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# Soundscapes of change: Creativity, commodification, and cultural identity in Thai classical music recordings

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**Abstract:** This study explores the transformation of creative production in the Thai classical music recording industry, focusing on four key aspects: repertoire, performance styles, visual identity, and artist groups. The study uses qualitative research to analyze historical trends, sociocultural influences, and technological advancements affecting Thai classical music recordings. Data were collected through archival research, interviews with industry professionals, and examining recorded materials. The study reveals that repertoire and performance styles have evolved from complex compositions performed by traditional ensembles to more accessible solo instrumental works. The visual identity has shifted from traditional Thai aesthetics to modern graphic designs, reflecting globalized influences. Artist groups have transitioned from kinship-based ensembles to institutionally affiliated productions, with organizations like the Fine Arts Department shaping recording trends. These transformations reflect broader shifts in the commodification of music, digital technology's impact, and the challenges of cultural heritage preservation. The findings enforce the need for strategies which can adapt and balance tradition with innovation to sustain the Thai classical music industry while preserving its cultural authenticity. This study contributes to the literature on ethnomusicology and cultural preservation, offering insights into the interplay between modernity and tradition in a rapidly changing market.

Keywords: Classical music business, Creative production dynamics, Long-play records, Recording production, Thailand.

# 1. Introduction

Thai classical music is a cultural product accumulated, filtered, and passed down through generations. Artists in each era create works that convey feelings, thoughts, and wisdom regarding various aspects, manifested as various bodies of knowledge, skills, and aesthetics. This has resulted in the uniqueness of melodies and performance styles. Thai music has been immeasurably diverse in each era, continuously transforming to serve society in various contexts.

This evolution in style has created opportunities for musicians, which originated in the past settings of Thai traditional culture between the home, the temple, and the palace [1]. In the past, the home was a place that nurtured musical knowledge, and the temple was the place that organized activities or events, becoming both the stage where musicians gained the opportunity to perform and activities to support musicians. The palace was then a place that supported musicians, helping them refine their musical skills in an orderly and systematic way. This interconnected cycle helped foster skilled musicians and create professional opportunities (Figure 1).

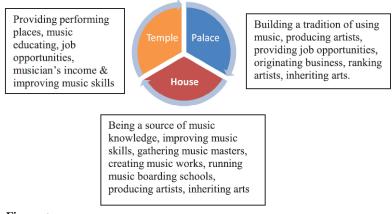


Figure 1. The Home – Temple - Palace Theory of Thai Music. Source: Eamsa-Ard [2].

The Thai music business began to form when Western culture flowed into Siam, today's Thailand [3]. It first started with the arrival of Edison's phonograph and recordings from Mr. Tia Thanwarachon, who was more popularly known as T. Ngekchuan (1889-1970), the founder of Thailand's most famous homegrown record brand, Kratai (Rabbit) [4] who first saw Edison's voice tube at the fresh market east of Bangkok in Chachoengsao in 1894 at the age of six years old later recorded choi songs (Thai folk songs) on his own Edison's voice tube. The import of the phonograph to Siam in the late 19th century marked the beginning of a new era in its musical history, enabling the beginning of Thai music preservation and its cultural heritage.

In later years, Mr. T. Ngekchuan became a pioneering figure in Thailand's early music industry. His Rabbit Brand record label was one of the first Thai-owned labels, symbolizing the transition of recording businesses from the hands of foreign companies to local entrepreneurs [4]. He was also influential in recording traditional Thai music, folksongs, and ritual music, preserving and popularizing these musical heritages during immense cultural change [5].

Another innovator during the introduction of Western music to Thailand was Phraya Prasan Duriyasap  $\lceil 6 \rceil$ . Before attaining his royal title, he was a renowned musician and composer and played an important role in bridging traditional Thai music with emerging recording technologies. He was also involved in the early recording scene using a flute or oboe when playing with the *Piphat Ensemble* of *Wang Tha Tian* and *Wang Burabhirom*. These achievements highlight the importance of royal court music's integration into the Thai commercial music scene between 1897 and 1904  $\lceil 5 \rceil$ .

A piphat ensemble is a traditional Thai musical ensemble typically consisting of wind and percussion instruments, such as the *pi* (Thai oboe) and *ranat* (xylophone). Ensembles such as the ones from *Wang Tha Tian* and *Wang Burabhirom* were closely tied to royal patronage and highlight an interesting fact regarding Thai classical music: its long-standing connection to the monarchy. Their involvement in early recording also highlights the transition of Thai music from the royal courts to the general public.

The move from employing musicians to perform in person at events to recording them to produce records was transformative for the Thai music industry. It not only changed the way music was experienced but also created new economic opportunities for musicians. It enabled their work to be enjoyed by much larger audiences in Thailand and other countries.

The arrival of Western culture in Thai society during King Rama V's reign (1868–1910) contributed significantly to the development of the Thai music industry [1]. The Thai music industry was initiated with Western recording technology and foreign companies, such as Gramophone Concert Record and Odeon Record. However, this period also saw the gradual decline of traditional Thai music's

prominence as Western-style music gained popularity.

Therefore, during this period, the music business evolved from live performances to recorded performances in which artists sang or played music for a recording phonograph. Later, during King Rama V's reign, foreign record company representatives (e.g., Gramophone Concert Record Company and Odeon Record Company) started recording on master sheets in Thailand, after which they sent these sheets back to their respective countries for production and subsequent sell in Thailand's domestic market [1]. Thai music entrepreneurs also wanted to join this new innovative business.

The record business flourished, and by the reign of King Rama VII, the first Thai-owned record label, Rabbit Brand, had emerged. Gradually, more and more Thai-owned labels appeared, with most recordings featuring Thai classical music, folk songs, ritual music, and other genres performed by renowned musicians or those affiliated with the palace or other institutions.

Following the regime change of 1932, the new administration maintained the policy of encouraging the Thai people to listen to and use music following Western values [4, 7]. Moreover, Thailand's Department of Public Relations encouraged using recorded music and established its ballroom dance band. Other public and private bands were urged to create Western-style songs with Thai lyrics [8] known as 'Western-style Thai popular music' [9].

As this form of music became increasingly popular, the role of Thai music decreased. Morton [10] suggests that music did not play a significant role in most people's lives during this period. Moreover, Western and Western-style Thai popular music rapidly replaced traditional music, *encouraged by commercial interests*.

