

Debussy and Siamese Whole-Tone Scale Music

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Abstract

This article explores Claude Debussy, Siamese whole-tone scale music, and urban cultural connections between France and Siam in terms of history, theory, and its inspiring creativity to music. Playing an important role in Western music, whole-tone scale expresses spirit and philosophy of the East along with unique improvisation and rhythmic patterns. More importantly it has been influential to a number of Western masterpieces such as music by Debussy, Béla Bartók, and Klaus Pringsheim. Siamese 7-note whole-tone scale music had a close connection with France since the diplomat to Siam, Simon de la Loubère was recognized to be the first foreigner who notated Siamese song *Say Samon* in 1667. The publication had been published in English version by a London publisher 26 years later in 1693. By that time Siamese, Khmer (Cambodia), and Laos have shared the same element in music and repertoire. The cultural performances and music representing of France colonial in Paris Exposition Universelle 1889 might touch many artists and music composers' hearts.

Keywords: Debussy, Whole-tone Scale, la Loubère, Paris Exposition, Siam, Say Samon, Urban cultural exchange, Thailand

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Introduction

Debussy has been recognized as one of prominent impressionist composers among Maurice Ravel, Erik Satie, and Gabriel Faure. His unique compositional style is related to whole-tone scale and quartal-quintal harmony which are similar to southeast Asian music especially Indonesian gamelan and Siamese Piphat and Mahori ensembles. Nonetheless, Debussy's whole-tone scale has 6 equal temperament notes, whereby Indonesian scale has 5 notes and Siamese scale has 7 notes respectively.



Figure 1. Claude Debussy (1862-1918).

Debussy was born on 22nd August 1862 in a small city called Saint-Germain-en-Laye, about 19 kilometers west of Paris, France. He was the eldest among five children whose father ran a China shop and his mother was a seamstress. By the time that the business failing, his family moved to Paris in 1864. They managed to own a small apartment in Paris whereby his father worked in a printing factory. Through bad experiences, Debussy had shown his gift in music at early age and started taking piano lessons at seven. Outstandingly, he entered the Paris Conservatoire in 1872, when he was only ten years old. Debussy immediately impressed the jury with his impressive improvisation of which he preferred to express other than the conservative sound interpretation. He had been at the conservatoire for 11 years and studied piano with Mme. Maute, who claimed to be one of Frédéric Chopin's pupils. At the same time, he studied composition with Ernest Guiraud, music history and theory with Louis-Albert Bourgault-Ducoudray, organ with César Franck, solfège with Albert Lavignac, and harmony with Émile Durand (Lockspeiser, 1963:10-11). Furthermore, his

piano playing was successful; he won the prestigious prize in composition, "Prix de Rome." He had won second prize in 1883 from the cantata *Le Gladiateur* and won the first prize a year later from the work *L' enfant prodigue*. The work had been guided by Guiraud in year 1884, from his Cantata *L' enfant prodigue*, based on the story of the Prodigal Son. The prize had granted Debussy to study at the Villa de Medici in Rome for four years from January 1885 to March 1887. Over there, he managed to meet Giuseppe Verdi and heard Wagner's operas which influenced and inspired him tremendously for writing his own compositions in the future.

Claude Debussy was a composer who worked on new colors of orchestration and integrated music theory. His philosophy was to challenge and against the traditional ways in finding new characterizing role of woodwind and brass sections in order to produce more creative and productive ways. One of those repertoires that can demonstrate those colorful laboratories well is *La Mer* (for orchestra, 1905.) The work has been admired as the pioneer of Impressionism. His music is a creative and imaginative work of art like sounding poetry. Other popular works in the same genre are *Clair de lune* (Moonlight from *Suite bergamasque*, 1890-1905), *Prélude à l'après-midi d'un faune* (Prelude to the Afternoon of a Faun, 1894), and his opera *Pelléas et Mélisande* (1902). His final works include piano pieces *En blanc et noir*, (In Black and White, 1915) and set of *Douze Études* (Twelve Études, 1915.)

