UNIVERSITY OF CALIFORNIA
SANTA CRUZ

IMPULSE CONTROL

A dissertation submitted in partial satisfaction
of the requirements for the degree of

DOCTOR OF MUSICAL ARTS

in

MUSIC COMPOSITION

by

Alexis Isara Olsen

June 2020

The Dissertation of Alexis Isara Olsen is approved:

_____
Professor David Evans Jones, co-chair

_____
Professor Benjamin Leeds Carson, co-chair

_____
Professor Hi Kyung Kim

_____
Quentin Williams
Acting Vice Provost and Dean of Graduate Studies

Table of Contents

CHAPTER 3 — Reflections: Process, History, Culture, and Prospects

List of Figures and Tables

Abstract

"Impulse Control"

by Alexis Olsen

The influence of Asian traditional music and thought on Western composition has been growing for more than a century. Composers working in the hybrid space between musical practices are now a formidable presence in Western art music; their role in some traditional music contexts is more complex, particularly in nations such as Thailand that have a unique history within the wider phenomenon of globalization.

In 2013, during a short residency at Burapha University, in Bang Saen, Thailand, I embarked upon a practice-based research project, composing "Impulse Control," for traditional *pi phat* ensemble, with other Thai instruments. Building on previous research, this particular compositional process fused an exploration of current trends specific to East/West hybrids, recent intercultural work by composers Chou Wen-Chung and Koji Nakano, my own Western music background training (particularly in jazz), and my experiences at Burapha University in 2013.

Intercultural composition, by its very nature, demands concessions in performance practice from all involved parties. I argue for aurally based pedagogy and transmission as an alternative to Western notation, and suggest jazz as a "parent" genre in the bicultural mix. The principal elements of this hybridity lie in juxtaposing musical archetypes: American jazz performance practices like individual and collective improvisation,'trading 4's', modal

harmony, and collective free improvisation; Thai archetypes like instrumental combinations reflecting three Thai ensemble types, and the tripartite *thao* approach to form. Mode and pitch centricity figure prominently within the context of the pre-composed and collaboratively-generated improvised moments of the hybrid composition. The form explores Thai concepts including *neua phleng* as a central feature framed by prior and later variations related by common structural tones, the *thao* approach to composing with pre-conceived melodies, sequentially increasing tempos, and the *ching* cycle. It also makes use of tempo fluctuation, and metric modulation between and within sections. Fundamental foci in the development of the work's aural acumen included traditional means of transmission, such as demonstration, repetition, memorization, and improvisation; but also their resulting cultural dissonances and frictions against Western practices and concepts, suggestive of challenges to assumptions about the functional roles of music in society.

Acknowledgements and Dedication

My sincerest gratitude goes to the Department of Traditional Music at Burapha University. Without their hospitality, generosity of knowledge and spirit, and their openness to musical experimentation and exploration, this project could never have begun.

Thank you to Professor Hi-Kyung Kim for introducing me to the cross-cultural composers that inspired this project.

Thank you to Professor David Evan Jones for his support throughout the DMA program, and for encouraging me to explore this part of my heritage in the first place.

Thank you to Professor Ben Leeds Carson (a.k.a. the dissertation whisperer) for resuscitating this project. This simply would not have been possible without your generous assistance at every step.

Thank you to my wife, Jessica, for her patience and love, her dedication and support, and for seeing me through the rain.

This project is dedicated to my parents, Penkhae and Lawrence Olsen, I am eternally grateful for the best parents a son could have.

Preface: Contextualizing "Impulse Control"

In the fall of 2013, I attended the Asian Young Composers workshop at Burapha University, Bang Saen, Thailand. The attending composers, musicologists, and performers represented a diverse array of Asian countries and cultures.[1] Hosted by composer and professor Koji Nakano in conjunction with Burapaha's Department of Traditional Music Studies, the event was dedicated to exploring practical approaches to composing 'new' music[2] for Thai traditional instruments and ensembles. The guest composers and the traditional Thai performers would have to surmount the language barrier, as most of the Thai classical musicians were not conversant in English. Given their artistic and professional involvement in the Western academic and avant-garde musical world, the visiting musicians were unsurprisingly all conversant in English, if not native speakers. Furthermore, the visiting composers would have to navigate the practical and cultural differences between Western experimental aesthetics and the Thai instrumental tradition. The typical amount of time afforded to each composer and their selected group of performers was typically not much more than a week, during which time they prepared a range of pieces for solo instruments, duets, or trios, to be performed at a final concert. Thanks to a dissertation research grant, I joined Koji and the students at Burapha for the entire month beforehand, thus facilitating music for larger ensembles, more rehearsals /

[1] All the attendees trained in the Western musical educational system. Despite their country of origin, they would likely consider themselves part of the Western musical tradition.

[2] (in the Western sense)

classes with the group of students, some compositional and experimental flexibility, and extra time to study instrumental music with one of the professors in the Department of Traditional Music.

A formal course of study can only begin once the student has participated in the *wai khru* ceremony. The ceremony (described in detail in appendix 2) serves to reinforce the *guru*-disciple relationship, positioning the initiate at the end of a very long chain of received sacred knowledge, stemming all the way back to the Hindu creation epic, the *Ramayana* (the Thai-language version is called the *Ramakien,* and is a central component of the national religion, *Theravada* Buddhism). The teacher repeats a single melodic phrase until the student adequately replicates it, moving to the next phrase, and the next, returning every so often to the beginning of the song to ensure the student is memorizing the melody correctly and in its entirety. The motivic lines are not predictably repeated, nor are the encompassing phrases symmetrical. Both of these factors can contribute to significant difficulty with memorization. Although the learning process can be slow, tedious, and confusing, once complete, the student will have internalized the music, in a sense absorbing a basic vocabulary of motivic cells. An accomplished musician or advanced student can spontaneously and effortlessly summon that vocabulary in order to string together the basic units of an improvised line.

During the weeks before the workshop, I amassed a wonderful group of players, two younger students, four upper-division students in their junior or senior year, and two

staff members who were also alumni of the program. We had a total of 8 or 9 rehearsals over the course of a month. Given the relaxed time frame, I was able to experiment with a variety of approaches. The following pages discuss some of these experiments, homing in on issues of notation and transmission, the oral/aural tradition, meter, formal structure, "tonality" in the absence of polyphony, the *thao* compositional form, historical interactions between Thailand and the West, and other issues pertinent to the analysis.

On the surface level, the piece under discussion conforms to many characteristic aspects of Thai performance practice, including the idiomatic Thai-tuning, the tripartite form rooted in the *thao* approach to composing, a structural melody represented in augmented and diminished temporal variations specific to each of the three sections, beginning with the longest variant, and ending with the shortest. The piece is cross-cultural in that it reflects musical practices that rest on different cultural foundations. Each is a foundation to which I am connected in my own heritage, but neither reflects a foundation on which I lay claim to "authenticity" or ownership. I immerse myself in both cultural foundations with humility, as a student, and as a curious investigator of musical possibility.

The eminent composer and anthropologist, Chou Wen-Chung, premiered a pair of such works during the University of California Santa Cruz Pacific Rim Festival in April 2010 (which directly inspired my approach to cross-cultural exploration). "The Eternal Pine," and "Ode to Eternal Pine," one for Western chamber ensemble and one for traditional Korean ensemble, both emerged from the same muse, but each exists within the

conventional boundaries of their respective traditions.[3] At the outset of this project, my intention was to present two versions of Impulse Control, by bringing "Impulse Control" to a Western group, using the same structural elements as the Thai version, but otherwise, existing within the Western framework. The *potential* for meaningful cultural exchange lies in the effective integration of one's native tradition with elements of the musical "other".

To begin reconciling these two musical worlds, I looked for analogues on which to build. What facets of the Thai approach to *musicking* would best suit the impending project?[4] Two prominent characteristics emerged as most salient to its identity, distinguishing it from other gong-chime percussion traditions in Southeast Asia: (1), the use of an allegedly seven-tone equal-tempered scale (hereafter referred to as "7-TET"), and (2), a sophisticated approach to collective improvisation based on a single referent melody, embellished and elaborated at once by multiple instruments (each in a manner idiomatic to a specific instrument)[5]. I chose to focus on improvisation as a bridge between musical systems. Thai improvisational practice ("idiomatic heterophony") is at least somewhat comparable to jazz improvisation in the West, in that the improvised melody relates to a preordained structure, the "referent." The "referent" in Thai improvisational practice is

[3] In this case, the muse was a famous Chinese painting of a pine tree.

[4] Garzoli, p. 3. "Three considerations" for the "Western" composer when embarking on cross-cultural explorations of traditional Thai music: 1. Intonational, 2. Idiomatic/ Stylistic, 3. Cultural/Historical

[5]Garzoli, John, and Bussakorn Binson. "Improvisation, Thang, and Thai Musical Structure." *Musicology Australia*, vol. 40, no. 1, Feb. 2018, pp. 45–62., doi:10.1080/08145857.2018.1480867.

the most basic form of the song's melody, frequently called the *essential* melody.[6] The collective knowledge of the melody serves as the structural foundation and cohesion for the simultaneous idiomatic improvisations and embellishments played by each performer. This approach correlates to the collective improvisational practice of the early jazz era, wherein the three horns of the Dixieland frontline present a syncopated and embellished melody, a conversational contrapuntal line, and a highly ornamented *obligato* outlining the harmony. Admittedly, this is a limited analogy, as only the trumpet is necessarily improvising with a known melody as "referent," while the trombone supports harmonic voice leading through the chords, and the clarinet is arpeggiating through the changes, thus the "referent" defining the improvisational content for the trombone and the clarinet is simply the harmony of the original song. As jazz evolved through the roaring 20s, individual solos replaced collective improvisation, and the use of a harmonic referent became the primary approach to improvising, while the melodic referent fell out of use.

Despite the imperfect parallel between jazz and Thai improvisation practices, I decided to pursue the concept of structured improvisation as the bridge between these musical worlds. Chapter 1 outlines the pre-planning stages of the project by surveying issues of hybridity in musical composition, as well as issues specific to the fusion of Western and Thai idioms, by defining some necessary terms, and by exploring some ethical considerations raised by other composers working in both generally and specifically related

[6] This is also commonly referred to as the 'hidden melody', the core melody, the basic melody, and in one direct translation, the meat of the song (*nuea phleng*).

areas. Using their considerations as a rhetorical model, I articulate my primary objectives in composing Impulse Control. For a variety of reasons, both cultural and practical, I argue that jazz is potentially a better pairing for Thai traditional music than Western concert music. Chapter 2 consists of a formalist analysis of Impulse Control. Chapter 3 concludes with some reflections on the process and the results, both predictable and unexpected. I revisit the history of interaction between the West and Siam, and how Western music has contributed to the current shape of the Thai musical landscape. I return to issues of notation, introducing recent scholarship that examines the relative value and efficacy of formalist Western music theory to demonstrate meaning equally across cultures. The chapter concludes with a discussion of what a more universal system for analysis might look like.[7]

[7] Following extant scholarship in the specific area of culturally hybrid composition, I discuss the ways in which alternative analytical and compositional processes (that include cultural context alongside formal analysis) shaped the pieces under discussion.

Chapter One: Impetus, Genealogy

1.1 "Art as Experience"

In his acclaimed book from 1934, John Dewey advocates a revitalization of "art" in society, as he believes that shared experience in art can potentially instill a genuine appreciation of "otherness," fostering a more healthy and tolerant society.[8] He argues, however, that fine arts in the West have evolved in such a way as to become exclusionary and elitist.[9] This situation may have resulted from the emergence of the nation-state and the rise of nationalism, forces that push towards cultural homogeneity, although in much of the West, the musical arts played a different role in service to the state. The earlier system of royal patronage effectively allowed composers to enjoy a measure of transnational cultural prestige, thus serving to glorify the patron. As democracies replaced Europe's monarchies, the state frequently co-opted the most refined cultural manifestations (such as music, literature, and the visual arts) as a tool of soft power, asserting one culture's superiority over another by means of the artistic and intellectual achievements of its citizens.

Growing notions of cultural superiority would help give rise to a pernicious ethnocentrism in the decade following Dewey's prescient treatise on art. For nearly a century by this time, composers followed in the footsteps of Beethoven, breaking free of

[8] Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Winter 2019 Edition), Edward N. Zalta (ed.), forthcoming URL = <https://plato.stanford.edu/archives/win2019/entries/dewey-aesthetics/>

[9] Ibid.

the financial shackles of the patronage system. Now autonomous and unbeholden to the musical tastes of royal patrons, composers were suddenly able to push the boundaries of the Western tradition. The complexity and diversity of art increased exponentially in the 20th century; hence, the reception of art also increased in difficulty, demanding a higher level of sophistication and specialization from the audience. Composers in the 20th century would find a home in academia, now completely unfettered by the whims and tastes of a public audience, free to invent and promulgate new theories of musical organization. The amount of academic interest and research into their music would determine their status in the pantheon. Dewey's project, consequently, takes up the problem of an increasing remoteness between institutional definitions of art and a broader public that might be its audience.

> The task is to restore continuity between the refined and intensified forms of experience that are works of art and the everyday events, doing, and sufferings that are universally recognized to constitute experience.[10]

Dewey's treatise on art and aesthetics, released during the Great Depression in the interwar period, could not contrast more with the prevailing consensus on aesthetics and art (given ubiquitous and authoritative voice by writers such as Theodor Adorno).[11] Dewey's notion that the artistic experience is attainable by everyone in society was

---

[10] Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Winter 2019 Edition), Edward N. Zalta (ed.), forthcoming URL = <https://plato.stanford.edu/archives/win2019/entries/dewey-aesthetics/>

[11] "To Adorno, music sound is a fixed autonomous object consisting of the composer's work, separated out even from words in song or opera. It is a container of quasi-sacred truth-knowledge to be revealed, and this powerful knowledge is analogous to the reach and might of the culture itself." Tenzer, Michael. *Analytical Studies in World Music*. Oxford University Press, 2006, p. 8.

somewhat revolutionary in its time, yet we may find Dewey's words to be prophetic if we consider the current integration of artistic experience and participation in the fields of medicine and therapy. This is not to say that Dewey was advocating an artistic regression, nor a simplification for the masses, nor homogenization of any sort. Rather, he argued that art and the experience of transcendence through art was not a rarefied event, exclusive only to an elite audience with adequate specialized education, nor was artistic complexity and sophistication indicative of cultural superiority.[12] The transcendent experience through art and creation was the birthright of humankind. Moreover, Dewey believed that the experience of receiving art was as significant as the creation and / or performance thereof. The engaged listener who fully perceives the work achieves transcendence of the self through a profound empathy, in a moment of communion with the creator (and potentially the performer, as well). They are all an integral part of the musical 'signification.'[13]

[12] Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Winter 2019 Edition), Edward N. Zalta (ed.), forthcoming URL = <https://plato.stanford.edu/archives/win2019/entries/dewey-aesthetics/>

[13] Jean-Jacques Nattiez discusses the issues at length in *Music and Discourse: toward a Semiology of Music,* (Princeton University Press, 1990) applying semiotic models to the Western process of musical signification, originating with the composer's ideas, written in a score to be interpreted by the performer, perceived effectively or not by the audience. The efficacy of perception is contingent not only upon the quality of performance and composition, but also on whether or not the listener possesses the proper syntax or grammar by which to construct the intended meaning, i.e. education (or culture) is necessary to participate

> The activities of the perceiver are comparable to those of the creator. Reception that is full perception, and not mere recognition, is a series of responsive acts resulting in fulfillment. In perception, consciousness becomes alive.[14]

From Dewey's perspective, art's potency derives from the effective conception, communication *and* appreciation of the work. His expansive conception of artistic experience as belonging to the domain of both the artist and the receiver equally opens the door for a reinterpretation of the composer's role in society, one which is very much in line with the thoughts of Chou Wen-Chung on the issue, discussed in the following section. Dewey's philosophy of art invites the composer to merge both the humanistic and artistic inclinations. To re-examine one's artistic intentionality through this lens is at once humbling and liberating. It was with this mindset that I began work on "Impulse Control."