The sound recording business operated within the social and cultural milieu of the time, and many companies and shops recording or selling sound recordings moved away from traditional Thai music. They instead recorded and sold large amounts of Thai pop music (*luk thung*) [11]. Simultaneously, international Chinese and Western music was imported into the country on a grander scale. This trend is also reflected in academic research for the period, where studies on the sound recording business have predominantly focused on Thai popular music, with little attention given to traditional Thai music.

Further research reveals that studies on traditional Thai music recordings are outdated [12]. By the late 1970s, the number of vendors producing traditional Thai music had fallen to just two: Mr. T. Ngekchuan and Kamolsukoson Company. Despite operating at a loss, these vendors continued to produce and sell hi-fi LP records until Mr. T. Ngekchuan closed his operations in 1979 [12]. In contrast, old Thai pop music recordings have been preserved in various formats, including LP records, cassette tapes, CDs, and digital archives.

These developments showcase the adaptability of the traditional Thai music recording business, which has evolved alongside technological advancements and shifting societal and cultural trends. To better understand these changes, this study examines the dynamics of sound recording production in the Thai traditional music business from 1957 to 2017. The year 1957 marks the beginning of the LP record era and the emergence of formal business operations in the Thai music industry [13]. Over these 60 years, the study traces the transition of sound recording media—from LP records to cassette tapes, CDs, and digital formats. The research focuses on the factors driving change in the creation of traditional Thai music recordings and their impact on the development of the industry in the modern era.

# 2. Literature Review

#### 2.1. Theory of Social and Cultural Change

The social structures and functions cause social change relating to status, roles, rules, values, and culture, including other factors that are not in society. Cultural change is caused by material and nonmaterial things, leading to changes in behavior patterns, especially values, social norms, and various symbolic systems. Therefore, a social or cultural change always affects each other, including those influences that affect each other.

Social and cultural change may happen in various forms. Luethongjak [14] divided these changes

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into two major types. Those include cyclical change (change in a cycle from prosperity to decline) and evolutionary change (change to a more developed, more complex state) that arise from internal factors (e.g., physical environment, population changes in terms of quantity and quality, or the invention of innovation) and external factors (e.g., communication with external society).

William Fielding Ogburn, a renowned sociologist, posited that social and cultural changes are continuous processes that profoundly impact human societies [15, 16]. These changes can yield both positive and negative outcomes. On the one hand, they enable societies to adapt to new needs, improve living conditions, and provide greater convenience [17]. On the other hand, if a society fails to adapt effectively, such changes can lead to instability or even societal collapse. Ogburn's Theory of cultural lag further explains this phenomenon, highlighting how technological advancements often outpace the ability of cultural and social institutions to adjust, creating a gap that can result in tension or disruption [16].

Ogburn's ideas are particularly relevant to studying music and cultural change. For instance, the advent of recording technology in the early 20th century revolutionized the music industry but disrupted traditional musical performance and transmission modes. Similarly, the globalization of music has led to the blending of musical styles across cultures. However, concerns have been raised about cultural homogenization and the loss of traditional practices.

#### 2.2. Historical Theory Concepts

History is the study and knowledge of the past concerning human and natural phenomena as events have occurred. It is a record of events either in writing or other forms of textual artefacts which is the evidence of the true tales of the past. History collects, analyzes, and interprets textual evidence to reconstruct past events [18]. Historians are essential when connecting, analyzing, and connecting, analyzing and putting these records together [19]. Anything that happens in the past, whether recent or distant, is a part of history as long as it is significant. Therefore, history is not tied by time; it is an ongoing process that stretches back to the past and present and even looks into the future [20].

History is defined as a social science. It is more than just telling stories or remembering dates and events. It is an academic study subject to a particular method or a set of practices. Studying history involves research, analysis, interpretation, and critique. Like the scientific method of experimentation and analysis, the methods used to study history comprise researching, analyzing, and using evidence and reasoning to conclude. The study of history, however, is not limited to the discovery of facts; it also requires interpretation and explanation. This allows for a greater understanding of human and natural phenomena within a historical context and provides a sense of why they happened.

### 2.3. Ethnomusicology: Change and Continuity

Ethnomusicology studies music in its cultural context [21, 22]. It combines methods and theories from anthropology and musicology to explore how music functions within societies, reflects cultural values, and shapes human experiences [23]. Ethnomusicologists often study traditional, folk, and popular music worldwide, focusing on the relationships between music, culture, and society [24, 25]. Famously noted that ethnomusicology can be approached from *anthropological* and *musicological* perspectives. He noted that researchers often emphasize the aspects of their disciplinary background anthropologists focus on cultural and social dimensions, while musicologists prioritize musical structures and forms. Despite these differing emphases, both groups share a common goal: integrating anthropological and musicological approaches. This ideal fusion, while challenging to achieve in practice, remains a central aim of ethnomusicological research.

The noted musicologist Sachs [26] investigated the origins of music and came up with some key factors that influence its evolution. Though his work is now somewhat dated, he is still cited [27, 28]. In summary, he proposed that the social context has two main kinds of effect on the evolution of music: 1. specialization (e.g., such as with a composer, performer, instrument builder, synthesizer designer), leading to greater individuality, complexity, and diversity of musical styles and musical products; and 2.

communication, leading to standardization and greater similarity between musical styles and products.

- 1. Cultural Exchange: Sachs [26] acknowledged that when two or more cultures come into contact, each element will likely spread to the other, meaning that new musical forms and styles often combine elements from different cultures. Sachs [26] used "cultural grafting" to describe this phenomenon.
- 2. Technological and Social Progress: Technology and changes in the societal environment have incentivized the development of new instruments, styles, and techniques.
- 3. Natural Variation: He also believed that there are two types of musical variation: Primitive and cultivated. Each new musical variation is a rudimentary form of the previous [26].

In *The Rational and Social Foundations of Music* (1921), Weber [29] argues that the history of music is, in some respects, an aspect of the history of rationalization [29]. He studies shifts in the musical scale, instruments, harmony, and strict organization through the lens of the socio-historical and economic rationalization of reality. Although he does not necessarily propose that the evolution of music is and, in all respects, determined by that of society and its institutions or its economic modes of production and organization, he consistently evokes shifts in man's imagination and understanding, which result from or interacts with rationalization.

Nettl [23] proposes nine factors that potentiate musical change. First, the relationship between politics, economics, demographics, and social structure exists. Second, there is the degree to which cultural contact and the resulting integration affect musical structure. Third, there are aesthetic criteria, musical change functioning to preserve a society's cultural ideals in changed circumstances as much as a tradition may seek out change, an indication of the fourth factor, a given society's motivation or the effect behind the change, previous changes potentiating future change. Musical change is neither inherently good nor bad, though resistance may be prudent or unhealthy.

