piano compositions.

The adjustments are as follows:

1. changes to the time signature and modifications to certain notes in specific measures.

Khaen Melody
(Klangprasri, 2006)

Piano Melody
(Author, 2019)

A B C D E F G H

Figure 3. Sample Khaen melody that is used to compose a piano piece in Lam Sing song.

Figure 3 provides an example of a Lam Sing melody that is used to compose a piano piece. The use of composition techniques in this paper can be classified into three groups as follows: 1) Changing the time signature from 2/4 to 4/4 retains the original feel of the melody while repositioning certain melodic notes within the same measure to fall on the down-beat, or the first beat of the measure. This adjustment emphasizes alignment with the harmony or chord of that measure, making the harmony more pronounced, as follows: A: half notes are made into whole notes, C: sixteenth notes are made into eighth notes and D: G notes are converted into C notes; 2) Certain note values have been adjusted to align with the strong beat to support practice for beginner-level players. Additionally, some note values have been extended, creating a new melody that closely resembles the original but with a clearer question-answer phrase structure, as follows: B: dotted quarter notes are made into half notes, D: dotted eighth notes are made into half notes, E: sixteenth notes are made into quarter notes and half notes, and G: sixteenth notes (note E) are made into half notes; and 3) Adjusting the octave of certain notes changes the melodic direction to reduce large interval jumps and to simplify fingering for easier practice. For instance, note G3 is used in place of G4.

2. Rearranging the melody following Western practices.

This research rearranged piano pieces following Western music composition practices, including the creation of phrases and cadences, as shown in the example of the Lam Sing song (Figure 4), and the development of motifs, as demonstrated in the example of Serng Yae Khai Mod Daeng (Figure 6).

Khaen Melody
Klangprasri, 2006

Figure 4. Part one, Example of how to create phrases and cadence in Lam Sing song.

Figure 4. Part two, Example of how to create phrases and cadence in Lam Sing song.

Figure 4 presents sample notes of Khaen melody in Lam Sing and piano parts. It is evident that the melody is structured with motif, with a rather short and constant rhythm, creating no symmetrical phrases. As such, the researcher developed phrases by adjusting note values or rhythm of the main melody to craft more apparent phrases, in order to allow the melody to reach a cadence. For instance, Phrase A constitutes one big phrase where the long sound occurs at a half note in I-V chord or half cadence before continuing on to Phrase B with the structure of V-I chord or imperfect authentic cadence. This is an outstanding feature of Western music composition, which is supported by the findings of Gianakon (2018:45-46). Gianakon put forward that according to Western classical theory, phrases are driven by harmonies; thus, cadences are related to phrases which lead the melodies to the achievement. In addition, Benjamin, Horvit, and Nelson (2003:242) mention that 'a phrase is a musical thought,' and when two phrases are connected, they typically form a question-answer pair. In this structure, the second phrase usually has a more complete sound than the first, which is referred to as a period as follows:

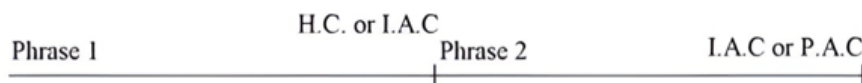


Figure 5. Phrase structure and period form. Benjamin, Horvit, and Nelson (2003:242).

Figure 6. Motif development in Serng Yae Khai Mod Daeng.

Figure 6 demonstrates motif development with repetition technique. In the song *Serng Yae Khai Mod Daeng*, The researcher used a motif from the Khaen melody (at position G), consisting of the notes G, A, and C, as a motif in the piano melody, maintaining the original proportions in the treble clef. Moreover, D5 notes in Khaen melody are used as D3 notes in piano melody in bass clef, which serves as the bass sound and the harmony. Quarter notes and sixteenth notes in Khaen melody are converted into half notes and quarter notes in piano melody. The repetition technique is used with new groups of notes that are short phrases consisting of D, G, A, and C notes to ensure connectivity and harmony.

Motif development with repetition technique is evident in the first movement of Ludwig van Beethoven's *Symphony No. 5 in C minor, Op. 67*. This piece employs the initial four notes of the opening motif to craft a melody enriched with melodic and rhythmic variations, as well as shifts in timbre and character. The same motif is found throughout the section (Gianakon, 2018:31). As such, motif development with repetition technique is one of the composition techniques in Western music that results in the simplicity of the melody (Deliège & Wiggins, 2006:373).