1.2 "The Western composer is at a crossroads..."[15]

In 2001, eminent composer and anthropologist Chou Wen-Chung gave a lecture at U.C. San Diego, in which he offered some thoughts and predictions about the future of music in an increasingly interconnected global society, at a point in time that some say was

[14] Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Winter 2019 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2019/entries/dewey-aesthetics/>)

[15] "...Today, the Western composer is at a crossroads – indeed one might say at a complex interchange of an international superhighway..."Chou Wen-Chung, "Music: What is its future?" *Search Event III*. Lecture conducted from Composition Area, Department Of Music, University Of California, San Diego, CA.)

the beginning of the end of Western cultural, economic, and political dominance. To begin, he recounted a lesson from Bela Bartok, pioneer ethnomusicologist and composer:

> Bartok taught us to learn from legacies beyond our own, but only in the context of their legacies and not ours, and only if those legacies can be transformed into our own.[16]

Bartok discovered the "sound" of the future through an extensive study of the past, in the traditional folk music of Hungary, and in the mysteries of sacred geometry occurring throughout the natural world. By combining elements from these arenas with his compositional output, Bartok developed a distinctly individual compositional voice and grammar, entirely modernist in aesthetic despite its foundation in traditional Hungarian folk music, and this unique approach to hybridity sustained his entire career. His compositional interest in folk music led him to extensive anthropological work, pioneering musical ethnography, and active involvement in the traditions he studied. Perhaps most importantly, he does not "orientalize" traditional Hungarian music - he approaches its study rigorously, and with a respectful humility:

> ...in studying non-Western music, one must consider the character and tradition of its culture as well as all the inherent qualities of the material itself, not all of which are perceptible or definable according to Western concepts.[17]

Bartok's modest reflection was ahead of his time; he was willing to admit the limitations of the Western theoretical / notational tradition, as it was clear to him that the Western notation system was not adept at handling music with great rhythmic complexity

[16]Chou, Wen-chung, ibid.
[17] Ibid.

(for example, African polyrhythms), nor music with tuning systems falling outside the Western 12-tone equal-temperament (such as quarter-tone scales found in North Indian Classical Music, and microtonal *maqam* from the Middle East), to name two. The 20th century's industrial spirit, technological advancements, and emphasis on divergent individual creativity has certainly stretched the limits of Western notation's capacity for effective communication of complex ideas between composers and highly accomplished performers. Though its practicality seems to wane the further one gets from the Western sphere of influence (which is to say, its utility in transmission, analysis, pedagogy, and preservation relies on the adaptability of the music to the notational system, not the other way around).[18]

Chou opines:

> For a global era to emerge, we may well need a synthesis of the humanist and artist of the European Renaissance and the artist-sage of ancient China..... At the least, we need socially and culturally committed artists who are motivated by more than personal gain.[19]

Chou presents Bartok as just that, both humanist and artist, his work clearly balanced in the service of both endeavors. However, Chou reiterates his concern about the great potential for cultural imbalance, and the crucial need for "a change in attitude."[20] He

[18] Western notation is not necessarily the most effective system of analysis to demonstrate meaning in multiple World Music traditions, which may be rhythmically complex, or in an entirely different tuning system.

[19] Chou, Wen-chung (2001, April). "Music: What Is Its Future?." *Search Event III.* Lecture conducted from Composition Area, Department Of Music, University Of California, San Diego, CA.

[20] "Today, the Western composer is at a crossroads – indeed one might say at a complex interchange of an international superhighway..." (ibid.)

calls on the composer of music between worlds to strive for a more balanced musical representation, and for mutually beneficial cross-cultural engagements. “” (ibid.)

Acknowledging that the vestigial colonialist perspectives have precluded the institutional adoption and development of many cultural and traditional arts from beyond the Western sphere of influence, composers now working in the space between have an opportunity (indeed, an obligation) to address cultural imbalance through a humanistic motivation, to redefine the ideal results of any cross-cultural creative work, as equally representative of the communities and traditions involved.

1.3 Cultural (Im)balance

Continuing his discussion of balance in cultural representation, Chou Wen-Chung affirms that Classical music from the European continent has permeated the entire world, and he laments the fact that European classical music has engendered an assumption of superiority to all other music.

> We must be reminded that, at least since the inception of the last century, European musical practices have spread across the world overwhelmingly, edging out the musical practices of many places including, for example, Asia. Even today, it is still taken for granted that Western music is universal, and therefore emulation of the same by other cultures is both natural and expected..... This attitude still dominates Western composers, educators, performers, and critics.[21]

Indeed, there is a representational imbalance between Euro-American music traditions and all other musical traditions. The past century has witnessed unprecedented

[21] Chou, Wen-chung (2001, April). “Music: What Is Its Future?.” *Search Event III.* Lecture conducted from Composition Area, Department Of Music, University Of California, San Diego, CA.

Westernization throughout Asia. Cosmopolitan universities in the urban centers have fully adopted and integrated the Western classical music tradition, closely following trends in Euro-American modern and post-modern contemporary composition, though not necessarily offering any form of education in their native tradition and heritage. As one might expect, the large majority of young Asian composers coming through the university system are functionally "Western" composers, for all intents and purposes. This is potentially only a temporary state of affairs, as new departments and programs dedicated to the study of cultural and traditional music heritage have begun to emerge across Asia. Still, the large majority of Asian composers are trained in Western music theory, history, and composition, while having only minimal exposure to the musical heritage of their native country or culture. And in many ways, this trend has yet to subside.

Nathinee Chucherdwatanasak, in her thesis on the music of the prominent Thai composer (of Western instrumental art music), Narong Prangcharoen,[22] describes the relationship between the Thai middle class and Western art music. She provides some of the historical context that explains how Thailand created its own generation of Thai composers focused Western academic art music. Thailand is unique amongst Southeast Asian countries, as it was never colonized by European powers. However, Western influence permeated the culture as early as the turn of the century, when, in an ongoing effort to deter colonial invasion, the country began making structural changes to its

[22] Chucherdwatanasak, Nathinee, "Narong Prangcharoen and Thai Cross-Cultural Fusion in Contemporary Composition." Masters thesis, University of Missouri Kansas City, 2014, http://hdl.handle.net/10355/43578. pg. 81.

governmental institutions, including the creation of the first national symphony, and the adoption of Western music theory into the national university curriculum, among other things. Furthermore, various members of the royal family attended schools in Europe, where they trained in Western music. The court financially supported both the traditional court ensembles, and the newly formed Western orchestra, right up until the bloodless revolution of the 1930s, when a military coup ultimately led to the adoption of a constitutional monarchy.

Thailand began to grow economically in the post-war years, and a middle class began to emerge in the Bangkok area. The first music Ph.D. from a Western university was awarded to Dr. Wipa Khongkhakul in 1976, and upon her return to Thailand, the most prestigious universities were stumbling over each other in their rush to recruit. The success of this pioneering scholar demonstrated to the upper and middle class that a Thai could pursue Western art music as a profession, with reasonable career prospects in the rapidly expanding Thai education system. And so began the academic trend towards pursuit of modernist Western musical aesthetics and ideals, while the court tradition was all but forgotten, the tradition now embodied by a small group of master teachers, their dedicated students, and academics from the West. Performances still accompanied religious ceremonies and rites, but also spread to other parts of society, finding a home wherever one might (for example, as the *pi-phat* that accompanies the Thai kick-boxing matches). A group of forward thinking traditional musicians revitalized the music through a series of

recordings in the 80s and 90s, which documented on some 6 volumes some of the most important historical repertoire, representing different historical periods in Thai history, and a variety of traditions from different geographical areas of Thailand. In the last few decades, traditional music education programs began to find a place next to Western music education programs.[23] And today, more than at any other time, there are numerous Western-trained composers who are also versed in Thai traditional music, thus creating the potential for "meaningful cultural exchange," as called for by Chou.[24]

Chou Wen-Chung acknowledges that despite his dismay at seeing Asian composers choosing Western music over their own heritage, he believes that Western art music is the ideal *lingua franca* in this arena, in that the Western tradition excels at absorbing outside elements, and thus is an ideal musical tradition through which to explore cross-cultural work.[25] He then adds:

> But cultural interaction depends on the vitality of the heritages involved. If the heritages are weak, meaningful exchange may not take place and the results might be misleading or unbalanced.[26]

On this point, there is some disagreement. Adler contends:

---

[23] Douglas, pg. 103.

[24] "Recently, there has been remarkable creativity emanating from composers of many diverse heritages ..... but their own legacy always seems sublimated, consciously or unconsciously, often reduced to a matter of sentiment and is thus unable to cross-fertilize with the Western heritage these composers have acquired. *Only when legacies again become vibrant can artistic independence assert itself and creative effort lead to cultural renewal, without which meaningful interaction in the arts cannot be achieved.* " (Chou, ibid.)

[25] "On the other hand, the strength of the Western arts is exactly its capacity to absorb ideas from other cultures." (Chou, ibid.)

[26] Chou Wen-chung.*MUSIC – WHAT IS ITS FUTURE?* Edited by Karen Reynolds. Copyright © 2001 Chou Wen-chung and the Composition Area, Department of Music, the University of California, San Diego.

> ... it is ultimately impossible and I would argue undesirable to qualify or disqualify an individual to act as representative based on lived experience, ethnicity, gender or any other aspect.[27]

In my estimation, these two perspectives need not conflict. Chou raises questions of cultural agency (or perhaps, sovereignty), the potential for cultural appropriation, and the obvious challenges inherent to cross-cultural representation, while Adler articulates a more liberal perspective held by a younger generation of composers, whose musical passions may span many musical traditions and cultures, and whose sense of national and cultural propriety has given way to a more fluid global orientation. Chou's criteria for cross-cultural work is problematic because it idealizes the composer with fluency in two musical cultures as the only composer who would be able to present a truly balanced representation. This outlook negates some of the ideal humanistic and ethical reasons for exploring cross-cultural composition: the desire to better understand another musical tradition, and the desire to give a larger voice to that tradition by using one's more privileged means of dissemination.[28] Moreover, attaining fluency and/or mastery in any musical tradition takes years of focused study, only after which does the music truly become embodied, executable as second nature.[29] Practically speaking, mastery of multiple musical traditions is more the exception than the rule. On the other hand, Adler's egalitarian notion of who can be a

---

[27] "My concern is not with the quality of representations in these pieces but in the multiple and myriad ways in which they may come to have representative meaning in a cross-cultural context." (Adler, p. 3)

[28] While hybridity may be fundamental to musics everywhere, this exposure to global diversity is often dependent upon conditions of power and privilege which favor musicians of the urban centers of the West and around the world. (Adler, p. 1)

[29] "... real musicality actually comes from prolonged exposure to deep details which we learn to experience cognitively and feel bodily. That takes years of focused study."(Michael Tenzer, *Analytical Studies in World Music* http://a.co/cHb9U6V pg. 34.

representative of a tradition has the potential to conflict with the cultural beliefs held by the native community regarding their own tradition. The imposition of Western liberalism on the notions of musical representation held by the culture in question is an assumption of ideological superiority, whether stated explicitly or not. The Western composer working at the edge of musical traditions must remember that most cultures imbue their traditional arts with meanings that reflect deeper beliefs and values held by the society as a whole; to assert Western egalitarianism over the religious traditions of another culture is not in the spirit of *balanced* cultural representation, as Chou might say.

Finally, one must acknowledge that the engagement with cross-cultural composition is a musical area of study that was born in Western academia, and the only composers who are attempting to create culturally and musically hybrid works in a self-conscious and culturally-aware manner are those who have passed through a Western education system.[30]

[30] "Few devote themselves as thinkers to other musics unless they have passed through a Western education system. The open tent of cross-cultural analytical research is inseparable from the acquisitive Western culture that cultivated it. That conclusion is impossible to avoid, however one may view it."—(Tenzer, Michael, ibid. pg. 17.)

1.4 Hybridity in Musical Composition across Cultures

John Garzoli employs the phrase "parent" forms[31] to describe the two traditions whose elements will fuse together in the hybrid work. So, in my particular case, the parent forms would be Western "new" music, and Thai traditional music. Garzoli notes the precedent in culturally hybrid musical styles existing in Thailand already, and he explains that the Thais generally use the term "fusion" to describe cross-cultural composition.[32] He defines the fusion process as the synthesis of musical elements from different cultural systems, and he explains that the "specific musico-cultural objectives" invite exploration at two levels. First, at the level of musical structure, and secondly, at the level of musical timbre.[33] As two broadly inclusive categories, these cover most of the potential issues in a general manner.

Other recent scholarship has offered a more specific categorization for the variety of Western-Thai fusions, particularly as they appeared within Thailand. Nathinee Chucherdwatnasak offers four fusion practices:

[31] "This does not involve grafting together entire musical systems, but creatively combining selective elements.")Garzoli, John. "Mawlam and Jazz in Intercultural Musical Synthesis." *Rian Thai International Journal,* Chulalongkorn University, Institute of Thai Studies, 1 Aug. 2019)http://www.rianthaijournal.org/book/rian-thai-volume-11-2018-number-1/ (pg. 3)

[32] As distinct from the connotation of "fusion" in the Western commercial music realm, which is more readily understood as a fusion between Western popular genres, such as the meeting of Modal Jazz performance practice combined with funk, soul, and various types of rock. (Ibid., pg. 4).