The phenomenon of musical change is a human universal, occurring across the world and spanning historical eras and human diversity. The rate of change varies between regions and periods. There is often resistance to change, though this is not always true. Changes may occur at many levels and are influenced by environmental, social, and personal factors. For example, the effects of changing social organization are profound in a region such as East Asia or Europe, previously dominated by court music. Economic systems also change over time, often affecting music. The influence of foreign music in most parts of the world is also of great significance. Because music is a social activity, technological advancement may also affect music, pragmatically or in principle, influencing its conception, production, distribution, and reception (see music and technology). Musical change may cause a wide range of effects because the components of a musical system are interrelated: sound, meaning, function, use, and/or belief, all of which may vary to a greater or lesser extent. Such changes may be relatively insignificant or conspicuously significant (see musical revolution).

However, social conditions are the most recognizable in understanding popular music today. The ideas proposed by Nettl [23] represent the complexity of musical change: the idea that it is a product of the interrelationship of a broad array of cultural, social, and historical factors.

Kaemmer claims that the factors of industrial societies influence the activities of music-making through its social stratification [30]. He suggests that the social stratification of classes, familiar worldwide, embodies itself differently in musical functions. Whilst an ideal of equality is represented in modern societies, differentiation still prevails in education levels and also ethnic differences, which may portray ethnocentrism and prejudice. Social stratification is mimicked symbolically in music, mainly by segregating high culture (seen as elite or classical) and popular or mass culture.

Kaemmer also suggests that the nature of industrial societies affects musical activities in several ways [30]. The effect of social stratification is particularly pertinent to these societies. The division of social classes is a worldwide phenomenon, and there are many ways in which this division is reflected within musical contexts. The ideal of equality in modern societies is belied by the inequalities of education levels and ethnic differences, and the ethnic differences are grounded on ethnocentrism, often based on meaningful differences within the culture and on prejudices issued from one ethnic group

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towards others. The differentiation of social classes finds musical expression in related contrasts, particularly between high and popular cultures. The distinction between high and popular culture implies a hierarchy informed by applying an elite criterion to the former, often with a conscious aim to exclude the latter from consideration. In economically developed societies, high culture emphasizes traditional forms mainly disseminated through the mass media. In popular culture, from traditional to rock, music is produced more in response to the marketplace than intrinsic values.

Kaemmer also points out the increased importance of individualism and materialism in industrial societies [30]. These societal values and changes in societal structure have serious consequences in the music industry. In capitalistic countries, the music industry emphasizes high marketability and profit, contributing to resource consumption and the reach of products.

### 2.3. The Study of Music History

Exploring musical change provides a valuable opportunity to understand notions of music history. Research into the history of change is essential for studying change processes. Histories of change shed light on music changes that occur in response to changes in the social and cultural environments in which music is found. Ethnomusicologists have used the study of change as a means to constitute music histories in which they examine both events of the past and the way events are perceived in the present and situate them in terms of cross-cultural interpretations and the context of plural cultural histories. The results of this dual interpretation are patterns, norms, and principles that can be developed into theories about what has happened, what might happen, and/or what governs the conditions of these events, norms, and principles.

Ethnomusicologists have increasingly turned their attention to the history of music in Asia [2, 3, 13, 31-35] drawing on written and notated sources as distinctive resources. They have, over time, incorporated oral transmission with documentary evidence to form a more holistic approach to historical research. This allows the researcher to understand the individual limitations of each source by utilizing both forms of evidence. It also raises important questions surrounding using written sources in primarily oral cultures to convey musical information. More recently, African music has also become a significant focus for new research, offering many examples of how music merges with cultural and social history.

However, the history of ethnomusicology has been criticized both from within the field, by musicologists and ethnomusicologists, and from outside the field, by theorists in the social sciences, for its limited relevance. It has tended to self-criticism rather than engagement in a discourse beyond the specialty. The exception to this tradition is cross-cultural comparison and theories of change. For example, learning from studying historical developments in specific regions is helpful to understand the changing relationship between music and culture. Studies in, for example, the globalization of music or the impact of colonialism augment understanding of the dynamics of Western and non-Western cultures.

As Nettl [23] notes, for historical studies to be relevant to ethnomusicology, they require historical research to be relevant to the discipline's essential nature: the understanding of music as a cultural phenomenon or placing musical practices in their cultural context(s), as well as the relationship between music and its cultural contexts on the other hand. For example, by studying Indonesian gamelan music's cultural context, historical ethnomusicologists would consider the musical structure of gamelan music, its use in rituals, and its social and national implications. Similarly, historical studies of the blues tradition in the United States place this musical tradition within the context of African American history, examining the cultural and social circumstances that led to the rise of blues music as a form of cultural expression and the ways that this musical tradition subsequently altered the course of popular music worldwide.

Rooting historical studies in the culture of the signification of music would help address ethnomusicology's perceived cries for relevance and endeavor. Such an approach would advance our understanding of music history and, perhaps even more splendidly—it could highlight ethnomusicology's ability to participate in much broader interdisciplinary investigations of culture, society, and human creativity.

## 3. Methods

This study employs a qualitative approach guided by ethnomusicological ideas and principles [36]. The methodology involves analyzing, synthesizing, and interpreting primary data from documentary sources and fieldwork. The aim is to explore creative production dynamics in the Thai classical music recording industry. Data collection is divided into three main components:

#### 3.1. Recorded Works of Thai Classical Music

Data was gathered from various formats, including LP, cassette tapes, CDs, and digital recordings. Sources included physical collections generously provided by collectors of vintage records, cassettes, and digital archives from libraries and online platforms. Additionally, information was collected from websites of music producers, general music retailers, and publications such as books, magazines, and journals related to the Thai music recording industry.

#### 3.2. Fieldwork Data

Fieldwork involved in-depth interviews with three key groups involved in the Thai classical music recording business:

#### 3.2.1. Record Labels

Representatives from companies producing Thai classical music recordings.

# 3.2.2. Artist

Musicians and singers who perform and record Thai classical music.

#### 3.2.3. Retailers

Sellers of Thai classical music recordings, including physical and digital formats.

These interviews provided insights into the perspectives of producers, performers, and the market for Thai classical music.

#### 3.3. Sociocultural and Historical Context

Data was collected on the sociocultural and historical context of the Thai classical music recording industry, from the LP record era to the digital age. This included examining how societal changes, cultural trends, and historical events influenced the industry.