3. Arranging the sound harmony with basso ostinato from drones.

The figure displays two musical staves. The upper staff, titled "Khaen melody + Drone (Klangprasri, 2006)", shows a melody in 2/4 time with notes G, A, and C in the treble clef, and a drone in the bass clef. The lower staff, titled "Piano harmony (Author, 2019)", shows the same melody in 4/4 time, with the drone in the bass clef. The drone is labeled "A3" and the Khaen melody is labeled "D5".

Figure 7. Sample harmony arrangements with basso ostinato from drones in Lam Sing song.

Figure 7 presents sample drones in Lam Sing melody. Here, we notice sound harmony for notes D-A, which are the 5th Inv. and are performed simultaneously with the song melody (Miller & Shahriari, 2017; Klangprasri, 2006; Klangprasri, 2010). Therefore, the researcher set this as a concept in mind when arranging harmony in piano pieces. The steps undertaken are as follows: 1) choose harmony from drones using one note, which is A5; 2) lay it out in bass clef as A3, with its value adjusted and rhythm arranged to create harmony that is synchronized with the main melody adopted from Khaen; and 3) specify notes from the melody of Khaen that are in the 2nd row or another row outside of drones to produce the main melody on treble clef. The main melody and harmony from drone notes are thus created at every rhythm including harmony of 1-2 notes. In fact, drone harmony in Northeastern Thai traditional songs is similar to drones in Indian classical music. Drones developed from local Indian scales are evident, such as Rag Yaman (late evening raga) scale. Moreover, drones composed of C and G notes were also found (Guinane, 2017:3), and Vilayat Khan's method observed drones in between notes that are pronounced with Sa-Pa (C - G) or Sa-Ma (C - F) (Jairazbhoy, 2018:77) (Figure 9).

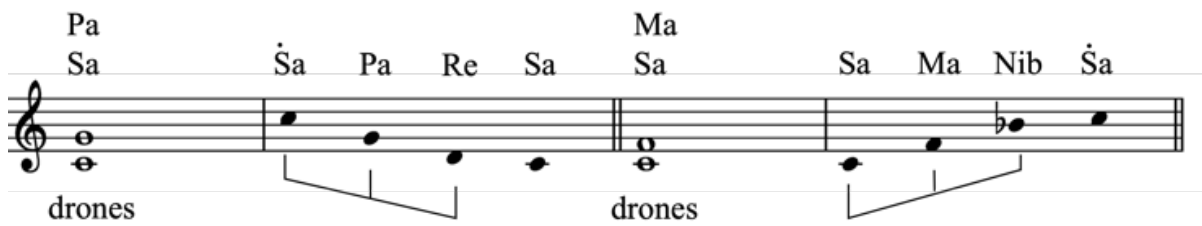


Figure 8. Sample drones in Vilayat Khan’s method (Jairazbhoy, 2018:77).

Besides, the method to arrange harmony with basso ostinato from drones coincides with how harmony is produced with drones in bass in the song Mazurka by Chopin. Cintron (2014:28) as cited in Aron, (2001:11) put forward that, “With the original harmony of the song ‘Mazurka,’ the sound of drones is noticeable all throughout the song along with the harmony of notes of different kinds. This creates sustained notes in bass, or pedal points.” Furthermore, Viljoen (2000:78) explained Chopin’s song Mazurka further that, “Drone notes in songs developed with Lydian mode where these notes are member notes of the gypsy scale in B-flat key when the sound is Db are in fact drones in bass. These are the 5th pair with Gb note that is the root, and also the 6th pair with B-flat note.

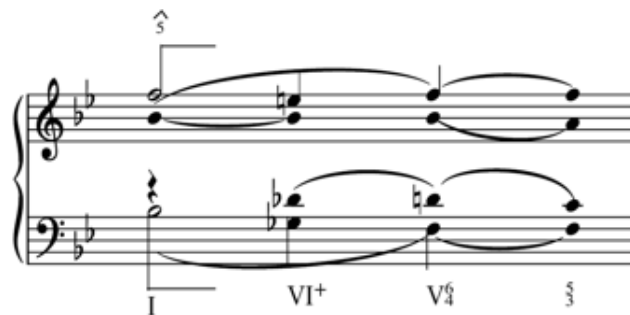


Figure 9. Example of how to arrange harmony with drones in the song Mazurka by Chopin (Viljoen, 2000:78).