Debussy's composing style had been criticized against those of Richard Wagner (1813-1883), the German Romantic opera pioneer. In the meantime, the Impressionism term that identified itself as "Fantasies and Dreams." It was until 1894 when Debussy had proved his genuine composing signature. The *Prelude à l'après-midi d'un Faune* was the first innovation that inspired him to the next phase of his later works. The remarkable techniques that described Debussy's composing style are the use of six-note whole-tone scale and the unresolved augmented chord progression.

In 1908 Debussy married a singer, Emma Bardac, and later had one daughter, Claude-Emma Debussy. Emma inspired Debussy to compose the piano piece in 1908 *The Children's Corner* which was dedicated to her. Debussy spent his later years in life as a critic, composing music, and traveling internationally to perform his own works. Later in 1918, Debussy, 55, died tragically because of the earliest colostomy operations of rectal cancer ever done. Even worse when Claude-Emma outlived her noted father only about a year. She died of diphtheria in 1919 after a mistake was made by the doctor who gave her the wrong treatment. Debussy was buried in Paris at Passy Cemetery, with his wife and daughter near him. Debussy's death was a great lost in music contribution.

Indonesian (Javanese) Gamelan

Javanese gamelan has been believed to be the most imaginative inspiring and influencing to Debussy's whole-tone scale as well as the idealistic quartal-quintal harmony, the harmonic figure similar to gamelan repertoire. In fact, the tuning called Pelog (7-note scale) is not exactly whole-tone scale differed from Slendro which is a pentatonic scale (C, D, E, G, and A). Pelog has a unique tuning depending on its harmonic series and the melodic mode. More importantly, there is nothing associated with the tuning of the 12 chromatic function.

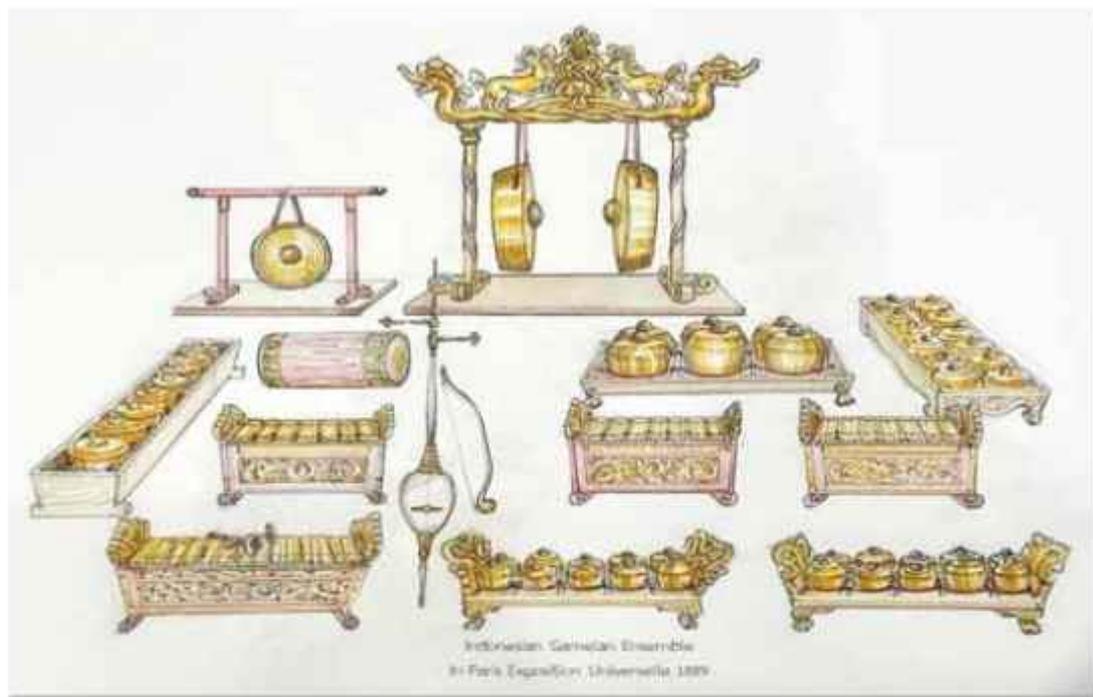


Figure 2. Indonesian Gamelan ensemble in Paris Exposition Universelle 1889.