After data collection, the researcher employed methodological triangulation to ensure the reliability and validity of the findings. The data was then analyzed, synthesized, and interpreted using documentary analysis as the primary method. The results are presented descriptively, focusing on understanding creative production dynamics in the Thai classical music recording industry.

# 4. Results and Discussion

The research findings are organized into three sections:

The researchers present the dynamics of Thai classical music recording creative production in four key aspects. These include:

1. Repertoire (ประเภทบทแพง) – The study examines how the repertoire of Thai classical music recordings has evolved, reflecting changes in audience preferences and market demands Sowat [37]. Wisuttipat [38]. Initially dominated by complex, multi-layered compositions like sam chan (three-tiered tempo) and sawing chan (two-tiered tempo) [32] the industry has shifted toward simpler, more accessible pieces to appeal to broader audiences. This includes the rise of solo instrumental works

featuring popular instruments such as the ranat ek (32117000, a type of xylophone) [39, 40] and khim (hammered dulcimer). Adapting traditional melodies into shorter, more digestible formats highlights the tension between preserving cultural heritage and meeting commercial needs. The findings reveal how repertoire changes are closely tied to technological advancements, sociocultural shifts, and the commodification of music, offering insights into the industry's strategies for sustaining relevance in a rapidly changing market.

2. Performance Ensembles (¿ปแบบการบรรแลง) - The study highlights the evolution of performance ensembles, from traditional piphat and mahori groups to hybrid and contemporary ensembles [41]. Adapting traditional ensembles to modern tastes and technologies was crucial in sustaining the Thai music industry [8].

3. Visual Identity of Recordings (ภาพลักษณ์ของผลงาน) - The visual presentation of Thai recordings evolved from traditional Thai imagery to modern graphic designs, reflecting broader cultural and aesthetic shifts. This change aimed to make Thai classical music more appealing to contemporary audiences.

4. Artist Groups (nainfailu) - The role of artist groups shifted from family-based lineages to institutional affiliations, with record labels becoming key players in ensuring the quality and marketability of recordings [42, 43]. This transition reflects broader changes in the social and economic structures of the music industry.

The creative production dynamics in Thai classical music recordings reveal a complex interplay between tradition and innovation. While traditional music forms like sam chan and sawng chan remain central [34], the industry has continually adapted to technological advancements, changing audience preferences, and global influences. The findings underscore the resilience of Thai classical music while highlighting the challenges and opportunities it faces in the digital age.

# 4.1. Repertoire

During the LP record era, the industry was dominated by Thai instrumental music accompanying vocal performances. This period featured various ensembles, including piphat, mahori, khrueang sai, piphat dukdamban, angklung, and solo instrumental performances. The most common pieces were sam chan (three-tiered tempo) and sawng chan (two-tiered tempo), particularly those in the Lao accent. The emergence of hybrid ensembles like Sangkhit Prayuk and Sangkhit Samphan helped maintain the familiarity of Thai classical music, especially in the Lao accent.

Kanchanaphon noted that Lao melodies harmonized better than Khmer or Western melodies [44] sometimes producing dissonant tones. Ensembles like Sangkhit Samphan often retained or adapted traditional song titles, such as Lao Duang Deun (from Lao Duang Deun Sawng Chan) and Lao Sian Tian (from Lao Sian Tian Sawng Chan). As a result, Sam Chan and Sawng Chan pieces became the most prevalent in recordings from the LP era to the present, as they were familiar, easy to listen to, and had simpler structures, making them more marketable.

Between 1968 and 1972, the repertoire diversified significantly. Longer and more complex pieces, such as tap (suites of melodious compositions) and music for theatrical performances, gained popularity. This shift was facilitated by the advent of cassette tapes, which offered greater storage capacity, lower production costs, and easier distribution than vinyl records [45]. Many artists became producers, funding their recordings and expanding the variety of available works.

In later years, producers increasingly favored instrumental versions over vocal-accompanied recordings, as the general public found traditional Thai vocal styles, with their elaborate melismas, less accessible. As Miller [34] observed, the vocal sections of Thai classical compositions are the hardest parts to understand, for the words are strung out in long melismas, the intonation is complex, and the timbre is nasal, unlike vocal timbres in the West.

After 2007, new recordings of traditional Thai classical music became rare, with most productions leaning toward contemporary or fusion styles. As the industry transitioned to digital platforms, only a

few Thai producers adapted to the new system, resulting in fewer recordings circulating in the market [46]. Most of these were Sam Chan and Sawng Chan pieces. However, international producers like Jonkey [47] offered innovative interpretations [47] such as the album Tribal Thai, which incorporated soundscapes from various locations, including the natural sounds of Phi Phi Island, elephants, long drum processions, and Karen hill tribe songs, blending them with instrumental tracks.

#### 4.2. Performance Styles (ลักษณะการบรรเลง)

Following the political changes in 1932, Thai popular music (Phleng Thai sakon - IMAN<sup>I</sup>MUGIMA) gained widespread recognition and popularity. Thai sakon is an international genre of Thai popular music with a widely palatable sound and overt stylistic influences from Western rock and pop [40]. Concurrently, Thai classical music began to innovate, blending traditional performance styles with Western influences while maintaining the essence of Thai ensembles.

For example, hybrid ensembles like the khrueang sai (string ensemble) were adapted to incorporate Western instruments, creating a harmonious fusion that appealed to contemporary audiences [48, 49]. The khrueang sai ensemble, in particular, proved highly adaptable, as its tuning could easily align with Western instruments, leading to the rise of mixed ensembles that became popular in recordings. Among these, the Watchara Band—a mixed ensemble featuring organ and traditional Thai instruments—stood out as one of the most prolific and beloved groups.

Traditional ensembles like the piphat (percussion and wind ensemble) also remained popular, especially for their role in ceremonial and ritual contexts. The enduring presence of piphat ensembles in recordings reflects the continued importance of Thai classical music in cultural and religious practices. Additionally, the strong networks of music schools (บ้านดนตรี) and master-disciple lineages contributed to the preservation and innovation of performance styles.

During the cassette tape era, performance styles became even more diverse, encompassing nearly every type of Thai ensemble. Artists began producing and distributing their works, leading to collaborations among musicians from different schools, lineages, and institutions. This period also saw a growing emphasis on preserving and archiving Thai classical music. However, solo instrumental performances gained particular prominence, especially in recordings produced by commercial companies. Solo works, such as เดียวพิม (solo khim) and เดียวระนาดเอก (solo ranat ek), became increasingly popular due to their accessibility and shorter, simpler structures, often featuring sawng chan (two-tiered tempo) pieces.