4. Creating chords and chord progressions from the song melody.



“Lam Sing” Khaen melody (Klangprasri, 2006)

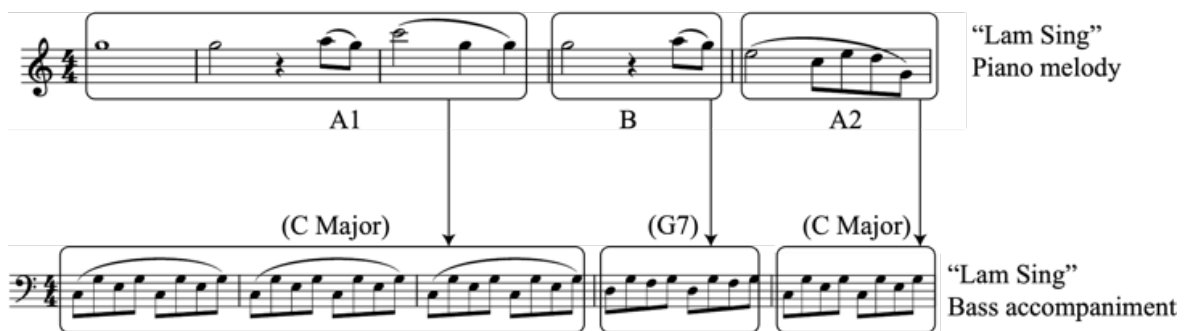


Figure 10. Sample new arrangements in Alberti Bass Accompaniment (or broken chord) (Author, 2019).

Figure 10 presents how to create the main melody from Khaen notes, to create chords based on the main melody, and to create arrangements in the form of broken chord or Alberti bass accompaniment, which refers to bass played with the left hand in conjunction and smoothly with the main melody (Hicks, 2003:28; Rogers 2015:15). The approach consists of: 1) A1, A2: The piano melody that is developed from A1, A2 Khaen melody appears in measures 1-3, and the C Major chord serves as the accompaniment in A1, A2 bass. A1 is based on notes in the main melody, which are notes G and C. Similarly, A2 is also based on notes in the main melody, which are notes E, C, and G. 2) B: The piano melody that is developed from B Khaen melody or notes in the 4th measure of the piano song specifies the G7 chord as the accompaniment in B bass. This refers to notes in the main melody, note G, which is the root note of the chord, with the 7th note added to complement the sound. The accompaniment in broken chord. Broken chord is a technique for accompaniment or harmony pattern, as seen in the second movement of Sonata in C (K.545) by Mozart played on the piano (Rogers, 2015:15).

The image displays a musical score for the song "Bai Sri Su Kwan". At the top, the "Khaen melody" is shown in a single staff with a treble clef and a 4/4 time signature. Below it, the title "“Bai Sri Su Kwan” Khaen melody (Klangprasri, 2006)" is written. The main part of the score is for piano, consisting of two staves: "Piano 1" and "Piano 2". "Piano 1" shows the piano melody, which is a transcription of the Khaen melody with adjusted note values. "Piano 2" shows the piano accompaniment, featuring block chords in the treble clef and root notes in the bass clef. The chords are labeled as Cmaj7, C9, Fmaj7, and C9. Arrows point from the root notes in the bass clef to the label "Root". A label "Block chord" points to the chords in the treble clef. The label "Piano accompaniment" is at the bottom right.

Figure 11. Sample new arrangements in block chord in the song Bai Sri Su Kwan (Thai blessing ceremony) by author 2019.

Figure 11 illustrates how harmonic accompaniment is created in block chord based on the main melody of Khaen. The process to create block chord is as follows: 1) Use Khaen melody as the main melody for piano by maintaining the note values and the pitches, and adjusting the note values at the end of phrases to be whole notes; 2) create a chord that synchronizes melodies based on the major key along with tension chords in different chords. For example, the 7th note in the 1st measure of Cmajor7 chord coincides with note B3 of Khaen melody, the 9th note in the 2nd measure of C9 chord coincides with note D4 of Khaen melody, and the 7th note in the 3rd measure of Fmaj7 chord coincides with note E4 of Khaen melody; and 3) two notes are specified for piano, which are root notes of the chord played with whole notes at the 1st beat in bass clef, and block chord played with dotted half notes at the 2nd beat in treble clef of each measure. According to the process above, the researcher managed to maintain the original melody of the song for piano 1 and