[33] Ibid., pg. 12.

1. The first fusion practice is simply pairing Thai lyrics to an existing Western melody, or newly composed melody in a Western style.[34]

2. Musical Exoticism, as defined by Ralph P. Locke,[35] wherein some generically Thai musical representations assume the role of the "exotic other" against the Western instrumentation, ensemble, and orchestration, generally consisting of a Thai melody harmonized with Western chords.[36]

3. The third process is much less superficially representative of Thai music, as the method here is to substitute each instrument of the Thai ensemble for one-to-one instrumental corollaries (usually represented by a brass-band), where Western instruments functionally play the idiomatic role of each Thai instrument, thus presenting not just one melody, but an entire piece, with idiomatically informed parts for corresponding instruments, a Thai piece through and through, but performed by Western instruments. [37]

4. Fusion at the structural level (for example, a completely Western piece superficially, in instrumentation, ensemble make-up, and style, purely Western in sound, but employing Thai formal structures and performance practices over Western forms and practices).

1.5 Organizing Principles

Like other composers exploring intercultural composition, I didn't end up here by accident. Reconciling cultural distance has been a constant theme throughout my life. I was born in Saudi Arabia to an American father and Thai mother, in a hyper-diverse

---

[34] This process was first practiced in religious music from the Ayutthaya period, then found life in music for dramas from the Fourth Reign. This accompanied music soon became so popular that its style was assimilated in Thai film music and the indigenous Thai popular music of the mid-twentieth century. (Nathinee, pg. 79)

[35] Ralph P. Locke. *Musical Exoticism: Images and Reflections* (New York, Cambridge University Press, 2009), pg. 47.

[36] "Western musical exoticism was a model for the second process, which merely adds some obvious Thai music characteristics (especially pentatonicism) into a Western composition." (Nathinee, pg. 79)

[37] "The third fusion is the "Thai-ized" process, commencing with the replacement of Thai pi- phat instruments with Rama IV's the military (Western) band in playing Thai songs. The process spread out to local brass bands and culminated in Prince Paribatra's arrangements of Thai music in a Thai style, in which he notated actual Thai music for Western wind instruments." (Nathinee, pg. 79)

multicultural company town, but was geographically and culturally isolated from both my American and Thai heritage —this despite the fact that the town where I grew up was a predominantly American expatriate community. I have always experienced something of a cultural imbalance in my own life. Writing "Impulse Control" was an opportunity to experience Thai music and to explore my maternal heritage, and I wanted to share some of my Western musical tradition with the Thai students. Ultimately, I would create a bridge for western-trained musicians to discover some of the unique complexities and aesthetic sensibilities of Thai music, which is underrepresented in world music study.

1.5a The role of the composer in the aural tradition: Koji Nakano

Koji Nakano, a Japanese-born, Western-trained composer, now living in Thailand, is a professor at Burapha University, who also has faculty duties at a conservatory in Taiwan. As the director of the composition program at Burapha University in Bangsaen, he and the faculty of the traditional Thai music department have created a space for experimentation and hybridity. His work continues to explore the possibilities inherent in mergers of Western and Asian musical ideals and aesthetics. Nakano describes his first foray into cross-cultural work as significant in the development of his personal approach to working with non-Western traditional ensembles. I considered Koji's approach very carefully while deliberating on my own approach, because he had already composed numerous pieces for traditional Thai instruments, and had navigated the obstacles specific to the Thai / Western musical hybrid, such as issues of notation, etc. Perhaps most significantly, he is a Western composer searching for different ways to approach Eastern

traditions. In a recent paper on his most recent intercultural compositional *oeuvre*, Nakano recalls the issues he struggled with most prior to composing his first piece for Thai traditional instruments.[38] Before putting pen to paper, he asked himself the following questions:

1. What is the role of a composer for Thai traditional music and how does he/she compose a new piece for the musicians?[39]
2. What does it mean to compose music for culturally and musically unfamiliar instruments?
3. How do we absorb and incorporate cross-cultural elements while still expressing our own musical voice?

Nakano compared the role of the composer in a Western context to the role of the composer in a Thai context. He studied the instruments with a traditional teacher in the traditional aural tradition. The composer / performer dichotomy does not exist in Thai music, as Jiradej Sethabundhu explains:

> ... the Thai culture has rarely made a distinction between composers and performers. All composers are performers, and many performers compose music. As soon as a new piece is composed and performed, it becomes public property.[40]

As a Western-trained composer accustomed to producing a score for reading musicians, Koji found himself untethered in this hybrid space. Koji discovered that in the Thai tradition, like many other orally transmitted musical traditions from across the globe,

---

[38] Nakano, Koji. "Introduction to Living Composition: A New Approach to Asian Music, Culture and Spirituality." *Kuandu Music Journal*: Taipei National University of the Arts, Taiwan, vol. 20, July 2014.

[39] "Melody types found in Thai music, on the other hand, appear in many pieces, and few of these melodic fragments are restricted to only specific pieces. Therefore, each of the fragments is not unique to any work. Most of Thai melody types were invented before the eighteenth century, but information regarding musicians who composed them virtually does not exist today." (Sethabundhu, pg. 8).

[40] Sethabundu, pg. 8

performers and composers are no more or less important than the other. In fact, they are (typically) one and the same.[41] Koji acknowledges that in the Thai performance practice, all instruments are participants in the creative act. His fundamental revelation is that in order to create a culturally balanced work, he must reimagine the Western notion of the composer as the sole or primary creative force behind a new musical work by abdicating control over the process, allocating creative agency to the performers in some respect, thus engaging with the culture in a procedurally and socially significant manner. Nakano concludes that the composer who is receptive to the results of a collaborative endeavor will likely benefit from the exchange. What's more, the composer may empower the performers to assert their agency as authentic representatives of their traditions, within this cultural dialogue. Through this process, he quickly becomes familiar with some of the idiomatic vocabulary, and as he becomes more familiar with the motivic catalogue common to each instrument, he can begin to amass these idiomatic lines as modular textures, to be mixed and matched with relative ease. Nakano finds the answer to his third question through his first two; through his concept of "living composition",[42] he has created a uniquely personal approach, a collaborative compositional framework that yields strong performances from his musicians, while also ceding some creative control to them.

---

[41] Performers of Thai traditional music compose in a manner unique to the Thai tradition, to be explained in detail in the following chapter.

[42] "Seeking a balanced power-relationship between composer and performer led (Koji) to embrace a form of indeterminacy inspired by the philosophy of John Cage in creating new works for traditional Asian ensembles. A "living composition" begins with an idea and an open framework, the end result being largely informed by both the musical culture and the individual musical personalities of the performers." (Nakano, p. 8)

Nakano's criterion for maximizing cultural representation while maintaining a Western notion of individual identity and authorship can be surmised from his three questions, and he has codified these criteria into a generalized approach applicable to creative work between any two "parent" cultures[43], specifically, his "Western" compositional voice, and a musical "other," without any apparent restrictions. Some might find this approach problematic, simply by virtue of the fact that a general approach to hybridity implies a generalized approach to cultural representation, thus reducing the traditional musical culture's unique identity to an interchangeable "other."[44]

1.5b CHOU Wen-Chung

Before accepting a commission from the Korean Contemporary Ensemble, Chou asked himself these questions, which reveal a slightly different vantage point:

1. What kind of composer am I ?
2. Why should I write this piece?
3. Why do I have the *right* to write this piece?[45]

Seen in one light, it is as though he is reluctant to engage in this particular intercultural dialogue, as his lack of experience with Korean traditional music might

---

[43] "This does not involve grafting together entire musical systems, but creatively combining selective elements." (Garzoli, 3)

[44] "To intentionally work between prior musical categories is to delight in their defiance and to critique their validity but at the same time is to engage with their mutual representation. Likewise, hybridity is not a monologic strategy adopted by the artist but is contingent in its very formulation upon the categories being hybridized. An approach taken by a composer regarding the hybridization of Euro-American and Southeast Asian musics may not then be generalizable to Euro-American and African musics, for example." (Adler, 32)

[45]Chou, Wen-chung, "Music: What Is Its Future?." *Search Event III*. Lecture conducted from Composition Area, Department Of Music, University Of California, San Diego, CA: April, 2001.

preclude a balanced representation. Another interpretation begins with some assumptions about the motivating forces behind this question. He has expressed some concern over recent approaches to hybridity between Asia and the West, particularly on the part of Asian composers trained in the West. His question situates him in opposition to that which might be deemed a superficial cultural encounter, where representations are unbalanced (the inevitable result of "weak" heritages).[46] From the breadth of his writings and speeches on the topic of cultural legacy and merger, one may gather that he is troubled by the expansion of commercialism into the arts. He has often lamented the trend amongst Asian composers to train in Western music to the exclusion of their own native cultural heritage and tradition.[47]

His second question then perhaps demonstrates some reluctance to engage with a cross-cultural project in which he does not assume total control over the music. Or perhaps he simply meant to say, "what do I get out of this?" Though, I am inclined to think that he asked the question rhetorically, to nudge the audience into self-reflection. John Dewey provides a satisfying answer to this question. In his philosophical treatise on aesthetics from 1934, "Art as Experience," he advocates for the revitalization of "art" in society, as he

[46] "But cultural interaction depends on the vitality of the heritages involved. If the heritages are weak, meaningful exchange may not take place and the results might be misleading or unbalanced." (Chou, Ibid.)

[47] "Worse, this faith in the universality of Western music is widely shared around the world, particularly in East Asia. As I have often observed, Asian composers as a rule are satisfied with emulating the West and reluctant to search for their own roots."-(Chou, Ibid.)

believes that shared experience in art can potentially instill a genuine appreciation of "otherness," thus fostering a more healthy and tolerant society.[48]

His final question reveals his sense of social justice, his commitment to cultural heritage and sovereignty, and his belief that cultural ownership is a right, particularly amongst underprivileged populations. In posing this question, he reveals an ideological imperative, namely that cultural authenticity, agency, and balanced representation are his top priorities when deciding to work in the hybrid space. The cultural exchange must begin with an appreciation of the power dynamics at play, and of the lingering Euro-centrism that permeates academic music across the world.[49] To move beyond imbalance, we must bear witness to a history of cultural appropriation and exploitation, and then assume a posture manifestly in opposition to it.

[48] Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Winter 2019 Edition), Edward N. Zalta (ed.), forthcoming URL = <https://plato.stanford.edu/archives/win2019/entries/dewey-aesthetics/>

[49] "This attitude still dominates Western composers, educators, performers, and critics."-(Chou)

	Nakano	Chou	Olsen
Grounding Question 1	What is the role of a composer for Thai traditional music and how does he/she compose a new piece for the musicians?	What kind of composer am I?	What are, and how can I address, the improvisational commonalities and contrasts between traditional Thai music and Western jazz?
Grounding Question 2	What does it mean to compose music for culturally and musically unfamiliar instruments?	Why should I write this piece?	How can I use this piece as a vehicle to impart musical knowledge to my students? How can this piece convey the primacy of rhythm, syncopation, and polyrhythm in American popular music?
Grounding Question 3	How do we absorb and incorporate cross-cultural elements while still expressing our own musical voice?	Why do I have the *right* to write this piece?	What Thai musical structure will connect the Thai ensemble piece, Impulse Control, with possible future reinterpretations

Fig. 1.1: Composing in the Cultural Hybrid Space

Before arguing the case for using jazz as the 'Western half' of this hybrid work, I provide some general terminology and preliminary information as to the texture, structure, and performance practice of Thai traditional music, or *dontrii Thai*.[50]

[50] The Thai word for Thai traditional music is *dontrii Thai,* which I shall use for the remainder of this discussion.

Texture

John Garzoli describes the character of *dontrii Thai* in the following terms:

> Thai classical music is primarily melodic. The *heterophonic* texture of ensemble music arises out of the combination of multiple melodic lines. Harmony, as it is understood from a Western musical perspective, plays no role in Thai classical music.[51]

This description is wholly accurate, but it omits comment on the characteristic *texture*. In David Morton's pioneering work, "The Traditional Music of Thailand," he provides a more colorful description:

> The sound of traditional Thai ensemble music might be likened to a stream... Here and there little eddies and swirls come suddenly to the surface to be seen momentarily, then to disappear as suddenly... The various threads of seemingly independent Melodies of the instruments bound together in a long never-ending wreath.[52]

In his pioneering research compendium, *The Traditional Music of Thailand*, David Morton proposes the descriptive terminology, "polyphonic stratification," to convey the unique nature of this heterophonic texture, as distinct from other heterophonic traditions.[53] The term has been in steady use by Western scholars of Thai music up until the past few decades.[54] Recent scholarship suggests that the term is not in use by native

[51] (Garzoli, p. 51)

[52] (Morton, p. 119)

[53] "In conversation, Pichit Chaisaree and Bruce Gaston acknowledged the historical importance of Morton's work but they pointed out that it contains flaws that misrepresent Thai structure and rhythm," (ibid., pp 52).

[54] Morton, p. 21

practitioners of the music, so I will use the more generally descriptive terminology, "idiomatic heterophony."[55]

Thai Musical Structure

Broadly speaking, there are three structural layers present in most *dontrii Thai*. The principal layer is the *nuea phleng*[56], or the "basic" melody, which defines the song. The structural layer above that consists of the simultaneous idiomatic variations of the basic melody by timbrally diverse instruments. The structural level at the bottom consists of the *luk tok,* or "pillar tones," which are notes occuring at the end of phrases, and, which provide a "skeletal outline of the structure." [57]

The *nuea phleng* is also commonly referred to as the *luk khong*. The reasons for this are two-fold and interconnected; first, the composer normally composes the basic melody at the *khong wong yai* (gong circle), and second, the idiomatic style of this instrument is the least elaborated (i.e., its idiomatic presentation of the melody) is closest to the original basic melody.

[55] Some Thai musicians explicitly reject the term, according to Garzoli, p. 51.

[56] The literal translation is "the meat of the song."

[57] Garzoli, p. 52

1.6 Improvisation as Unifying Aspect

The "Referent"

John Garzoli's article, "Improvisation, *Thang, and Thai Musical Structure,*" asserts the central role of improvisation in *dontrii Thai,* stating categorically, "improvisatory practices lie at the heart of Thai classical music."[58] (Garzoli, p. 45) He then introduces some terminology used to help explain the precise nature of Thai improvisation, demonstrating that jazz improvisation and idiomatic improvisation in *dontrii Thai* are similar in their function. I will use this same terminology, both here and later in the paper. To begin, he proposes Jeff Pressing's concept of the "referent:"

> A referent is 'a set of cognitive, perceptual, or emotional structures (constraints) that guide in the aid of the production of musical materials.[59] (Pressing 1998, 52)

Therefore, in the case of jazz, the referent might be the melody of the song being played, but it can also be the chord changes, or even the larger formal structure.