Siamese Mahori Ensemble

Both Thai traditional music and gamelan music have been accompanied by the intricate and varied rhythmic patterns, played by different sizes of drums and designed percussions. Actually, music in the southeast Asian region shared common ground technique and repertoire from Siamese Music. Ayutthaya Kingdom had played an important role in ruling Laos, Cambodia, and Vietnamese for centuries. More importantly, they had shared the cultural performing tradition, court music beyond repertoire as well as instrumentations and playing techniques. Principle of practice is based on 7-note whole-tone scale accompanied by various tuning drums and a small pair of cymbals called "Ching."

The region known as the "Golden Land" is the Southeast Asia peninsular comprised of Thailand (Siam), Myanmar, Laos, Cambodia, Vietnam, Malaysia, and Singapore. Siam had a close connection with many European countries such as Portugal, France, and the Netherlands since Ayutthaya Kingdom. Especially, France, in the reign of King Narai the Great (1656-1688) of the Ayutthaya Kingdom, Siamese received Simon de la Loubère as French diplomat of King Louis XIV to be in Siam from October 1687 to January 1688. During his visit, la Loubère wrote all observances about Ayutthaya and the royal palace. A fine violinist and well educated himself, music was certainly part of his interest. La Loubère managed to record melodic singing styles in detail. However, he did not mention the different tuning system between Just Intonation used in Europe and Siamese whole-tone music. He only stated that there was no half tone in Siamese music.