The use of the term  $\vec{n}$  (solo) in the recording industry, however, diverged from its traditional theoretical meaning. According to Tramote [49] and Tramote [50]  $\vec{n}$  in Thai music theory refers to a performance style where a single instrument is played to showcase three key elements: melodic development, precision, and technical skill. In contrast, the recording industry adopted the term  $\vec{n}$  to describe solo instrumental tracks, often prioritizing marketability over traditional artistic objectives. While some solo recordings adhere to the theoretical principles of Thai music, many are tailored to appeal to broader audiences, reflecting the industry's adaptation to changing tastes and commercial demands.

#### 4.2.1. Key Points

1. The *khrueang sai* ensemble became a focal point for blending Thai and Western string instruments, leading to innovative performance styles [51]. The *Wong khrueang sai* (DAINSTON) is one of the quietest and most intimate ensembles in Thai classical music. It accompanies singing, dances, and holidays, especially for impromptu occasions requiring music. It is considered one of the most intimate and subtle ensembles within Thai classical music, primarily due to its composition of string instruments, creating a softer and more delicate sound compared to other larger ensembles like the *piphat*, which include more percussion instruments [52].

- 2. Solo Performances: Solo instrumental works gained popularity during the cassette era, driven by their accessibility and commercial appeal.
- 3. Divergence in Terminology: The term (solo) in the recording industry differs from its traditional theoretical meaning, reflecting a shift in artistic priorities.
- 4. Preservation and Innovation: Networks of music schools and master-disciple lineages played a crucial role in preserving traditional performance styles while fostering innovation.

### 4.3. Visual Identity and Conceptualization of Thai Classical Music Recordings

The visual identity of Thai classical music recordings has evolved significantly over time, reflecting changes in design trends, cultural influences, and marketing strategies. Producers have consistently sought to modernize the presentation of their works to attract buyers, experimenting with design elements, typography, language, symbols, and imagery.

#### 4.3.1. Early Era: Shellac Records

In the era of the gramophone industry's shellac records, packaging was minimal, consisting of simple sleeves with a central hole for the record and introductory promotional text or images. In the days of 78 rpm records (roughly 1920–50), vinyl formulations had not yet become useable to press a recording from a master. A compound that incorporated shellac (a sticky product derived from insects) to bind together the disc material was the most common way to press consumer records for decades [53]. Between 1927 and 1933, as competition in the record industry intensified, sleeves became more elaborate and visually appealing.

#### 4.3.2. LP Records Era

With the advent of LP records, packaging transitioned to sturdy, full-color cardboard covers featuring detailed information about the recordings [54]. The visual style of Thai classical music record covers during this period was heavily influenced by Thai movie posters, particularly during the musical film era (1970–1972). Renowned artists like *Piak Poster* (a.k.a *peak poster*) [55] (Somboonsuk Niyomsiri) and *Phanom Suwannabun*, known for their work on movie posters and novel covers, contributed to the design of record covers. These covers often featured hand-drawn illustrations, blending traditional and modern aesthetics.

During this time, Thai classical and popular music covers shared similar styles, reflecting the influence of musical films. Later, as color photography and graphic design techniques advanced, covers incorporated photographs, often depicting *nattasin* (Thai classical dance) performances, temples, musical ensembles, and instruments [56]. These images became iconic representations of Thai classical music, as dance music was prominent in LP recordings.

### 4.3.3. Cassette and CD Eras

Even as recording formats shifted to cassette tapes and CDs, producers continued to use traditional imagery such as *nattasin* and temples to convey the "Thai-ness" of their recordings. However, some covers began to feature more specific visuals, such as musical ensembles or instruments, to align with the content of the recordings [57, 58]. Portraits of renowned musicians and teachers also became common, particularly for solo instrumental works, which gained popularity during the cassette era.

Producers also began to develop distinct visual identities, experimenting with layout, typography, and image selection. By the 1980s, English text started appearing on covers, including transliterated song titles and album names. This shift reflected a growing awareness of international markets.

Conceptually, Thai album titles evolved from using song names to highlighting the genre or ensemble type. Some titles explicitly indicated the ceremonial use of the music, such as albums for funerals, weddings, or teacher homage ceremonies, underscoring the ritualistic role of Thai classical music in society. Companies like Hand-Acme Supply introduced creative, poetic titles like *Sabat Mai Bon* 

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Sai Siang ("Striking the Strings") and Sen Siang Samniang Khim ("Melodies of the Khim"), which added a layer of artistic sophistication to their releases.

# 4.3.4. CD and Digital Eras

In the CD era, while some covers reused designs from cassette tapes, new releases began to adopt more modern and visually striking designs. Graphic design became more prominent, focusing on typography and layout while retaining Thai identity. However, the use of artist portraits declined, except for well-known figures like *Narongrit Tosa-nga* who played the part of Kun-In (a famous ranad-ek player in Thailand). In the movie 'The Overture,' the music that Khun-In plays is actually from a tape recording of Narongrit performing on television when he was eight.

CD covers often featured minimalistic designs, with some using only the album title or entirely English text, signaling a shift toward targeting international audiences or marketing the recordings as cultural souvenirs (Figure 2).

# 4.3.5. Digital Era

In the digital download era, the visual identity of recordings saw little change, as most works were re-releases of older recordings. Thai producers did not significantly adapt their album titles or designs for the digital market, which increasingly catered to non-Thai audiences.



Figure 2.

Example of a CD cover from Thai Lamphu Company, featuring graphic design and English text.

# 4.3.6. Key Observations

1. Evolution of Design: From simple sleeves to elaborate graphic designs, the visual identity of Thai classical music recordings has continually adapted to technological and cultural changes.

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- 2. Cultural Symbolism: Imagery such as *nattasin*, temples, and musical instruments has remained central to conveying the "Thai-ness" of recordings.
- 3. Market Adaptation: The use of English text and minimalist designs reflects efforts to appeal to international audiences.
- 4. Conceptual Shifts: Album titles evolved from descriptive to poetic, emphasizing the ceremonial and artistic value of the music.

# 4.4. Artist Groups (กลุ่มศิลปิน)

In the early days of the Thai classical music recording industry, the artists featured on recordings were primarily court musicians, those with royal titles, or musicians affiliated with royal departments. Each recording session required official permission and was typically conducted within the palace or under the supervision of the musicians' patrons. Beyond these court-affiliated musicians, recordings included folk musicians, *likay* (Thai folk opera) performers, and other non-court artists.