Pressing's analytical framework was clearly intended for jazz, but through further exploration of his concepts, we find other potentially significant similarities between Thai and Western jazz improvisation. Pressing adds the following condition:

---

[58] "Improvisation, Thang, and Thai Musical Structure," Musicology Australia, 2018 VOL. 40, NO. 1, 45–62, https://doi.org/10.1080/08145857.2018.1480867

[59] Pressing, Jeff (1998), "Psychological Constraints on Improvisational Expertise and Communication," in Improvisation. Chicago: University of Chicago Press, 1984.

> All referent-guided improvisation rely on a parallel repertory of compositions.[60]

Perhaps it has yet to be stated explicitly, but the Thai musical tradition typically employs a vast repertory of widely known melodies, both old and new, as the basis for generating new compositions, and for generating new *thang* (idiomatic melodic variants). Just as jazz players are expected to know hundreds of standards by memory, so too are Thai improvisers expected to know a certain body of repertoire by memory, if they are to effectively partake in a collective improvisation.

Another parallel exists between certain specific eras of jazz, and the nature of Thai motivic melodies. First, when any jazz musician is just starting to learn, they might have one or two prepared 'licks' that they can play over a specific part of the form (particularly if they are just beginning). Learning isolated fragments is typically a sub-process of the overarching task of transcribing a solo. During the tonal jazz periods of the 40s and 50s, students of *bebop* would transcribe a Charlie Parker solo in its entirety, learning one lick at a time, often a lick that fit perfectly over an archetypal harmonic motion (such as ii-7-V7-I, etc), resulting in a complete solo (which, in fact, is a chain of individual melodic cells and fragments). As in the introductory pedagogical pieces in Thai music, the short motives that make up the melody become the basis for numerous other melodies in other songs, so that when internalizing a pre-composed *thang* (idiomatic improvisation), the student is actually preparing for many other songs. Likewise, the most astute students of Bird's records may

[60] Pressing, Jeff (1984), "Cognitive Processes in Improvisation," in W. Ray Crozier and J. Chapman Anthony (eds.) *Advances in Psychology*. Elsevier: North Holland, p. 350.

have noticed that Parker likewise relied on a set of pre-composed, pre-rehearsed "licks," that he could string together in novel ways to create a new solo.

Finally, the bebop era practice of *contrafactum*, whereby jazz musicians wanting to play familiar changes without paying royalties would simply compose a new melody over the same underlying chord changes. This process has given birth to countless 12-bar Blues and 32-bar AABA 'Rhythm Changes' tunes and has even created musical dopplegangers of more complex changes (such as *Indiana,* and *Donna Lee,* or *What is this thing called love?* and *Hot House).* Similarly, the Thai ensemble might use a given pre-composed melody as the foundation for one piece, then later use the same melody as the foundation for another piece.

Despite numerous differences, there is a direct parallel in the improvisational process: both traditions use a 'referent,' they both draw from a large body of common repertoire, they both employ motivic units, which may or may not be interchangeable with other motives, depending on context. A consideration of the cultural role of Western jazz on Thai music is put forth in Chapter Three. For the time being, let us summarize three commonalities, the 'referent,' a common repertory, and melodic / motivic content associated with particular facets of the referential.

To conclude, I offer a passage extracted from Michael Tenzer's book, *Analytical and Cross-Cultural Studies in World Music,* wherein he is "reflecting on jazz as

twentieth-century America's underdog in the realms of musical legitimacy and hybridity."[61]

Stated with gusto:

> For decades its creative development was hidden in plain sight. It occupied a position with respect to Western music's institutions and structures of power analogous to the one that many of the contributions to this book (plus its predecessor and other similar writings) occupy with respect to the practice of music analysis generally. Then things changed. Following decades of exclusion, jazz' ultimate inclusion in the academic canons of musical value let the cat out of the bag in that world, implicitly affirming openness to all music. As jazz led the way, it gradually penetrated the awareness even of musicians who do not practice it, as other world traditions do today. It **is a vehicle for the individuals quest for self-realization. Its irreducibly hybrid origins offered a paradigm for viewing any music, if not people and social relations**. We now have decades' worth of neo-hybrids involving jazz and other world music, and generations at home in both jazz and other traditions. **If jazz and other African American musics had not long ago made the case for this evolution, would other traditions have been in a position to do so since? Jazz has made us more musical than we thought we could be.**[62]

[61]Tenzer, Michael, and John Roeder. Analytical and Cross-Cultural Studies in World Music. University Press, 2011, Kindle Edition, http://a.co/1rwNPKm.

[62] (Tenzer, Ibid.)

1.7 Instrumentation

There are three primary ensemble formats in the Thai Court Music tradition, varying in size, timbre, and common repertoire. Perhaps the most iconic group is the *piphat* ensemble, which is the oldest known instrumental configuration, consisting of:

1. the *ranat ek*,
2. the *ranat thum*,
3. a *khong wong yai*,
4. a *pi nai* or *pi jawa*,
5. the *taphon*, the two-headed barrel drum "and the de facto spiritual leader of the ensemble." (Morton, 68)

The *ranats* use hard mallets on full size xylophones, and the intensity of volume is only overshadowed by the nasal, brittle, piercing, and endlessly expressive *pi jaw*a, the Javanese oboe, a double-reed conical-bore wind instrument.

This ensemble, due to its volume, is best suited to outdoor ceremonies and functions. Today, ensembles can be found in public spaces much more often than in the past. In the secular realm, this group will most often be found accompanying a kick-boxing match, or as the lively entertainment at a beer hall or outdoor restaurant / club.

The *khruang sai* ensemble (string ensemble) consists of:

1. the plucked *jakhe*,
2. the bamboo flute *khlui*, and three bowed string instruments,
3. the *saw sam sai* (3 stringed bowed fiddle),
4. the *saw u* [63](the lowest in pitch, with a darker tone)
5. the *saw duang* (with a much more prominent timbre, nasal and cutting)

[63] The lower of the two prominent stringed instruments generally plays closest to the hidden melody (mimicking the role of the *khong wong yai*).

The *saw sam sai* is well-known for its vocal mimicry, and it has been a prominent accompaniment instrument for vocal court performances since the 14th century. All the bowed strings, and the bamboo flute (the *khlui*), are known to articulate musical gestures that imitate the Thai language and the style of singing. Perhaps the most expressive instrument is the *pi nai*, which can conjure frighteningly realistic sounds of intense wailing.

The third major ensemble, the *Mahori*, analogous to the European orchestra, is a combination of all instruments listed prior. The fixed-pitch *ranats* are frequently paired with smaller, higher-pitched versions of themselves (i.e. *ranat ek lek, ranat thum lek)*. Likewise, the *khong wong lek*, which is a smaller version of the *khong wong yai*, transposed up one octave. In the context of the *mahori,* one of these higher-pitched auxiliary instruments can double their larger counterpart at the octave, thus constraining the primary instrument's opportunities to improvise. For example, the *khong wong lek* can reinforce the basic melody played by *khong wong yai,* or it can add an idiomatic variation akin to the *ranat ek* in character, disguising the melody with streams of running 8th and 16th notes in the higher register.

My ensemble was a blend of the two smaller groups; a *pi phat* ensemble (*pi nai*, *taphon*, *khong wong yai*, *ranat ek, ranat thum*), augmented by two bowed strings from the *khruang sai* ensemble, the *saw u* and the *saw duang*, and one auxiliary percussionist (to cover the time-keeping responsibilities of the *ching*, plus the hanging gongs known as *moong.* In addition, there were three instrument doubles (in the sense of one player

performing on two or more instruments within a single contiguous piece), enabling short sectional "features" approximating the character of either the *pi phat* or the *khruang sai,* thus expanding the textural palette, and increasing the potential for a wider dynamic range than could be achieved with any one group alone. The wind-player begins with the *pi-nai,* but then plays the bamboo flute (*khlui*) until the final movement, just as the *ranat ek* and *ranat thum* start the piece on the metal-keyed, soft-mallet "indoor" version of their respective instruments, ultimately moving to the wooden keys and harder mallets for the final movement. The percussion includes the time-keeper, who articulates the structure and tempo with the *ching* and *moong*, and the *taphon* (two-faced barrel drum). The *taphon* generally plays a more active role in ensemble interaction and cohesion. The *khong wong yai* typically plays the simplest version of the central melody, while the *ranat ek* performs the most virtuosic embellishments based on the central melody. The *ranat thum* typically adorns a melodic variation with lots of playful syncopation, sometimes virtuosic, sometimes more sparse. Common performance practice and idiomatic technical execution (such as the *sabad* technique, which functionally enables a mallet player to embellish a note by preceding it with two ghost notes, roughly equal to 32nd notes) are common to all three mallet instruments, and are an integral determinant of idiomatic improvisational vocabulary for each instrument. Some other common techniques employed are the dampened keystroke for staccato attacks, the *kraw,* which is the roll technique, employed on a single key, or between the right and left hand octaves, and the *kwad,* which refers to the technique of using *glissandi* for dramatic effect.

1.8 Tuning

Within the liner notes for the 1993 album by *Fong Naam,* entitled, *"The Sleeping Angel*," Neil Sotrell summarizes the Thai approach to tuning in the following manner:

> Theoretically, the Thai scale has seven equidistant notes, which means that the intervals are "in the cracks" between our semitone and whole tone, and are equal, though in practice some are more equal than others![64]

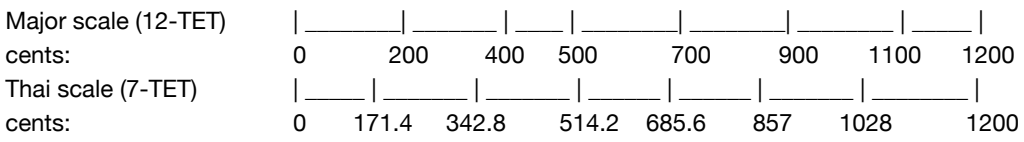


Fig. 1.2: Comparison of Western and Thai Equal-Tempered Scales

The tuning chart above compares the Western tuning for a major scale, and the theoretically equal-tempered 7-note scale. Sethabundhu, a Western-educated composer with fluency in Thai traditional music, notes the remarkable ambiguity of the a Thai third, which at 342.8 cents, is almost exactly halfway between the Western minor third (300 cents) and the major third (400 cents). In practice, particularly when performed by instruments with flexible intonation, such as the strings and voice, we hear something resembling a blues third, or variable third, as can be heard clearly on the Fong Naam recording of "Music for the Puppet Theatre" (ca. 00'15").

7-TET

The seven-tone ostensibly equidistant tuning of the idealized Thai scale (which is compared with a major scale in 12-tone equal-temperament tuning, in Fig. 1.2) lies well

[64] Fong Naam. I99I. Liner notes from The Sleeping Angel: Thai Classical Music. Nimbus Records NI5319, compact disc.

outside the conventional Western 12-tone equal-temperament.. Indeed, with the exception of the octave, there are no familiar intervals.[65]

David Morton was perhaps the first to measure the tuning using scientific tools, but there has been a pervasive skepticism about the theoretical concept of the 7-TET scale, for a variety of reasons. First, there does not seem to be a consensus amongst veteran Thai musicians of an ideal tuning system matching 7-TET. Secondly, in focusing only on the fixed-pitch idiophones, past scholarship has narrowed the scope of the tuning system to include only fixed pitch instruments, while the instruments of flexible pitch are constantly pushing the intonation of a given note up or down, and this intonational variation is simply part of the texture, and is desirable.[66]

David Sethares, in his monumental book on tuning practices, seemed to be the first person to really explain how the 7-TET might have evolved organically, by connecting the specific timbre of the idiophones with the complex harmonic and inharmonic spectra resulting from these types of pitched instruments.Garzoli calls his credibility in to question by pointing to a problematic claim in Sethares' article (Sethares mistakenly identifies the wooden idiophone native to Northeastern Thai and Laotian traditions, called the *bong*

[65] Setabundhu, Jiradej. "Aspects of Thai Music and Compositional Techniques in Selected Works of Jiradej Setabundhu." Northwestern University, UMI, 2001, pp. 1–60.

[66] Garzoli, John (2015b), 'The Myth of Equidistance in Thai Tuning'. *Analytical Approaches to World Music* 4/2: 1–29.

lang, as belonging to the Thai 7-TET tuning system, which is incorrect (the *bong lang* is tuned to Western equal-temperament).[67]

Garzoli's article, "The Myth of Equidistance in Thai Tuning," makes the claim that the entire notion of a 7-tone equal-temperament is a Western imposition and interpretation of a phenomena that does not actually exist. His article provides ample evidence to make his point. First, he finds methodological problems in Morton's original tunings, implying that Morton utilized the average intonation of a variety of ensembles as the final result, while particular notes from specific tuning measurements might have varied significantly from each other. Next, he posits that the rush to discover and analyze something novel motivates the Western analyst to bypass all things cultural and traditional in his search for the most exotic deviation from the Western system. Finally, he explains the nature of intonational diversity as a desirable aspect of Thai music. In light of the fact that most of the instruments never even attempt to blend their sound, this makes sense. And like particular stretched octaves in the tuning systems of Balinesian *gamelan*, a particular ensemble tuning might deliberately stretch the octave to help generate the 'shimmer' that one associates with closely beating tones.

[67] Garzoli, John (2015b), 'The Myth of Equidistance in Thai Tuning'. *Analytical Approaches to World Music* 4/2: 1–29.