create accompaniment with extended chords by adding notes in triad chords with major sound consisting of seven chords, ninth chords, and thirteenth chords. These are based on the member notes of the main melody of Khaen in the song Bai Sri Su Kwan that are drawn to the newly developed chord tone. This is in accordance with the main melody of piano 1, and reflects basic chord progressions comprising chords I, IV, vi, V7 that play along with piano 2. Chord symbols common in popular music are also incorporated. This concept is consistent with piano pieces for two players in Korean traditional music, as seen in Piano Duet: Der blauen Vogel (Blue Bird), Op. 240, No. 3 by Kuk-Jin Kim (b. 1931). The song is made up of the main melody from the main notes in pentatonic scale, and the accompaniment is created with a group of notes or chords developed from notes in the main melody together with notes with new values or triplet notes, 3-4 of which are taken from the main melody (Choi & Kwon, 2013).

The above findings highlight the concept of creating music by blending different music cultures - notably Thai Isan folk music and Western music, which plays an important role in promoting the development of contemporary piano with more Isan musical features. These features are embedded in songs and can be passed on to future generations through piano teaching and learning with practice pieces. Moreover, this serves as a way to promote the awareness and value of the folk music culture. An expert in the field once gave an interview that, "This piece of work is a creation of music because it builds on the national music culture that will help learners to better access their folk culture and unique characteristics of national music" (Interview, April 26, 2018). Another expert put forward that, "The piano pieces that were composed are good resources for a large number of students nowadays who are not familiar with the local musical melodies of Thailand's Isan region. Most are familiar with Western music, so this is a good chance to bring them back to learn about their folk music culture through these piano pieces" (Interview, April 26, 2018). These comments demonstrate the importance of one culture that is built by integrating folk culture with Western culture (Elliott, 2011), and align with the discussion on contemporary piano pieces in China. Ye (2019) remarked that, "Lessons should not only teach learners to be knowledgeable and skillful to play the piano, but should also include content to allow learners to enjoy the beauty of music with creative songs, value of art, and sophistication of that particular piece of work." In addition, the concept to combine folk music with other branches of art not only promotes and spreads folk culture to a wider population, but also supports people to have better quality of life. For instance, health science can be complemented by local performing art to create musical drama with music and lyrics that promote healthy lifestyle among the elderly. Also, musical melodies from different cultures can be complemented by applied Western musical instruments and contemporary technology to reach more new audiences while preserving local attributes (Rotjanasuksomboona, and Chanvorachote, 2022:143; Binson, 2022).

Conclusion

The development of piano pieces from Khaen melodies presented in this paper is based on the sound structure of Northeastern Thai traditional music, with harmony rearrangements according to Western music, producing pieces that reflect contemporary music with techniques of Western music (from the medieval period up to the 20th century) and structures of popular music. Five major approaches are captured below:

1. Select well-known Northeastern melodies.
2. Apply local Northeastern melodies arranged for basic Khaen as main melodies for piano.
3. Rearrange piano melodies to synchronize with Khaen melodies. Produce new chords and harmony that go along with main melodies with respect to the primary chord.
4. Create accompaniment developed from elements of accompaniment of local North-eastern drone found in Khaen notes.
5. Content on musical features and characteristics is incorporated, such as articulation, dynamic, chord symbol, and pedal sign. This is to prepare learners for higher skills related to the expression of moods and feelings.

Finally, this development of piano music serves as a starting point to support beginner-level piano players, helping to promote and provide young people with the opportunity to learn Isan-inspired piano compositions. As Pramote Phokha (2021) suggests, Thai undergraduate music students should become familiar with Thailand's musical roots to foster cultural preservation. This approach motivates future generations to creatively reinterpret traditional music. Furthermore, integrating historical context or explanations of original melodies into these piano lesson pieces would enhance understanding of both music and national culture from various perspectives (Ye, 2019). Moreover, composers can further develop pieces for higher skill levels to convey the refined accents and unique characteristics of local melodies. An example is the arrangement of Thai melodies for piano by Silapabanleng, an important Thai composer known for skillfully adapting Thai tunes into Western musical style for piano. These works were performed by his student, Apsorn Kurmarohita. The key concept in presenting these pieces is the focus on how pianists can beautifully express the nuances of Thai lyrical accents (Chulapan, 2022).

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