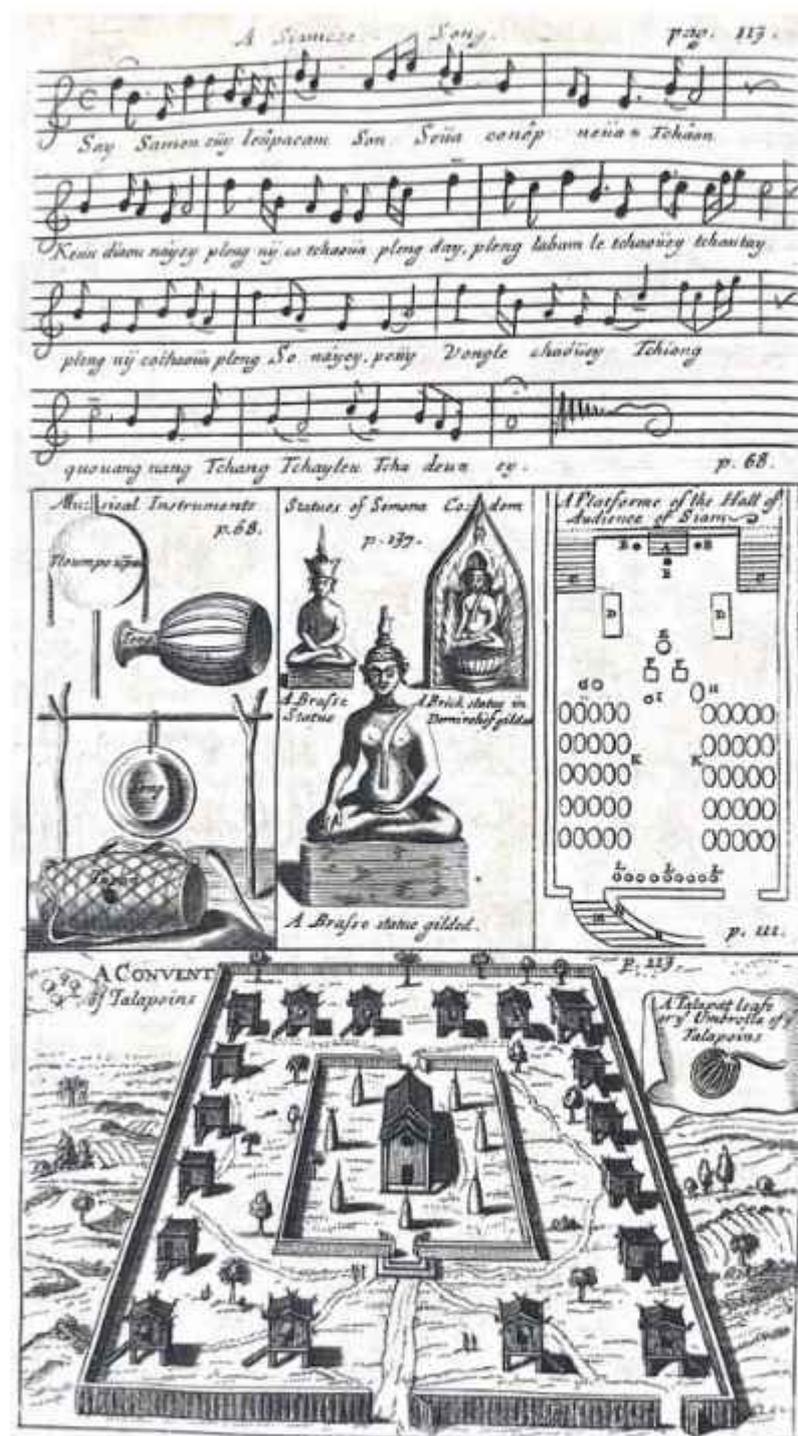


Figure 3. Picture of "Say Samon" music notation by la Loubère in 1687, recognized to be the first whole-tone music notated. English publishing version, London 1693 (la Loubère, 1693:113).

"Say Samon" transcribed
from La Loubère notation accompanied by Baroque Counterpoint

Moderato

The musical score is presented in four systems, each with two staves (treble and bass clef). The first system contains measures 1 through 6, the second system measures 7 through 13, the third system measures 14 through 19, and the fourth system measures 20 through 24. The tempo is marked 'Moderato' at the beginning. The key signature has one sharp (F#). The score shows a main melody in the treble clef and a counterpoint in the bass clef. The counterpoint consists of a steady eighth-note accompaniment. The piece ends with a double bar line at measure 24.

Figure 4. Picture of Say Samon accompanied by Baroque counterpoint.

Besides, the first ever written whole-tone music was notated by Simon de la Loubère in 1687. The important page of history was turned when Siamese sent the first embassy to France in 1686 led by ambassador Kosa Pan. The three Siamese ambassadors and their group had left Ayutthaya on December 22, 1685, and arrived at the port city Brest on June 18, 1686. They remained in France from June 1686 to March 1687 and presented King Narai's letter to King Louis XIV at Versailles on September 1, 1686. They still spent several

months traveled to North of France before returning to Brest. There was no substantial evidence showed the connection between France court and operatic composer, Jean-Baptiste Lully (1632-1687) who was born in Florence (Italy), and paid his visit to see Kosa Pan and the Siamese musicians. Anyhow, King Louis had assigned a court composer, Michel-Richard Delalande (1657-1726) to compose 2 pieces of procession music, *Entree des Siamois* (Welcome Siamese) and *Air des Siamois*, to perform by a large ensemble during the procession ceremony. These 2 compositions showed relation between French and Siamese monarchy in the history. Even though the functions of whole-tone scale and pentatonic scale in Siamese music did not show the relevance but the ethnicity and essence of eastern flavors still existed.

Debussy and the Exposition Universelle

Debussy attended the Javanese music performance at the Exposition Universelle in 1889. The event was known as the 1889 Paris Exposition, a world's fair held in Paris, France from May 5 to October 31, 1889 and was also the occasion that the Eiffel Tower was built and launched as the highlight attraction. More importantly, there were ethnic music and dances around the world especially the colonial countries presented in the Expo. Neither clear evident nor contents supported that Khmer dances and music were performed in the Paris Expo 1889. The record by Paul Holmes in his book entitled "*Debussy*" (Holmes, 1989:37) shows that:

Debussy visited to the Eiffel Tower, the construction tribute to French technical invention "Eiffel," with Robert Godet (journalist) and Paul Dukas (composer). They could also explore the area where almost every nation including France's new colonies displayed its culture and products. Debussy and friends heard music that they had never been experienced before. They had heard folk music from every continent and specifically Balinese gamelan played as accompaniment to the shadow puppet performance that made Debussy was fascinated with the improvising rhythmic pattern and its harmonious overtone series. Indonesian's Gamelan and the cultural music and drama of Southeast Asian it had been spotted in published advertising and Europe newspaper.