1.9 Notational Considerations

Thai counting vs. Western counting

As a matter of convention, all Thai classical music is notated in duple meter. Thus, in a measure of 2/4, each eighth note is felt as a beat (or one quarter-note in a bar of four). In the Thai system of metrical organization, the strongest beat always occurs at the end of a phrase. In the common-use short-hand *solfège* notation, they place the strongest beat of the measure at the end of each bar. While the Western practice places the strongest beat at the beginning of the measure on beat 1, and the second strongest on beat 3, the Thai will always emphasize the beat 4 primarily and beat 2 secondarily. The chart below demonstrates two views of the same material.[68]

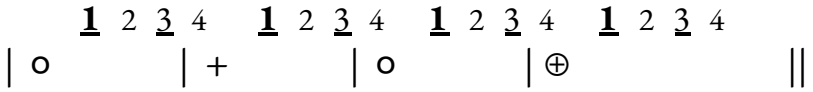


Fig. 1.3: Western Count

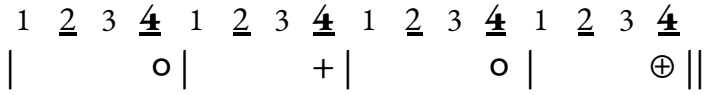


Fig. 1.4: Thai Count

Notational Practice in the Thai tradition

During the period prior to constitutional monarchy, a young King with a Western pedigree and musical training was tasked with preserving Thai traditional music, and so he

[68] As these concepts will be covered again in detail, I will only briefly introduce them here.

decided to transcribe (in standard Western notation) a number of famous traditional suites from previous eras. This transcription collection, in simple notation without any articulations or dynamic markings, was the basis of Western scholarship into Thai music for a few decades, and a complete study of the transcribed suites was written by a student of David Morton's, Michael Wright, whose thesis explores the idiomatic characteristics of each particular instrument. Beyond this, however, there has apparently not been much use for the documents. As Myers-Moro heard from a Thai informant, "scholars, not musicians," were the only people to find any use from them (Myers Moro, p. 54).Terry Miller notes, "In the traditional master-student relationship notation was not only unnecessary, but a hindrance to effective learning."[69]

Traditionally, music was always taught through patient demonstration, imitation, repetition, and memorization. While this is obviously a slower way to learn, the repetition commits the material to memory much more quickly. [70]

Pamela Myers-Moro notes that in contemporary Thailand, "serious musicians are apologetic about the use of notation, and even amateurs know that one shouldn't use

---

[69] "Teaching music by rote, however, is extremely time intensive, and yet once students learn by this method, they are likely to retain it. Having learned to play X number of melodies on a given instrument in this manner, students will evidently absorb an intuitive sense of how to realize other melodies heard on other instruments into the idiom of their particular instrument. The use of notation, however, tends to rob the player of this ability. For example, pianists can learn to play a thousand works from notation, but without notation most have little to play; an ability to improvise new music patterned after the notated music does not necessarily follow. " - Miller, Terry E. "The Theory and Practice of Thai Musical Notations." *Ethnomusicology*, vol. 36, no. 2, 1992, pp. 209

[70] Miller, Terry E. "The Theory and Practice of Thai Musical Notations." *Ethnomusicology*, vol. 36, no. 2, 1992, pp. 197–221., doi:10.2307/851914.

notation....” The prevailing attitude amongst Thai practitioners is simply that “notation is not to be trusted”[71]

Today, the two major systems used are solfège cipher notation, and Arabic numeral tablature (for stringed instruments). In keeping with Thai practice, I utilized the solfège system, in which Thai consonants represent the sound of the *solfège* syllables (see Fig 1.5).

C	ด	“do”
D	ร	“re”
E	ม	“mi”
F	ฟ	“fa”
G	ซ	“son”
A	ล	“la”
B	ท	“ti”

Fig. 1.5: Legend for Thai Solfege Notation

[71] Myers-Moro, Pamela. “Musical Notation in Thailand.” *Journal of the Siam Society* 78(1): pg. 105.

1.10 Personal Engagement

Following the rhetorical exercise of both Koji Nakano and Chou Wen-Chung, I pondered what questions I might ask myself, to clarify my intentions and aims, to strive for a more balanced representation,[72] and to understand my role as a composer in a Thai context.

1. Why not jazz?

The use of jazz as the Western 'parent' form (instead of Western 'classical,') would likely precipitate less control over the compositional results, but this small concession would give the Thai musicians the space to present their strongest musical selves.

Jazz, it probably doesn't need to be said, is a kind of international language, bridging not one but many diasporas. In many respects, its possibilities as a set of practices may have seemed sufficient to express any range of my musical ambitions. But my impulses as a student and participant in a cross-cultural heritage drove the dissertation in distinctive ways. I wanted to find elements common to Thai musical practice and to my own Western music tradition. As one of the most vital elements of Thai music is one's ability to expound upon a conjured melody heard only in the mind's ear, jazz appeared not only plausible, but perhaps even preferable to Western 'new' music. The practice of improvisation, broadly stated, is common to each, but the nature of the improvisational

[72] That is to say, to strive for a more balanced representation notwithstanding my relative lack of experience in Thai music.

approach also becomes a focal point of contrast (Thai musicians improvise against an internalized melody, while jazz musicians improvise against internalized harmonic progressions). (See section 1.7 " Improvisation as Unifying Aspect" for a full explanation.) So, I begin with Chou's first question, "What kind of composer am I?" My answer: I am a jazz performer, composer, and arranger with broad interests in world music. My strongest musical heritage is from jazz, so it makes sense that I would use jazz as the *lingua franca,* exploiting some commonalities between improvisational practices, and relying on aural teaching methods, as well as notation.[73]

2. Why should I write this piece?

Dewey's notion of the potential of art to create cross-cultural understanding and empathy is certainly reason enough.[74] But this social conception was not my only motivation. I hoped for my students to participate in a discovery-learning experience, just as I wished to internalize some aspect of Thai music through the composing of the piece. How can I make the piece a vehicle to impart knowledge to my students? How can I express the primacy of rhythm, syncopation, and polyrhythm in jazz? My intention was to foster individual development of their solo improvisations by creating supportive musical spaces, with predictable cyclic ostinato patterns, challenging them to improvise without using their customary referent, instead employing isolated rhythmic motives, pre-rehearsed

[73] Koji Nakano's answer to his question, "What is the role of the composer in Thai traditional music?" has been stated elsewhere and was already known to me before I went to Thailand.

[74]Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Winter 2019 Edition), Edward N. Zalta (ed.), forthcoming URL = <https://plato.stanford.edu/archives/win2019/entries/dewey-aesthetics/>

pentatonic modes and patterns. Within the context of trading "4's" between an instrumental pair, I asked them to listen to each other's solos, using the shape and contour of a melodic line as a point of departure for their own invention. I challenged them to internalize concepts and develop technical skills and rhythmic sensibilities that might remain with them well beyond our brief encounter. For this ensemble, that meant developing their confidence with syncopated rhythms—and specifically, their confidence with one-per-part syncopated contrapuntal lines, basic polyrhythms, and metric modulations between formal sections. (All of these are aided by practice with a metronome.) Thai musicians, however, are trained to move ahead of, and to pull behind the tempo, either accelerating collectively as an ensemble—moving as a single unit over a longer stretch of time—or suddenly (yet uniformly) pulling back on the tempo, usually just after the arrival at a structural tone, or between texturally contrasting sections.

To aid in practicing syncopation and in developing rhythmic confidence and accuracy, I split the group in half, and introduced a common interlocking melodic pattern derived from Balinese *gamelan*, known as a *kotekan*. This exercise ultimately became the "shout chorus" of the arrangement, preceded and followed by many rounds of solos. In addition to exploring the unique Thai approach to tempo in flux, I introduced a few basic polyrhythms to the group (3/2, 4/3, specifically simple-ratio proportional polyrhythms that would help facilitate metric modulations between sections.[75] Working with these basic

[75] The employment of such syncopated devices in jazz is more commonly referred to as 'dotted quarter OR eighth-notes over-the-bar-line'.

polyrhythmic cycles is essential to attaining fluency with highly syncopated rhythms, and they are significant to understanding the simultaneous duple and triple nature of swung eighth notes. These different rhythmic archetypes are the reasons behind the title, *Impulse Control*.

3. The Question of Structure

What Thai musical structure will connect the two traditions? I have utilized the Thai compositional form, the *Thao*, to generate a tripartite composition.[76] After this instantiation of the piece in a Thai context, how do I bring meaningful, non-trivial, formal and/or structural aspects of Thai music to bear on a representation of Impulse Control in a jazz context?

[76] I did not adhere strictly to the form, but the thao served as the conceptual basis for the work.

Chapter Two: Analysis of "Impulse Control"

2.1 Pitch

a. Mode

b. Melody

c. Modal Areas in "Impulse Control"

2.2 Time

a. The *Ching* Cycle and the Three Metrical "Levels"

b. Tempo Fluctuation as Performance Practice

c. Metric Modulation in "Impulse Control"

2.3 Form

a. Thai Approach to Composition

b. The *Thao*

c. *Khaek Bora Tet* Analysis

d. *Thao* in "Impulse Control"

2.1a Mode

Thang, Pentatony + 1, the relative major / minor relationship

Michael Wright proposes the following criteria for the term 'mode'; they serve here as a primer for discussion of modal features in *Impulse Control*.

> ... The essential requirements of mode are, 1. a non-equidistant scale of at least three pitches, 2. a hierarchy of pitch relationships, & 3. characteristic melodic patterns including melodic formulas.[1]

The Thai musical tradition makes use of the word ***thang***, a multi-faceted descriptor that relies on context for meaning. The term literally translates to "path" or "way," but in a musical context, it is also used to describe "method," or "approach." For the present discussion, it roughly equates to "mode," at least in so far as "mode" describes a set of pitches belonging to a parent scale.[2] As mentioned previously, the Thai "chromatic scale" consists of seven tones in an approximately equal temperament. However, the large majority of Thai melody is most fully expressed by the common pentatonic scale, with intervallic content and ordering comparable to the western "major pentatonic," comprising scalar degrees 12356, with an intervallic ordering of 22323 (a 2nd, a 2nd, a 3rd, a 2nd, and a 3rd). Frequently, the modes are associated with the lowest key of a specific

[1] Wright, pg. 12.

[2] Note that the Western diatonic modes (the Greek modes) are sets of 7 pitch-classes (the major scale), drawn from a larger pitch set (the chromatic scale), and it is in this regard that the two systems are in parallel, as the Thai modes are 5-note sets drawn from a larger 7-note set. However, the Greek modes are defined by varying intervallic content from one mode to the next, and can be transposed to any pitch-class without losing identity (whereas the Thai "modes" all share theoretically identical interval content, and are instead defined by the local home / tonic pitch).

instrument or ensemble type, their labels corresponding to the approximate "home" pitch-level for that instrument or ensemble.[3] Of the seven modes common to the traditional practice, the following four are used in "Impulse Control."

1. *thang kruat* , Western C __(C D E G A)
2. *thang nai* — corresponds to G major pentatonic (G-A-B-D-E). This is the 'home' pitch-level for the standard *piphat* ensemble, as well as the lowest blown note on the *pi nai*, the double-reed aerophone of the ensemble.
3. *thang klang haep*, D__ (D E F# A B)
4. *thang klang* — begins on A (A B C E F) [4]

The term *thang* can refer to the mode associated with a pitch or instrument, but it can also be used to describe the idiomatic melodic capabilities of an instrument (for example, a stringed instrument will perform in its most characteristic manner when the mode can accommodate the open-string tuning of the instrument). Any instrument's *thang* will affect the nature of the melody, as particular melodic gestures are most associated with each specific instrument. .

Scalar pitches 4 and 7 (as they occur in the Ionian church mode) may function as accented or unaccented passing tones. These are rare, however, and their presence usually indicates a shift to a new modal center (this has commonly been equated with 'modulation,' but we will avoid that term here due to potentially conflicting notions about

[3] The "home" pitch-level of any given instrument is typically defined by the lower-register limits. For example, the aerophones have a relatively limited range, thus, the lowest blown note would logically be the "home" pitch-level for that instrument.

[4] Miller, p. 201.

what constitutes modulation in the western sense). While pentatonicism is the norm, there are many songs that feature an additional sixth pitch, sounding in close proximity to the original pentatonic set, thus yielding a hexatonic scale.[5]

Sethabundhu notes that the presence of 7th and 4th degrees can also suggest a superficial modal departure (that is to say, a momentary shift) to the relative minor mode. He further stipulates that despite the alleged equidistance of the 7-tone equal-temperament, the music still manages to project a strong sense of major *and* relative minor (see the analytical reduction of *Khaek Bora Tet* for an example of relative major & minor alternation, i.e. C D E G A, vs. A C D E G). This is because the construction of major and minor in the ear of the listener is informed by the intervallic order of the pentatonic modes. Any pentatonic set with the intervallic content 22323[6] will suggest a major pentatonic mode, while the intervallic ordering 32232 will suggest a minor pentatonic scale, typically the relative minor of the prevailing major mode.[7] [8]

[5] Wright, p. 7.

[6] The five numbers denote the size of the interval (2nd or 3rd), in ascending order, beginning at the presumed pitch-center of the given mode.

[7] Sethabundhu, pg. 3.

[8] If this point feels belabored, it is because I want to make clear that this works with the 'relative' major and minor modes, but not with parallel major and minor modes (in other words, it would appear that our minds can easily construct the relationship between major and minor as long as the parent scale is the same, but it would be impossible to construct distinction between a major and a minor mode with the same root by means of intervallic ordering alone). C-D-E-G-A, or C major pentatonic, shifting to the parallel minor, C-Eb-F-G-Bb, or the 6th mode of Eb, is how the parallel major and minor would be articulated in Western terms. But in Thai music, the accidentals are really only used to convey the correct intervallic ordering to a western musician studying or researching Thai music, and even in that context, their utility is limited in scope.

Modes from *Isan* : *Lai Yai, Thang Yao*

The folk music from *Isan*, northeasternThailand, has many similarities to Thai traditional music, but it also has many distinct characteristics, blending elements of Laotian and Northeast Thai rural folk music with *dontrii Thai*. The modal system is derived from iconic *khaen*, the free-reed bamboo mouth-organ, which is one of the oldest known musical instruments indigenous to the area, dating to the bronze age.

The Lao musical tradition conceives of two primary parent scale forms, known as *thang san* and *thang yao*. Respectively, these correspond to the western notion of major and minor. Since most notation for the *khaen* is written in C for the sake of simplicity, the *San* scale comprises from bottom up G-A-C-D-E, giving this particular mode a sort of suspended dominant feel, while the *Yao* scale is commonly associated with the western minor pentatonic mode, thus A-C-D-E-G.

In addition to the first four modes listed prior, I make use of a mode from the Lao tradition. The *lai yai* (or *thang yai*, a subset of the minor mode, *thang yao*) is fundamentally just an A minor pentatonic scale with an added second degree (B), comprising the hexatonic pitch set, A-B-C-D-E-G.[9] Not coincidentally, the mode derives from the lowest played notes of the *khaen*, the bamboo free-reed mouth-organ, whose unique voice is the foremost identifying feature of *Isan* and Lao traditional music. *Lai yai*

[9] Yanavut, Wannapha. "An exploration of Thai Traditional music for Western Percussion Instruments." DMA (Doctor of Musical Arts) thesis, University of Iowa: 2016. https://iruiowa.du/etd/3231.https://doiorg/10.17077/etd.hrz2wnbk, pg. 46.

will often place the main melody in the lowest possible register, as is characteristic of its use on the *khaen*.