By the late reign of King Rama VII and during King Rama VIII's reign (1934–1946), the introduction of electric recording technology and the expansion of recording venues made Thai classical music recordings more accessible and widespread. However, the political changes of 1932 marked the end of royal patronage for musicians, forcing many music schools (anunni) to seek independent income through performances. While the 1950s saw a decline in the prestige of cultural and entertainment professions, with many artists turning to government jobs, some prominent music schools managed to sustain themselves and played a vital role in transmitting musical knowledge to the next generation [77]

During the LP record era, the strong ties of musical lineages—familial and master-disciple relationships—were evident in the naming of ensembles. These ensembles typically fell into three categories:

- Named after the ensemble leader, such as วงดนตรีไทยกรมประชาสัมพันธ์ (Thai Music Ensemble of the Public Relations Department).
- 2. Named after their affiliated institution or music school, such as *nuzqsulszuln* (Duriyapraneet Ensemble).
- 3. Newly created names, often incorporating elements of the leader's name or lineage.

Each ensemble was known for its unique style and expertise, contributing to the rich diversity of Thai classical music recordings. However, the economic crisis of 1997 (known as the *Tom Yam Kung* crisis) severely impacted the demand for Thai classical music in ceremonies and events. Many musicians were forced to seek alternative careers or join educational institutions and military bands to survive [59]. This led to a decline in the continuity of music schools and ensembles and reduced public performances and recognition opportunities.

The dissolution of these tight-knit musical communities also affected the production of Thai classical music recordings. In the past, artists played a crucial role in promoting their works, and recordings served as a way to preserve the performances of master musicians. However, as the public became less familiar with individual artists and ensembles, later recordings often omitted specific names, instead using general terms like unnumfansuftations (musicians of the Fine Arts Department).

The Fine Arts Department, responsible for preserving, innovating, and promoting Thai arts and culture, became a mark of quality and authenticity for recordings. In some cases, musicians chose not to disclose their identities, further contributing to the anonymity of artists in the industry.

#### 4.4.1. Key Observations

- 1. Shift from Royal Patronage: The end of royal patronage forced musicians to adapt, leading to the decline of traditional music schools and the rise of institutional affiliations [8].
- 2. Economic Impact: The 1997 economic crisis significantly reduced opportunities for Thai classical musicians, pushing many into alternative careers [8].

- 3. Anonymity in Recordings: The dissolution of musical lineages and the public's declining familiarity with artists led to anonymous or institutionally attributed recordings.
- 4. Role of the Fine Arts Department: The department became a key guarantor of quality, often replacing individual or ensemble names on recordings.

### 5. Conclusion and Recommendations

The dynamics of the Thai classical music recording industry have been shaped by sociocultural contexts across different eras [60, 61].

- . The creative production of recordings has evolved in response to four key factors:
- 1. Repertoire (ประเภทบทเพลง)
- 2. Performance Styles (รูปแบบการบรรเลง)
- 3. Visual Identity (ภาพลักษณ์ของผลงาน)
- 4. Artist Groups (กลุ่มศิลปิน)

Producers have had to adapt to these changes, particularly in response to technological advancements [4, 13]. While technology has enhanced the diversity and quality of recordings, it has also introduced challenges [53]. For example, the precision of modern recording techniques can sometimes diminish the spontaneity and emotional depth of live ensemble performances. Additionally, editing or reusing previously recorded tracks, rather than recording new performances, has become common, potentially altering the music's authenticity.

As Kaemmer noted, when music becomes a commodity, it must continually innovate to remain marketable [30]. This has led to creating new works that simplify musical complexity, making them more accessible to a broader audience. For instance, lengthy or intricate compositions have been shortened, and ensembles with unconventional sounds or mixed instrumentation have been streamlined. Traditional Thai vocal styles, characterized by elaborate melismas and sparse lyrics, have also been adapted to suit modern tastes, contributing to the popularity of solo instrumental works featuring well-known instruments like the *ranat ek* (Thai xylophone) and *khim* (hammered dulcimer) [39].

The shift from physical media (e.g., vinyl records, cassettes, CDs) to digital platforms has further transformed the industry. As various experts have observed, the rise of streaming services like Spotify, Apple Music, and YouTube has replaced traditional music purchasing and downloading habits. This transition is not merely a change in media format but a fundamental shift in how music is consumed, distributed, and monetized [62-64].

According to the Electronic Transactions Development Agency [65] younger Thai generations (Gen Y and Gen Z) are the most active Internet users, spending an average of 8.55 and 8.24 hours online daily. In contrast, older generations (Baby Boomers and Gen X) spend significantly less time online. Activities like downloading software, music, and dramas have declined, replaced by streaming services.

### 6. Future Trends and Sustainability Suggestions

This trend raises critical questions about the future of the Thai classical music recording industry:

Who will be the primary consumers?

How can the industry attract new listeners?

What creative strategies are needed to expand the audience base?

To ensure the sustainability of the Thai classical music recording industry, the following recommendations are proposed:

1. Embrace Digital Platforms: Producers should prioritize distributing recordings on streaming services to reach younger, tech-savvy audiences.

2. Innovate While Preserving Tradition: While simplifying music for accessibility, efforts should be made to preserve the essence and complexity of Thai classical music.

3. Leverage Visual and Multimedia Content: Combining music with visually engaging content, such as videos or interactive digital experiences, can attract a broader audience.

4. Target Niche Markets: Focus on promoting Thai classical music as a cultural experience for tourists, educators, and cultural enthusiasts.

5. Collaborate with Educational Institutions: Partner with schools and universities to introduce Thai classical music to younger generations through workshops, performances, and digital content [66, 67].

By adapting to these changes, the Thai classical music recording industry can continue to thrive, preserving its rich heritage while appealing to modern audiences.

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The authors confirm that the manuscript is an honest, accurate and transparent account of the study that no vital features of the study have been omitted and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

### **Authors' Contributions:**

Conceptualization — KS, PA, & NP; Methodology — KS & PA; Software - KS & PA; Validation - KS, PA, & NP; Formal Analysis — KS & PA; Investigation — KS; Resources - KS, PA, & NP; Data Curation - KS; Writing — Original Draft — KS; Writing — Review & Editing — KS, PA, & NP; Visualization - KS; Supervision — PA & NP; Project; Administration - KS; Funding Acquisition - N/A; All authors have read and agreed to the published version of the manuscript.