Siamese, Cambodia, and Laos Music

Even though there was no substantial evidence that there was the traditional troupe or music ensemble from Cambodia as Khmer had been under France from 1863 to 1954. France's colonial in Southeast Asia beside Cambodia, which had been taken from Siam (Thailand) before further invasion parts, were Laos and Vietnam in 1867. Music and dance of Khmer and Laos had been influenced by Siamese traditional court performance and were indistinguishably related. Certainly, there was no a substantial record that traditional troupe from Cambodia or Laos were presented in the Expo. Khmer had been an important part of France's colonialism and played a culture luxury role in Southeast Asia region. Assumably, Debussy might have heard music that accompanied a court dance troupe from Cambodia and therefore being inspired by the whole-tone melodic structure, propounding quartal-quintal harmonic as well as improvising rhythmic patterns either in Expo 1889 in Paris or Expo 1900 in London. His creativity had been applied into several categories of music especially in *Preludes* (Book I 1909-1910 and Book II 1912-1913), *Suite Bergamasque* (began composing in 1890 and significantly revised before its publication in 1905), *Doctor Gradus ad Parnassum* (1908), and *La Mer* (1905).

Whole-Tone Scale

Debussy was not the only pioneer composer who used the whole-tone scale in his music, but Bartók, Berg, Berlioz, Chopin, Elgar, Glinka, Janacek, Liszt, Mahler, and Messiaen among others also experienced the use of 6-note whole-tone scale which believed to commonly share philosophy between the East and the West. Basically, Western tuning bases on 12-note equal temperament in an octave but mainly explores 7 notes in diatonic major and minor scales. However, Thai traditional music plays on 5-note pentatonic mode based on the 7-note whole-tone scale. More importantly, the 7-note whole-tone scale has been used in common in traditional and folk music in those areas mentioned, especially the 5-note Slendro gamelan scale. Moreover, the quartal-quintal harmony and improvising rhythmic patterns are also the heart of Siamese and Khmer music.

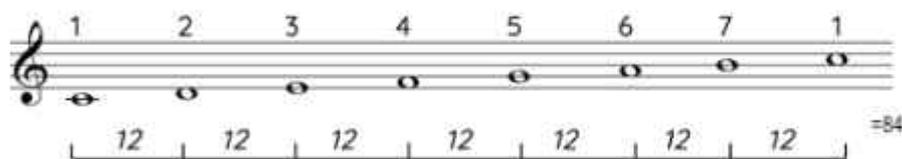


Figure 5. Siamese 7-note whole-tone scale.



Figure 6. Debussy's 6-note whole-tone scale.



Figure 7. Western music's 12-note chromatic scale.

Siamese Whole-Tone Music Composers

In 1930, after having been ruled by France for nearly 67 years, the court music of Khmer had been stagnated. At that time King Rama VII of Siam had paid a royal visit to Cambodia and Vietnam, accompanied by Siamese court music master, Luang Pradit Phairoh, the headmaster of the royal court music. King Srisawasdi Maneewongse of Cambodia was highly impressed with the performance of solo Ranad (Siamese wooden xylophone) by Luang Pradit Phairoh in the royal welcoming party held at Angkor Wat for King of Siam.



Figure 8. Luang Pradit Phairoh (1881-1954).



Figure 9. Dr. Klaus Pringsheim (1883-1972), a professor of music at the Tokyo University of Arts.



Figure 10 Prasidh Silapabanleng (1912-1999), student of Dr. Klaus Pringsheim.