2.1b Melody

As mentioned in the previous chapter, the Thai tradition does not typically distinguish between composers and performers.[10] One reason for this is that many of the melodies in wide circulation date back to the 18th century, and any trace of recorded authorship has been lost to history (or more likely, it was never documented in the first place).[11] Another reason is that of the two primary types of melodic style (motivic and lyrical), the motivic cells heard as part of any given melody are somewhat interchangeable between songs, meaning that certain specific motives may be traced throughout the repertoire. Melodies of the "lyrical" type are longer, and are not easily broken up into smaller units.[12] The originating melody might also invoke an "exotic" style. These styles are known as "accents", or *samnieng*.[13] The Thai repertoire is replete with songs intended to invoke the exoticism of foreign cultures.[14] They possess certain modal characteristics and

[10] Setabundhu, Jiradej. "Aspects of Thai Music and Compositional Techniques in Selected Works of Jiradej Setabundhu." Northwestern University, UMI, 2001, p. 7.

[11] The notion of "cultural preservation" is not native to a Buddhist culture, and it really was not until the 20th century that the Thais began following the western concept of nation-state.

[12] Setabundhu compares this style with the melodies common to the romantic composers, comparing a Thai melody with a Schumann melody. (Ibid., p. 7.)

[13] This will be explained in the following pages.

[14] In essence, *orientalizing* the "other" from the Thai-centric perspective.

melodic ornaments that recall foreign sound.[15]

2.1c Modal Areas

The Thai modal classification system makes use of the term "pitch level," roughly analogous to the Western notion of "tonic" or "key." [16]

Level I roughly corresponds with the western key of 'G.' Level II is comparable to 'A' and so forth. In theory, all seven pitches of the scale might be used as starting notes for distinct modes or scales, although in practice, only four modes are common practice, those at pitch Levels I (G), IV (C), VII (F) , & III (Bb).

Given that the seven possible pentatonic modes all express the same intervallic content and ordering (22323), we can now apply "mode" as it is understood in western music theory, as an intervallically specific and unique representation of a parent scale built from any degree other than ˆ1. If we take a given pentatonic scale to be a potential "parent scale," we might consider five distinct modes of varying intervallic ordering. For example, given pitch level IV (C major pentatonic) as our "parent" scale, one can derive five modes of distinct intervallic ordering, such that the first mode begins on C, the second mode on D, the third mode on E, the fourth mode on G, and the fifth mode on A.

---

[15] There are as many as a dozen distinct *samnieng* (accents), including *Khaek* (Persian / Arab), *Farang* (Western, stemming from the Thai pronunciation of *français*), Lao, and ancient pre-Khmer.

[16] This was omitted from the previous discussion of mode due to the fact that Thais more commonly use the named modes, while the pitch-level terminology and system are not referred to in practice, but rather have been emphasized by earlier Western scholarship.

Practically speaking, the only other mode in frequent use besides the first mode is the fifth mode beginning on ˆ6 (or the relative minor mode, as discussed earlier). Thai musicians have adopted the terms "major / minor" to articulate the relationship between these two modes as they exist within the context of Thai music.[17] Alternations between the major mode and its relative minor mode are commonplace throughout the repertoire. That said, it should be noted that the central pitch of a minor pentatonic mode does not correspond to a "home" pitch-level as such; its identity is contingent upon the parent-scale. [18] The pitch-level of the minor mode results from the distinct intervallic ordering (as explained previously, and also in footnote).[19] Likewise, to describe Thai music as existing in a 'key' would be inaccurate, yet Thai musicians in practice do recognize local areas of pitch-centricity. Academics sometimes refer to these as "tonal areas," but I believe "modal areas" to be more apt, because the term 'tonality,' like 'modulation,' carries notions specific to Western music theory, whereas "modal area" describes only the central pitch, and the modal pitch content, but it is not burdened with the Western notions of tonic and dominant harmonic function. A "modal area" is implied by the use of a given set of pitches within a melodic phrase or temporal section, the pitches accented by *ching* strokes at

[17] Garzoli, John. "Mawlam and Jazz in Intercultural Musical Synthesis." *Rian Thai International Journal*, Chulalongkorn University, Institute of Thai Studies, 1 Aug. 2019, http://www.rianthaijournal.org/book/rian-thai-volume-11-2018-number-1/. pg. 11.

[18] For example, as *Thang Kruat* contains C D E G A, we can consider this pentatonic scale the "parent-scale." The mode beginning on pitch 6 results in A C D E G.

[19] The major mode, 1 2 3 5 6, consists of the following scalar steps, 2nd, 2nd, 3rd, 2nd, 3rd, while the minor mode, 6 1 2 3 5, results from scalar steps, 3rd, 2nd, 2nd, 3rd, 2nd.

structural tones, the insertion or withholding of particularly suggestive pitches, and the contraction and expansion of modal density that contribute to sectional demarcation.[20]

For a more thorough examination of mode in "Impulse Control," please see "formal structure vs. time" in Appendix 6. The modal areas listed therein offer more detail, including momentary shifts, modal density (rated on a scale of 1 to 7, minimum to maximum), as well as episodes of superimposed or layered thematic material (approaching a discernible bi-modality, despite only using 7 notes).[21]

The modal areas in "Impulse Control" are summarized in the following figure.

Reh. Let.	A	B	E	K	L
Section	Intro	1 + transition	2	transition	3
Mode	G	C	Em	Am	Em

Figure 2.1 Primary modal areas in "Impulse Control"

[20] Movement between keys or tonalities in Western music is called modulation, but this term is not applicable to Thai music, as the harmonic conditions by which modulation is defined are simply not present in Thai music, nor is any other conception of harmony as a musical determinant.

[21] The success of these modal superimpositions relies largely on the imagination of the listener, to be able to recognize the intended foundational mode as distinct from the superimposed mode above. Timbral distinctions certainly help, while some of the later attempts at projecting a sense of poly-modality were less effective due to timbral similarity of the contrasting modes. Additionally, the overall range of the ensemble is rather limited, forcing instruments to sound in each others' registral space, whereas in the context of jazz improvisation, polymodality is often expressed through the instrumental occupation of registral space of significant enough size to allow the two modes at play to give the impression of belonging to two distinct audio streams. This is the case in big band chord arrangements, as well as in small 'combo' improvisations.

The introduction (*rua*),[22] reh. A, m. 1, begins without an obvious meter, as the hanging gong (*moong*) rings out an open G numerous times in slow succession, announcing the ensemble in tutti ascending and descending gestures, followed by timbrally related pairs. The strike of the gong repeats at intervals of approximately 6 seconds, with gestures occupying the interim space. The first section - reh.**B**, m.15 - begins once the *ching* establishes the initial tempo of 120 bpm. Here, the *ching* is responsible for setting the tempo, but then is tacet for some time, as the mallet instruments and the *taphon* begin their *ostinato* cycles comprising different numbers of repetitions of a three note pattern, C - D - G in 8th notes, with emphasis placed on every third note. Each instrument performs a temporally unique cycle of 2 bars, 3 bars, or 4 bars, such that the complete meta-cycle lasts 12 bars (that is, the point at which all three cycles reconverge). For example, the *taphon's* cycle is the longest at 4 bars, giving the drum cycle three full iterations within one 12-bar meta-cycle. Likewise, the *ranat ek lek*, whose duration is 3 bars, will complete four iterations within a metacycle, and the *ranat thum lek* maintains a steady 2-bar pattern that repeats 6 full times within one metacycle.

The modal content of the piece as a whole emerges from a horizontal projection of the opening motive. This structure is a pitch-class reduction of a quintal triad in open position (i.e. C - G - D, with the D brought down an octave).[23] Generally speaking, a

[22] "Introductory passages in a 'floating' rhythm, or 'free' time, that feature virtuosic instrumental displays, or that focus on a solo rubato vocal, are called, *Rua*." (Setabundhu, pp. 28)

[23] Admittedly, the C and G pentatonic, hexatonic, and relative minor modes constitute the modal foundation, while the D major / B minor pentatonic are only implied briefly at a few particular moments.

listener might understand the 1st section as belonging to the C major heptatonic scale, beginning with the quintal triadic abstraction of the motivic kernel, followed by a gradual increase in modal density in the improvised conversation between the *saw u* and *khlui*.[24] Once the improvising instruments join together in 'unison' to play the *luk khong* (the 'central' melody), whose essential notes are articulated by the return of the *ching*, the modally ambiguous theme begins to project an increasing sense of polymodality (that is, the simultaneous use of two or more distinct modes). The 'central' melody in isolation projects a strong sense of E-minor (*thang nai* G mode from the 6th degree), but placed here, over the 3-note background motive, with a sustained 'B,' and then in presenting the final note of the 7-TET heptatonic, the F# (which can be understood as belonging to either B minor pentatonic, or D major pentatonic). The B and F# arise not as passing tones, but as intentional points of departure from the predominant modal pitch-center. Stated more succinctly, in the first half of the basic melody, the E minor over C major projects an air of bi-modality, and in the second half, the melodic notes of B minor over C major create a slightly more tense polymodality, particularly with the arrival of the F# in registral proximity to the G from the ranat accompaniment.[25]

[24] As the section progresses, the lower mallet instrument, the *ranat thum* employs a Thai performance practice, adding a fourth below the primary melody, adding G-A-D in the lower-register left hand.

[25] NOTE: For reasons already discussed previously, the minor modes are always associated with their relative major mode, and this convention is reflected in the Modal analysis (E minor is denoted by "G," *thang nai*, and B minor is denoted by D major, *thang klang haep).*

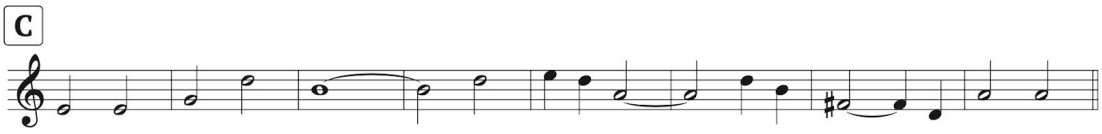


Fig. 2.2 Section **1**, 3rd lvl. slowest tempo (*Sam Chan*)[26]

Consider the first half of the melody. The set of pitches constitutes four notes from the G pentatonic scale, *thang nai*, or more specifically, the mode beginning on the ˆ6 of *thang nai* (E minor pentatonic). Due to their sustained durations and structurally poignant placement, I consider the two notes E and B to be the most important tones in the antecedent.

Now consider the second half of the melody (mm. 51-54). Due to their placement on the downbeat of a 2 bar cycle, the two structural tones are E and F#. However, pitch A exerts a strong influence as well, approached by leap at both the beginning and ending the phrase. In conjunction with the E, D, F#, and B, the auxiliary note A completes the new pitch collection, B - D - E - F# - A,[27] the relative pentatonic minor of the D major pentatonic mode, *thang klep hep*. The full melody outlines a hexatonic set, E-F#-G-A-B-D. Along with the original motivic tri-chord *ostinati* emphasizing pitch C, an aggregate heptatonic collection of C D E F(#) G A B, thus attaining maximal density before the

[26] As a matter of convenience, the Western score for Impulse Control is transcribed in 4/4 instead of the customary 2/4 meter.

[27] The Thai custom is to adjust accidentals as needed to best represent their modes. Thus, as a matter of convention, the F# in the context of D mode reinforces the sense of modal structure (1 2 3 5 6).

transition brings back the sparser opening texture of the C-D-G structure, this time presented as a homophonic quintal tri-chord spread between the two *ranats*.

Transition 1

By blurring the musical structures between the major sections, rhythmic levels, and modal areas, the transitions serve to develop both previous and foreshadowed material.[28] Functionally and practically, they allow the piece to organically morph between sections at an unhurried pace, without any sudden shifts to other modal areas, instead focusing on creating polyrhythms that reflect the tempo 'levels' of the previous and impending sections. Once a new tempo is established, the subsequent transition material continues to explore thematic content from the prior section. The upcoming section begins only when all of the previous musical material has ceased. Thus, sectional boundaries do not necessarily coincide with the tempo changes.

Section II: *Song Chan* (2nd level).

After the remaining transitional material, with a new tempo established in time for the second section, the full ensemble plays the *luk khong* (essential melody), again outlining notes from the E minor pentatonic mode (the relative minor of the 'G' mode, *thang nai)* for the first half, then outlining notes from the 'D' mode (*thang klang hep*) for the second half. The notes of the *luk khong* are "harmonized" by a descending stack of 4ths spread across the four hands of the two *ranats*, who are still playing on the softer brass-key

[28] See SCORE, Transition #1, Reh.D (m55) ⇒ Reh. E (m. 79)

"indoor" versions of their respective instruments for this section. The *ranat ek lek*, and the *ranat thum lek* are timbrally similar, and the combination of the two instruments yields a larger range than either instrument alone. This, coupled with the idiomatic 2-hand performance style, allows the pair of musicians to collectively execute 4-note simultaneities. The stacked 4ths are a complete departure from traditional Thai melodic practice, as the pan-heptatonic quartal voicing below the primary melodic notes create a "harmonic" event - that is to say that despite the lack of any harmonic functionality arising from the parallel-structure of the sequence, the timbral disparity between the traditional sound of idiomatic heterophony and the sound of a wide register of evenly spaced notes in homorhythm is itself a demarcation of the structural boundaries of the current texture.

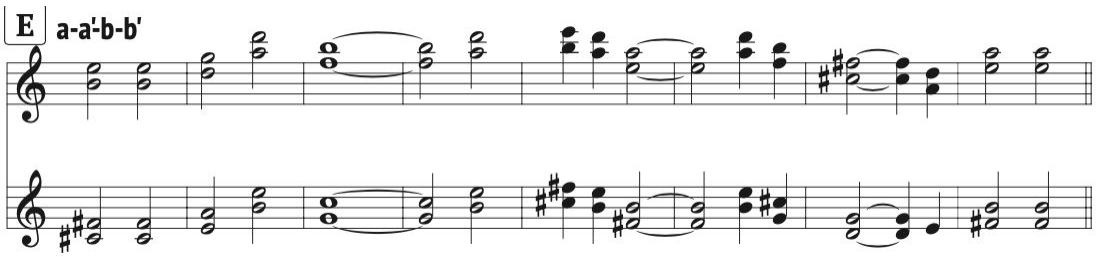


Fig. 2.3 Section 2, 2nd level (*Song Chan*), Quartal stacks, rehearsal **E,** m. 79

After the repeat of the **a** (**a'**), when the **b** theme begins, the longer melodic phrase expresses the hexatonic mode borrowed from *Isan*, known in Thai as *lai yai, thang yao*, and roughly equating to A minor pentatonic + 1 (the "plus one" in this case, the note 'B,'

results in A-B-C-D-E-G).[29] This hexatonic pitch-set covers the **b** theme almost entirely, until the appearance of the F# outlier, once again at the very end of the 16 bar phrase. From the micro-perspective, the first 4 bars of **b** can be understood as part of the hexatonic set described above, while the 2nd 4 bars suggest E minor again. The second half (or the 3rd grouping of 4 bars) holds to E minor, but the final phrase projects a sense of A minor hexatonic, further obscuring the pitch center with the ascending tetrachord of the last four measures, A B C F# (this last motive is derived from the *thang klang* mode, A B C E F#).[30] As in the first movement, the melody gradually reveals the total chromatic over the duration of the line.[31]

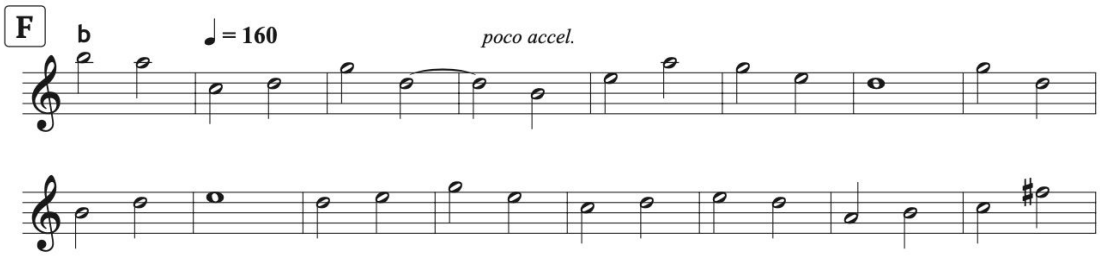


Fig 2.4: **'b'** theme, 1st statement

---

[29] See fig. 2.3, m. 95

[30] In jazz terms, this pentatonic intervallic ordering is often referred to as the Coltrane pentatonic, as well as the melodic minor pentatonic, or the minor nat. ^6 pentatonic.