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## References

- [1] P. Meenetthip and C. Schaub, "The early years of music business in Thailand: History and development, AC 1851-1950," *Fine Arts International Journal*, vol. 18, no. 1, pp. 97–108, 2014.
- [2] L. Eamsa-Ard, "Thai popular music: The representation of national identities and ideologies within a culture in transition," Ph.D. Dissertation, Edith Cowan University, North Carolina, 2006.
- [3] J. Yamprai, *The establishment of Western music in Thailand*. Colorado, United States: University of Northern Colorado, 2011.
- [4] J. Mitchell, "The rabbit record brand of siam/Thailand 1925-1970: Assessing the legacy of T. Ngekchuan," Asian Music, vol. 47, no. 2, pp. 48-83, 2016. https://doi.org/10.1353/amu.2016.0015
- [5] P. Aroonrat, "Biography and works of Kru Phraya Prasanduriyasap (Plaek Prasansap)," Master's Thesis, Mahidol University, 1994.
- [6] J. L. Mitchell, *Music and recording in King Chulalongkorn's Bangkok*, 1st ed. Chiang Mai, Thailand: Silkworm Books, 2022.
- [7] P. Puchadapirom, "Thai government's promotion of national culture that affected Thai traditional music research during 1982-2012," *Journal of Urban Culture Research*, vol. 26, pp. 29-42, 2023. https://doi.org/10.14456/jucr.2023.2
- [8] P. Maryprasith, "The effects of globalization on the status of music in Thai society," Ph.D. Dissertation, Institute of Education, University of London, 2000.
- [9] P. Amatyakul, *The foundation of Thai popular song: Musicology concepts.* Bangkok, Thailand: Amarin Printing and Publishing Public Company, 2011.

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- [10] D. Morton, *The traditional music of Thailand*. Berkeley: University of California Press, 1976.
- [11] J. L. Mitchell, Luk Thung: The culture and politics of Thailand's popular music. Chiang Mai, Thailand: Silkworm Books, 2015.
- [12] S. Limpichai, "The impact of the tape cassette business on creativity of Thai popular song," Master's Thesis, Chulalongkorn University, Bangkok, 1989.
- [13] J. Mitchell, "Suraphon Sombatjaroen on 78 rpm: The development of Thailand's king of music business," *Rian Thai: International Journal of Thai Studies*, vol. 7, pp. 67-88, 2014.
- [14] S. Luethongjak, *Principle of anthropology and sociology*. Thailand: Faculty of Humanities and Social Science, Udon Thani Rajabhat University, 2009.
- [15] R. Volti, "Social change with respect to culture and original nature," *Technology and Culture*, vol. 45, no. 2, pp. 396-405, 2004. https://doi.org/10.1353/tech.2004.0107
- [16] W. F. Ogburn, "Cultural lag as theory," Sociology & Social Research, vol. 41, no. 3, pp. 234-238, 1957. https://doi.org/10.2307/2088850
- [17] E. M. Rogers, Diffusion of innovations, 5th ed. Free Press. https://doi.org/10.2307/2094581, 2003.
- [18] E. O. Adeoti and J. O. Adeyeri, "History, the Historian and his work: Issues, challenges and prospects," *International Journal of Educational Research and Technology*, vol. 3, no. 4, pp. 36-41, 2012.
- [19] L. Marpelina, "Revolutionizing history learning in the Digital Era: Transforming the way we learn," *KnE Social Sciences*, pp. 912–927, 2024. https://doi.org/10.18502/kss.v8i2.11594
- [20] O. Boonstra, L. Breure, and P. Doorn, Past, present and future of historical information science. Netherlands: DANS, 2006.
- [21] T. Rice, *Ethnomusicology: A very short introduction*. Oxford University Press. https://doi.org/10.1093/actrade/9780199794379.001.0001, 2013.
- [22] K. Wa Mukuna, "Epistemological interfaces of Ethnomusicology: Understanding human existence," *Revista Música e Cultura*, vol. 13, no. 3, pp. 19-30, 2024.
- [23] B. Nettl, The study of ethnomusicology: Thirty-one issues and concepts. University of Illinois Press. https://doi.org/10.5406/illinois/9780252072789.001.0001, 2005.
- [24] S. McKerrell, "Towards practice research in ethnomusicology," *Ethnomusicology Forum*, vol. 31, no. 1, pp. 10-27, 2022. https://doi.org/10.1080/17411912.2021.1964374
- [25] A. P. Merriam and V. Merriam, *The anthropology of music*. Evanston, IL: Northwestern University Press, 1964.
- [26] C. Sachs, *The wellsprings of music*. New York: Springer Science & Business Media, 2012.
- W. Freeman, N. L. Wallin, B. Merker, and S. Brown, A neurobiological role of music in social bonding. In The origins of music (N. Wallin, B. Merker, & S. Brown, Eds. Cambridge, MA: MIT Press, 1998.
- [28] G. Tomlinson, A million years of music: The emergence of human modernity. New York: Zone Books. https://doi.org/10.2307/j.ctt17kk95h, 2015.
- [29] M. Weber, The rational and social foundations of music (D. Martindale, J. Riedel, & G. Neuwirth, Trans.). Carbondale: Southern Illinois University Press, 1958.
- [30] J. E. Kaemmer, *Music in human life: anthropological perspectives on music*. Austin: University of Texas Press, 1993.
- [31] P. P. N. Ayutthaya, C. Phikulsi, and J. Seemuang, "Musical inheritance and identity formation of the Suphanburi Basin Piphat Mon Ensemble," *Pakistan Journal of Life and Social Sciences*, vol. 22, no. 2, pp. 80-83, 2024. https://doi.org/10.57239/PJLSS-2024-22.2.00611
- [32]B. Kongphet, "A musical analysis of Chandrahu Sam Chan for Sawsamsai solo by Professor Udom Arunrattana,"<br/>
  Parichart Journal, vol. 35, no. 4, pp. 1–16, 2022. https://doi.org/10.55164/pactj.v35i4.257699
- [33] J. Latartara, "The timbre of Thai classical singing," Asian Music, vol. 43, no. 2, pp. 88-114, 2012. http://dx.doi.org/10.1353/amu.2012.0013
- [34] T. E. Miller, Traditional music of the Lao: Kaen playing and Mawlum singing in Northeast Thailand. Westport, CT: Greenwood Press, 1985.
- [35] P. Suwanthada, "Music notation of traditional Thai music for Piano Solo," Veridian E-Journal, Silpakorn University (Humanities, Social Sciences and arts), vol. 7, no. 4, pp. 203-210, 2014.
- [36] D. G. Hebert and J. McCollum, Methodologies for historical ethnomusicology in the twenty-first century. In Theory and method in historical ethnomusicology. New York: Routledge, 2014, pp. 35-83.
- [37] S. Sowat, "Thai classical music for the Phrommas episode in Khon performance," Ph.D. Dissertation, University of York, UK, 2018.
- [38] N. Wisuttipat, "No notation needed: The construction and politics of transnational Thai identity through the oral transmission of classical music," *Asian Music*, vol. 51, no. 2, pp. 5-38, 2020. https://doi.org/10.1353/amu.2020.0018
- [39] M. Wisuttipat, "Pipat tradition in Mainland Southeast Asian Nations: Traditional music in Thailand and Cambodia," *Ekpresi Seni*, vol. 13, no. 2, p. 178325, 2011.
- [40] T. Tanprasert and J. Rockwell, "Sounding Thai: Instrumental translation, language-melody correlation, and vocal expressivity in Thai Sakon music from the 2010s," *Journal of Southeast Asian Music Studies*, vol. 45, no. 1, pp. 42-68, 2024.
- [41] P. Roongruang, P. Rodchangphoen, and A. Thanawat, "Phleng-ruang Mahori: A new Invention Thai musical Genre," Journal of Modern Learning Development, vol. 8, no. 4, pp. 306-320, 2023.