French and royal officers kindly asked King Rama VII for the royal permission to let Luang Pradit Phairoh train and revise the missing repertoire of Khmer and Siamese court music. Concerning the royal command, King Rama VII granted a month to complete the mission requested. After an impressive service, King Srisawasdi Maneewongse had great satisfaction of the result; both Khmer and Siamese polished up all the worship and ceremony repertoire as well as playing and tuning systems spectacularly. During that visit, Luang Pradit Phairoh had been accompanied by his son, Prasidh Silapabanleng. Prasidh, who had strong background in Thai traditional music from his father, enrolled the cultural exchange program in Japan in 1934 and met Dr. Klaus Pringsheim, a German composer and conductor, and pupil of the world renown artist, Gustav Mahler (Premananda, 2011:27, 29, 30, 37). Prasidh had studied with Pringsheim at the Tokyo Geidai (Imperial Academy of Music or Tokyo University of Arts at present) and took private lessons until 1937. Upon returning to Thailand, Prasidh invited Pringsheim to stay in Bangkok occasionally. Both of them worked on many compositions based on Thai 7-note whole-tone scale, quartal-quintal harmony, Thai rhythmic patterns, and Thai musical form within the same inspiration as found in Debussy's. The music of Pringsheim that had been influenced by Thai melodic structures included *Concert of Orchestra in C major, Op.32* (concerto for 2 pianos and orchestra), music and opera in one act *Yamada Nagamasa*, and the lost composition tribute to King Rama VIII, *The Royal March. Yamada Nagamasa* (1470-1530) was the true story of a Japanese swordsman and merchant who came to serve King of Ayutthaya Kingdom and became the supreme governor of Nakorn Si Thammarat city in southern Siam. In the meantime, Prasidh composed *Siamese Suite*, a symphony in 4 movements and an overture *Cherd Nai* as a tribute to King Rama IX the Great which was based on his father's composition. The composition enhanced him to be awarded the National Artist in Music Composition later in 1998. Pringsheim passed away in Tokyo in 1972 and Prasidh in 1999, Bangkok and have passed down Pringsheim's School of Composition to younger generations in Thailand. The two impor-

tant disciples who play a vital role in inheriting Pringsheim and Prasad's philosophy are Prasinee Sakhuntararat and Weerachat Premananda; they both studied with Pringsheim's pupils at Tokyo University of Arts, Manabu Kawai, and Hiroaki Minami. Pringsheim introduced the innovative techniques applying traditional pentatonic scales of both Thai and Japanese music.

Whole-Tone Scales in Comparison

There are several pentatonic Japanese scales such as the one that is more like jazz music mode called "Hirajoshi" (C, D, Eb, G, Ab, and C). And the one that is similar to Hirajoshi is called "In Sen" (C, Db, F, G, Ab, and C). The "Iwato" is like mode of Western music combined with C, Db, F, Gb, Bb, C. And the one that is closed to Thai pentatonic whole-tone scale is called "Yo" which has been used specifically in traditional Japanese folk songs in contemporary compositions. *Yamada Nagamasa* is one of outstanding examples that combined Thai and Japanese pentatonic whole-tone scales perfectly. The piece had been performed and broadcasted from time to time by the NHK Symphony Orchestra over the past 40 years.

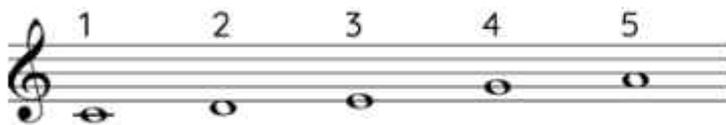


Figure 11. Thai Pentatonic based on 7-notes whole-tone scale.

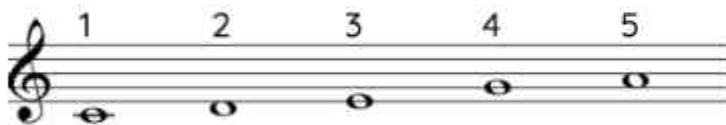


Figure 12. Japanese "Yo" pentatonic scale.



Figure 13. Debussy's whole-tone scales in different divergence.