[31] The "total-chromatic" refers to only 7 equally-tempered tones.

Transition 2

At rehearsal letter **I,** m. 187, the layering of multiple statements of the B theme at proportionally related tempos brings into the second transition, connecting the 2nd section to the 3rd. The modal center is obscured, as the total heptatonic is present throughout, and structural tones are not easily identifiable due to the metrical blurring.

At rehearsal **J,** m. 207, the *ching* guides the ensemble into the new tempo through the final metric modulation, and once the final tempo is firmly established (*chan dio*, or 1st level), the *ranat ek* improvises in *thang nai* (G mode).

When the *kotekan* pattern is subsequently layered into fold (reh. **K**, m. 227), with the fading **b** material from the previous movement, the superimposition of G over C occurs once again, as the **b** material from the second movement is mostly expressed in G major / E minor, and the *kotekan* hocket melody is in A minor. After the first iteration of the 16-bar *kotekan* pattern (reh. **K2**, m. 243), all material from the previous movement ceases, and the ensemble is in a definitive A minor (aka *thang kruat,* C maj. pentatonic) for the remainder of the section.

Section 3, 1st level (*chan dio*)

At rehearsal letter **L,** m. 275, we hear the return of the syncopated figure from the first movement, marking the start of the third and final section, the *chan dio* (1st level)

variation of the central melody, pictured below. This melody is a 4-bar version of the 8-bar A-theme from the second movement. Accordingly, the first half contains a set of pitches suggesting *thang nai* (the "G" mode), with an emphasis on pitch 6, "E", while the second half contains a set of pitches that suggest "D" scale, *thang klep,* again emphasizing the two extra notes B and F# as structurally significant.

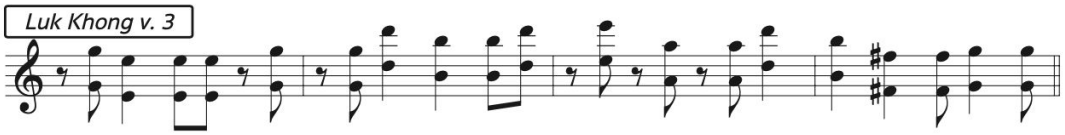


Fig 2.5: Final section, 1st level (*chan dio*)

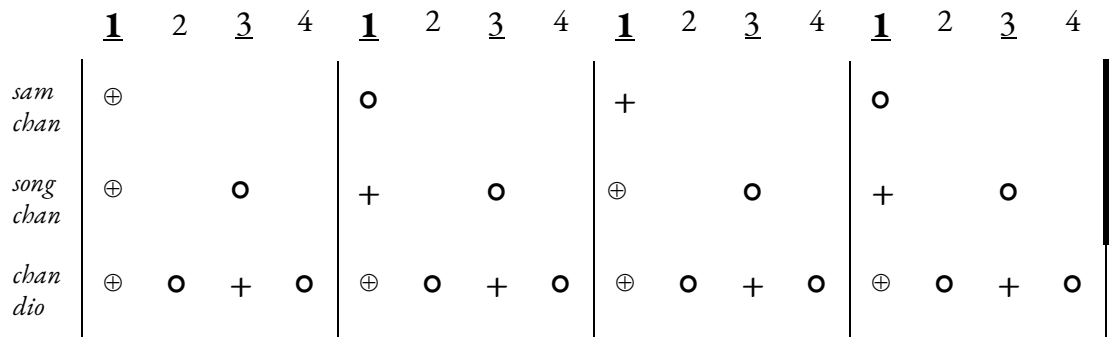
2.2a The *Ching* Cycle and the Three Rhythmic "Levels"

Thai music consists of three rhythmic levels, each defined by the specific rhythmic patterns of cymbals, gong, and drum (see figure 2.6).

The primary time-keeper in the Thai ensemble is the pair of hand-cymbals, the *ching*. The *ching* can make two sounds, an open, resonating strike (known as *ching*, and represented by an "O" on the illustration below), and a dampened and accented strike (known as *chap*, denoted by a "+"). The large majority of Thai classical songs are in duple meter, with alternating open and dampened strokes in groupings of four at different speeds. A cycle of four strikes begins with an open, and ends with a dampened strike. The second dampened strike of any grouping of four is structurally important, as it will coincide with a structural note in the melody. In Thai music, the strongest accent in a grouping of four is felt on the fourth beat (the second *chap*, the last stroke in a grouping of 4). This fourth beat is equivalent to the Western down-beat. There are three metric levels (known as *chan*), each related to each other by a factor of 2. The *sam chan* (third metric level) is the least dense (the *ching* strokes are the furthest apart, spanning 16 measures, only striking on every other bar). In the *song chan* (second level), the *ching* pattern takes exactly half the time of the previous level, now striking once per measure, the overall pattern lasting 8 bars. In *chan dio* (1st level), the pattern would only last 4 bars. This is illustrated in Terry Miller's chart below. The circle with the "+" in the middle represents the structurally important note, and the strongest accent in the cycle of four strokes. This is

called *siang tok*. Myers-Moro notes that this is often reinforced by an additional gong-stroke.

Western count



Thai count

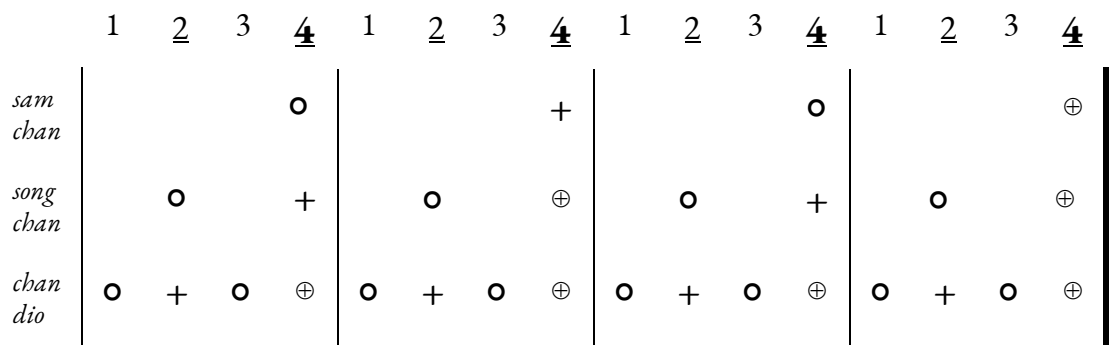


Fig 2.6: *Ching* Patterns: Western and Thai Beat Count Notation[32]

The top set in Figure 2.6 is notated in a Western style of counting beats, with the most important tones landing on the downbeat (beat ONE), followed by beat three, which is more significant than beats 2 and 4. The bottom set is notated in the Thai style,

[32] Morton, page 41.

where the placement of the emphasis notes is shifted by one beat (as beat 4 assumes the most important role).

These distinctive rhythmic patterns subsequently provide a hierarchical pitch structure on which traditional Thai musicians base their compositional and improvisational process. The notes that fall on the end of each cymbal pattern are called *luk-tok* (pillar-tones), with those *luk-tok* that fall on the end of the drum patterns defining the end of each phrase. Between each pillar-tone, every player is free to play anything within the instrument's *thang* (handiwork or performance practice). However, all instrumental parts have to meet on the pillar-tones, whether in octaves or unisons. They can occasionally miss some pillar-tones on cymbal strokes but they never miss the pillar-tones on the end of the drum patterns.[33]

Thai musicians describe three tempo "levels," the slowest is *sam chan*, or "3rd level," the medium pace is called *song chan* (2nd level), and the fastest is *chan dio*, or "1st level." The finger-cymbals (*ching*) alternate between open and damped strokes, the latter serving to articulate the structural tones in each variation. In the first movement (*sam chan* slow tempo), certain notes are demarcated by a *ching* stroke (open or closed) every 4 beats (so two measures of the conventional 2/4 meter, or one measure of common 4/4 time, as in Impulse Control). The pitches accompanied by dampened *ching* strokes are more

[33] For explanations and examples of the Thai metrical levels, pillar-tones, and compositional process, see Setabundhu, Jiradej. "Aspects of Thai Music and Compositional Techniques in Selected Works of Jiradej Setabundhu" (PhD diss., Northwestern University, 2001), 7-15.

important than the notes with open *ching* strokes, and the most important pitch occurs at every other dampened stroke (i.e. for the second rhythmic level, *song chan*, the same formula obtains, except that the *ching* strokes are now articulating every half-note, with the most important pitch occuring every other bar.)

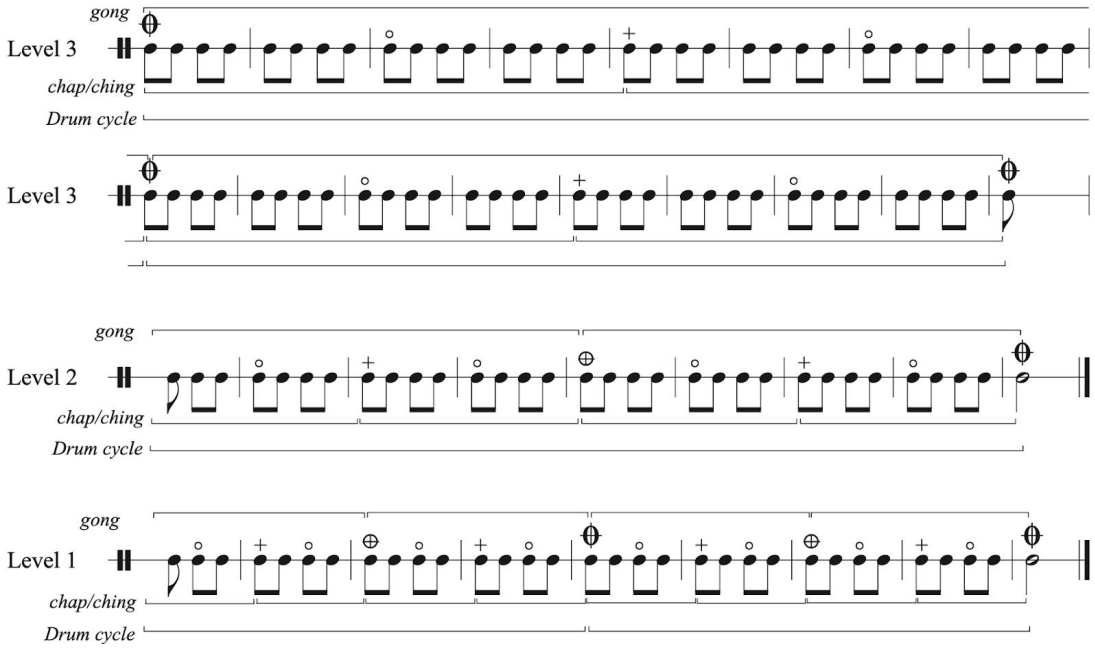


Fig 2.7: Relationship of Cymbal Strokes, Gong Strokes and Drum Patterns[34]

[34]Chucherdwatanasak, Nathinee. "Narong Prangcharoen and Thai Cross-Cultural Fusion in Contemporary Composition." Masters thesis, University of Missouri Kansas City, 2014, pg. 77.

2.2b Tempo Fluctuation as Performance Practice

The Thai conception of tempo is notably distinct from most Western music, which typically remains in one tempo for a sustained duration, with accelerations and decelerations more an effect than the norm. The Thai sense of tempo also is distinct from any African diasporic music that relies on a highly-developed internal sense of rhythmic periodicity (or "metronomic" sense). Thai ensembles practice speeding up and slowing down together, over short and long durations. As a listener of Thai music will attest, the tempo is in a constant state of flux. It speeds up gradually towards the next movement, sometimes resetting and speeding up again, or slowing down uniformly at the end of phrases. Bruce Gaston offers the uninitiated listener an essay, *Gradus and KowGrylas: A Practical Guide for the Development of Thai Listening Skills*, in the album notes for "Ancient-Contemporary Music from Thailand," by the group, *Fong Naam*.[35] He attaches great significance to the rather unique sense of time and tempo held by Thai musicians:

[35] Gaston, an American expatriate living in Thailand since the 1960's, is one of the few privileged "farang" (Westerners) to attain "mastery" of the music, thus entrusting him to perform the most important spiritual rites and ceremonies from the ancient body of sacred works. He has mastered the most complex of the sacred repertoire, and has done much by way of building a musical and cultural bridge between east and west.

> The basic Thai feel for tempo is a gradual *accelerando* from slow to fast. It requires much discipline in order for a musician to be able to control a gradual *accelerando* over a span of 20 or 30 minutes such as can be heard in .....This is to be distinguished from the Western manner wherein the basic training is to maintain a steady tempo.[36]

Gaston even goes so far as to draw parallels between the approach to musical performance practice and Thai culture, writ large:

> The Thai rhythmic style, whereby the basic orientation of the tempo is an accelerando, is so characteristic of the Thai way of doing things that we can find analogous manifestations throughout Thai culture. We see the stupas in Buddhist temples, reaching to the heavens, there are the *chadas*, or pointed hats which have become the most well-known symbols of Thai classical dance, one of the essential features of Thai traditional houses are their pointed roofs. Indeed, the traditional *wai* or raising of the hands as a gesture of greeting demonstrates this upward movement. And in Thai music, the inability of the beat to remain static but to always be speeding up is certainly related to Buddhist teachings concerning change.[37]

Gaston proposes that the intonational disparity of the tuning systems is only one of multiple disparities in performance practice across cultures, thus adding weight to the notion that the Thai classical musician has a fundamentally different approach to time than does the western musician. The Thai musician does not rehearse with a metronome (when practicing Thai classical music), because the resulting static tempo would negate the desired effect. Given that the aesthetic of the music relies so heavily on the ensembles' ability to accelerate rather slowly (over the span of minutes), the Thai musician is always aware of and sensitive to the ensemble's tempo (whether accelerating or decelerating).