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- [42] M. P. Suwannasorn and P. Rawd-ard, "Behind the scenes of a big-name Thai music label," Thammasat University. Faculty of Journalism and Mass Communication. (No. 308248), 2022.
- [43] N. Wuttipong, "The Thai popular music industry: Industrial form and musical design," Ph.D. Dissertation. University of Nottingham, UK, 2012.
- [44] P. Roongruang, "Thai classical music and its movement from oral to written transmission, 1930–1942: Historical context, method, and legacy of the Thai music manuscript project," Unpublished Doctoral Dissertation. Kent State University, 1999.
- [45] S. Techaburana, "Change and expansion of Thai popular music business in the 1980s," *Thammasat Journal of History*, vol. 3, no. 2, pp. 115–145, 2016. https://doi.org/10.14456/thammasat-history.2016.9
- [46]M. Bourreau, F. Moreau, and M. Gensollen, "The digitization of the recorded music industry: Impact on business<br/>models and scenarios of evolution," 2008. http://dx.doi.org/10.2139/ssrn.1092138
- [47] C. Jonkey, "Exotic worlds and sonic safaris," Retrieved: https://tinyurl.com/4bwbkb85, 2025.
- [48] N. Natchanawakul, "The evolution of Thai classical music ensembles," *Journal of Thai Musicology*, vol. 15, no. 2, pp. 45–60, 2020.
- [49] B. Tramote, *A lecture note on sciences of playing musical instruments*. Thailand: Fine Arts Department, 2002.
- [50] B. Tramote, "Thai music theory and practice. Thai Music Foundation," Retrieved: https://tinyurl.com/ysx5au8x, 2002.
- [51] T. E. Miller, "The theory and practice of Thai musical notations," *Ethnomusicology*, vol. 36, no. 2, pp. 197-221, 1992. https://doi.org/10.2307/851914
- [52] A. Kulsakdinan, "Khrueang Sai The Thai string ensemble," Retrieved: https://tinyurl.com/2p9zdmar, 2022.
- [53] G. Williams, "Shellac as musical plastic," *Journal of the American Musicological Society*, vol. 74, no. 3, pp. 463-500, 2021. https://doi.org/10.1525/jams.2021.74.3.463
- [54] P. Amatyakul, The history of Thai music recordings. Bangkok: Thai Music Press, 1997.
- [55] The Nation, "Film-maker Somboonsuk aka Peak Poster among eight named National Artists. The Nation," Retrieved: https://www.nationthailand.com/life/30275590, 2015.
- [56] S. Diteeyont, "Adaptation of Thai Traditional Plays in a Contemporary Context," Doctoral Dissertation, University of Exeter, United Kingdom, 2012.
- [57] H. Kaufman, "Catalog number(s) FW04463, FE 4463, Folkways Records, Thailand. Smithsonian Folkways," Retrieved: https://tinyurl.com/nhf3a43f, 1959.
- [58] Allmusic, "Thai album highlights," Retrieved: https://tinyurl.com/mr3wmm, 2025.
- [59] G. Lekakul, "Prachan: Music, competition, and conceptual fighting in Thai culture," Doctoral Dissertation, SOAS University of London, 2017.
- [60] S. Loedkobkune, "Siam bourgeoisie parvenu and development of Thai traditional music in early period of Rattanakosin," *Mahidol Music Journal*, vol. 4, no. 2, pp. 23–36, 2021. https://doi.org/10.14456/mmj.2021.3
- [61] K. Pommitavon, "Thai popular music guru Mongkol Amatyakul: Characteristic, knowledge, wit, and successful creator of the music band and outstanding singers," Retrieved: https://tinyurl.com/2t76ybhs, 2017.
- [62] P. Prudyabumrung, "Reflection of Thai society and culture through Thai pop songs after World War II 1957," Master's Thesis, Mahidol University, 1999.
- [63]B. Sisario, "Downloads in decline as streamed music soars; Rapid growth of services like Spotify and YouTube cuts<br/>into traditional sales. International New York Times," 2269-9740, Retrieved: https://tinyurl.com/47x4spun, 2014.
- [64] D. Arditi, "Digital subscriptions: The unending consumption of music in the digital era," *Popular Music and Society*, vol. 41, no. 3, pp. 302-318, 2018. https://doi.org/10.1080/03007766.2016.1264101
- [65] Electronic Transactions Development Agency, "ETDA reveals Gen Y reclaims the throne, using the internet the most, almost 8 hours per day, most popularly watching LIVE COMMERCE, civil servants government officials win hands down in all professions, using the internet almost 12 hours per day," Retrieved: https://www.etda.or.th/th/pr-news/iub2022.aspx, 2022.
- [66] A. Kuankachorn, "The application of thai classical fiddle techniques for cello," Doctoral Dissertation, University of Northern Colorado, 2024.
- [67] D. Intawong, "Thai choral music in intercultural choral literature: A guide to Thai choral music," Doctoral Dissertation, University of Northern Colorado, 2024.