The 6-note whole-tone scale of Debussy has the same mode modulation as Siamese and Japanese music. In repertoire of ritual ceremony, Siamese music has moved from 6-note mode to another without accidental tone as played in the white keys. Triads created by 6-note whole-tone scale mostly are augmented chords like C Aug. (C, E, G#), D Aug. (D, F#, A#), F# dim (F#, A#, C) and C7 (Bb, C, E). Therefore, 6-note whole-tone scale needs to com-

bine at least two scales in order to create a tonality and harmonic function; for example, C and Eb whole-tone scales. Moreover, traditional harmony does not suite Debussy's scale. Therefore quartal-quintal harmony is a better solution. Siamese pentatonic scale can easily harmonize themselves following its harmonic series and a tonic note can move itself following the mode of the melodic movement.



Figure 14. Debussy's whole-tone scale in *Prelude No. 12, Book II*.

Siamese traditional music has long been developed from folk music into refined court music. Approximately, it had taken more than 4000 years since Thai people originally resided in southern Yunnan County of China. The uniquely designed musical instruments, the playing technique, and the repertoire had been influenced and shared among Chinese, Indian, Khmer and Mon cultures. Since the year 1238 of Sukhothai Kingdom, Thai music was spectacularly set up its unique form of ensemble that suited to every ritual and ceremony. Many Thai minorities also shared same diction but different dialects or written script. Different combinations of instruments had been recorded in lot of evidences such as stone inscriptions and stone crafting of Angkor Wat (1113-1150). Siamese music had powered over the region called Suvarnabhumi including Laos, Cambodia, Vietnam and part of Myanmar in Ayutthaya Kingdom (1350-1767). And the 7-note whole-tone system had played an important role in Southeast Asia. Ayutthaya Kingdom period to the middle of Rattanakosin Kingdom period (1767-1932) has been recognized as the golden age of Thai music. However, Siamese music had faced pessimistic obstacle when Thailand changed from absolute monarchy to democracy ruled by military government of Marshal Plaek Phibunsongkhram during 1942 to 1957.

The 7-note whole-tone scale of Siamese music had been proved to the world for the first time in 1885 by renown musicologist Alexander J. Ellis (1814-1890) when Siamese ensemble had been invited to perform in London. Ellis used a pitch machine to measure all the registers and recorded that there are 7 notes which equal to the 12-note temperament of Western music. Gamelan and Siamese (Thai) have shared many spectacular things in common. Slendro of Gamelan scale and Thai pentatonic scale are quite similar in both tuning and structure as a whole-tone scale series. The instruments, Gongs have played an important role in both harmonic and melodic progressions. Drums play rhythmic patterns, three-strings bowed instrument accompanies singing, and wooden xylophone plays rhythmic syncopation. When King Chulalongkorn (King Rama V of Siam, 1868-1910) visited Indonesia in 1871, 1896 and 1901, Javanese had composed Gamelan music to pay tribute to His Maj-

esty. Another tile relation between Siamese and Gamelan music was the time when Prince Paribatra (1881-1944), son of King Rama V moved to reside to Bandung city, West Java, Indonesia because of the political incidence in 1932. As a find musician himself in both Thai traditional and Western Music, Prince Paribatra founded a Siamese traditional ensemble in his palace and shared the refine artistic performances among inviting guests and visitors. In the meantime, the royal family member who played an active role in Siamese and Javanese music exchange was Prince Bhanurangsi Savangwongse (1859-1928) who visited Indonesia with his court musician, at the time Luang Pradit Phairoh in 1908 and brought a Javanese bamboo instrument back which later became popular in Siam and known as the *angklung*.



Figure 15. Stone carving of ancient Khmer musical instruments. (from: https://hmong.in.th/wiki/Kong_von_thom#title).

At present, Siamese and Javanese music has been recognized worldwide. Every established school of music and university has contained curriculum in both kinds of music. In Bangkok there are several Gamelan ensembles including those of the Srinakharinwirot University among others.

Conclusion

Whole-tone scale music has played the important role in Southeast Asian cultural sound for centuries. It creates uniqueness of sound characters and stylistic musical forms. Moreover, it possibly expresses spirit and heart of Asian arts. Nowadays, whole-tone music has very much influenced new generation of composers in creating contemporary music techniques and innovative imagination. In the meantime, it also inspires integrating knowledge towards music study in the higher education.

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