---

[36] Gaston, Bruce. Liner notes. "*Gradus ad KowGrylas*: Being a Practical Guide for the Development of Thai Listening Skills," from *Ancient-Contemporary Music from Thailand*. Music by *Fong Naam*. Celestial Harmonies, 1995, CD.

[37] Gaston, Bruce. Ibid.

Being a conscious participant is necessary to keep in time with the group throughout so many points of fluctuation. David Morton describes the practice with the following:

> When the three divisions (i.e., the three metrical patterns) are used in a suite, an acceleration of the pulse occurs near the end of a division, heightening the tension, which is released at the change to a new *Ching* pattern.[38]

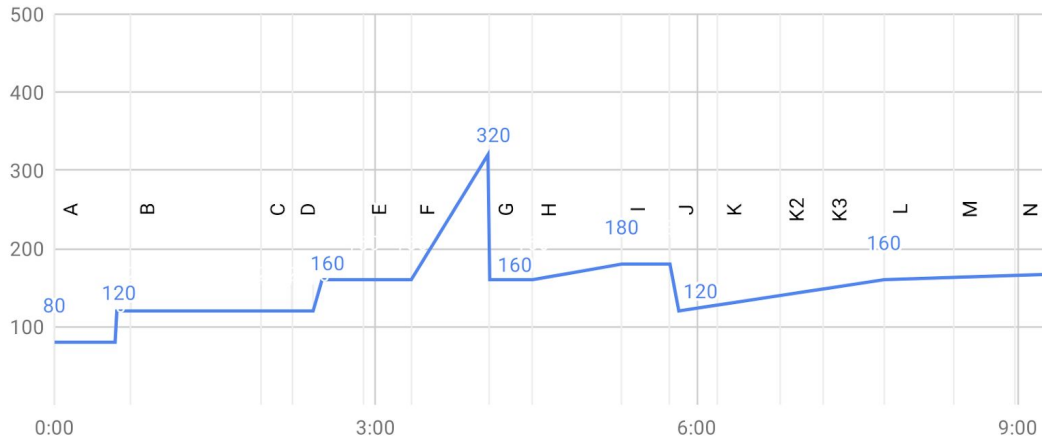


Fig 2.8: Tempo in B.P.M. (y- axis) over Time (x-axis)

This unique ability of the Thai ensemble to uniformly push and pull on the tempo is explored in the second movement. The central melody in its essential form closely adheres to an AABBAABB structure (the A theme alone was used as the model for the variations in the 1st and 3rd movement).

[38] Morton, David, "The Fundamentals of Thai Music," Berkeley: University of California Press, 1976, pg. 43.

On the figure above, the X-axis represents time, and the Y-axis represents tempo. The 2nd section tempo of 160 bpm holds steady for the first and second "**a"** themes, however the gradual ensemble *accelerando* begins at the first statement of the **b** theme, rehearsal F, m. 95, and it continues pushing forward on the tempo for almost a full minute. Just before the repeat of the entire AABB, the accelerando reaches 320 bpm, exactly twice the tempo it started at, but then the ensemble immediately drops back down to 160 bpm for the sectional repeat of AABB. The B theme repeats for a third time (labeled B" below), making it through only 4 full bars before returning to the A theme at the original tempo.

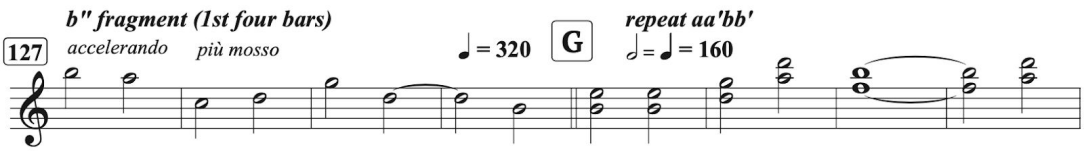


Fig. 2.9: *Accelerando* through 320 bpm, then *subito* q=120bpm, reh. **G,** m. 127-134

2.2c Metric Modulation

Impulse Control has three sections in three tempos, moving sequentially from slow, to medium, to fast, just as in the *Thao* form (see further explanation of the *thao* in the following section). The transitional material between movements becomes an opportunity for the superimposition of Western musical structures on the existing "Thai" material, through the recapturing, expansion, contraction, and layering of melodic content

from the "*luk-khong*", the central melody of the 2nd movement (*song chan*).

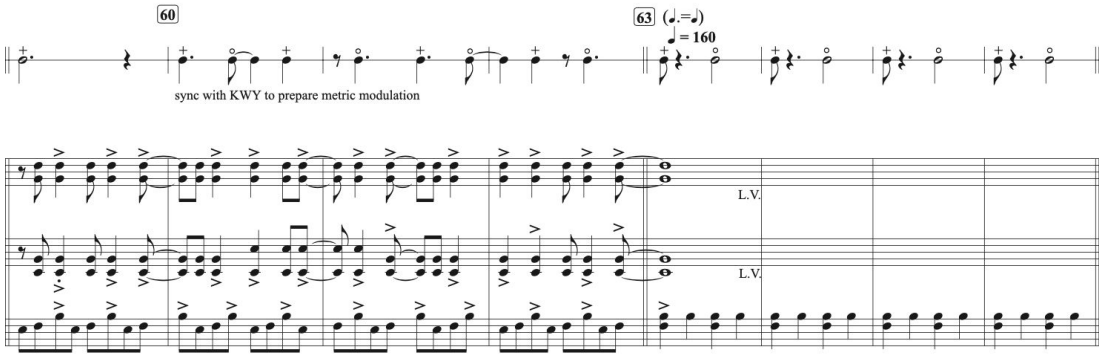


Fig. 2.10: Transition from 1st to 2nd section, q=120 & q=160

In the first transition, at measure 60, the *ching* picks up the accent on every third 8th note (along with the *gong wong yai*). The accent on every three 8th notes is reinterpreted as a half note in the upcoming tempo, 160 bpm. Some continuity between tempos is obtained by the *khlui's* continued improvisatory performance, and the restatement of the rhythmic motive in the *ranats*, (which foreshadows the melodic variation from the 3rd movement in the fastest tempo, *chan dio*). This rhythm serves as a "send off" for the 2nd movement, as just before the entrance of the essential melody.

After the repeat of the AABB, the tempo does not increase as drastically and quickly as the first time around. By the end of B2", the tempo has increased to 180 bpm (5'14", m. 183). The second transition, at m. 187, finds the mallets playing the B theme at different speeds. The *ranat ek* has exactly doubled the tempo, while the *gong wong yai* is playing it at 1.5 times the original speed. This means that for every three quarter notes

played by the *ranat ek*, the *gong wong yai* has played *two* dotted quarters.

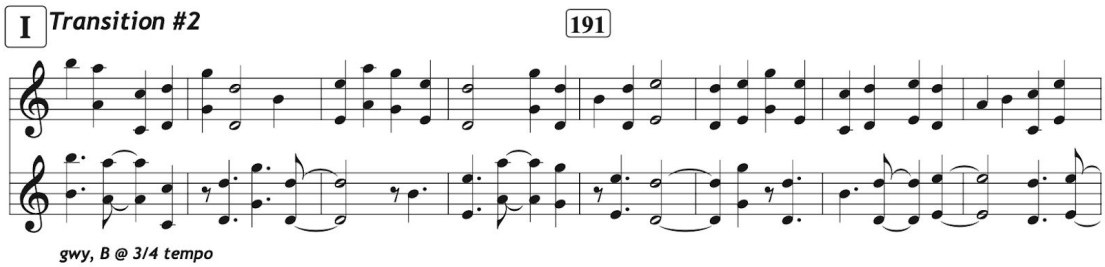


Fig. 2.11, Transition #2, m. 187

At m. 191, the *ranat thum* begins a cycle of ascending 7-note scales, at first in sync with the *ranat ek* in the top line, accenting the 2nd level tempo. At m. 199, the *ranat thum* reorients itself to the upcoming tempo, now syncing up with the *khong wong yai's* dotted-quarter-notes-over-the-barline

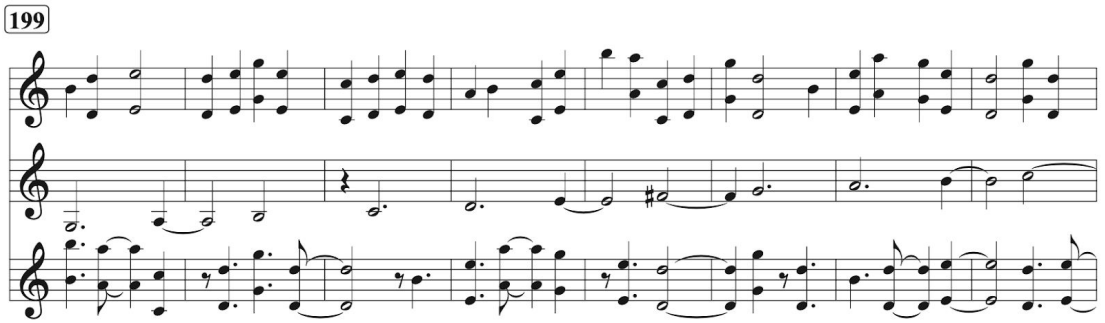


Fig. 2.12, Transition #2, m. 199

When the dotted quarter is reinterpreted as the regular quarter, the new tempo becomes 120 (a metric modulation from 180 to 120, a 3:2 proportion). The *ching* helps guide the ensemble into the 1st level tempo at rehearsal **J** by joining the dotted-quarter-notes of the *ranat thum* and the *khong wong yai* (the two lowest staves in the system pictured in figure 2.13).

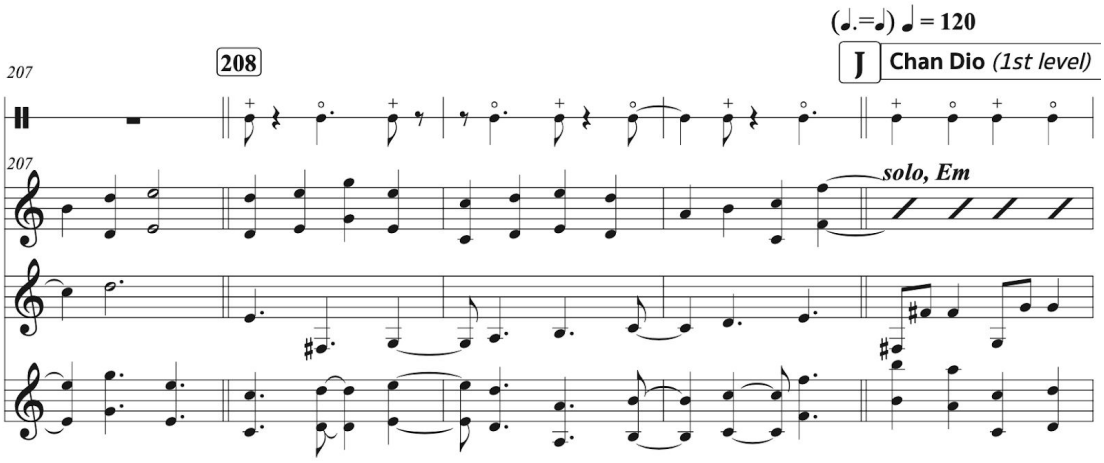


Fig. 2.13, Transition #2, metric modulation #2, m. 207-231, reh. **J**

2.3a Thai Approach to Composition

David Morton writes, on the nature of consonance and dissonance in Thai music:

> The motor power driving this type of music forward is the alternation of relative consonance at structural points of unison (or octaves) with relative dissonances between those points, through the idiomatic treatment of the lines.[39]

Melody in Thai music can generally be classified as one of two types, lyrical / flowing, or motivic. A composer will generally write a new melody at the *khong wong yai* (large gong-circle). Myers-Moro recounted the description put forth by her mentor, who stated that inspiration springs from nature, or is received through the divine muse.[40]

The composer must be aware of the thaang of all the instruments who will perform the piece. The composition will string together motivic units that are common to other songs, and are well-known by the other musicians who will play the piece.[41] The composer then produces the most basic version of the melody, the *luuk khaung.* Playing this melody for the other members of the ensemble, each one will memorize it quickly, and transform it to suit their relative instrument. The *khaung wong jaj* usually plays some form of this melody, while the *ranaat ek* plays the most embellished version of it. These two

[39] Morton, pg. 115.

[40] Myers-Moro, Pamela. *Thai Music and Musicians in Contemporary Bangkok*. Berkeley: Centers for South and Southeast Asia Studies, University of California Berkeley, 1993. (pg. 91).

[41] A common melodic vocabulary is shared by all musicians and a large body of repertoire, thus facilitating the efficient aural transmission of rather complex and long melodies.

instruments carry a very important role in the ensemble, as they are sort of comparable to the conductor and the lead soloist, respectively.[42]

2.3b The *Thao*

The *thao* is the most popular compositional form of non-sacred repertoire. The governing principles of an entire piece are borne out of a single melody (whether newly composed or borrowed from another song). First, the melody is set to the 2nd level *ching* cycle, thus demarcating the most important structural tones, the secondary structural tones, and non-structural tones. Then, the composer creates two additional versions of the original melody through temporal interpolation and extraction, creating an outline for two variations of the original melody, at double the length and half the length of the original. The three sections are always played in order, beginning with the longest variation, and ending with the shortest. While it is customary to refer to these sections as "slow, medium, fast," the tempo of a Thai piece does not actually change much from section to section; instead, the *Ching* cycle, which outlines the structural notes of the melody common to all variants, doubles its rate with each new section, and common performance practice dictates a modicum of ensemble acceleration and retardation (always heading towards or away from a "pillar tone").

[42] Olsen, Alexis, "Thai Classical Music: A Survey of the Music and its Culture," Qualifying Exam, UC Santa Cruz, May 31st, 2012. p. 101 - 128.

2.3c *Khaek Bora Tet* Analysis

A large portion of the *sepha* repertoire body (comprising secular songs for entertainment) exemplify the various national "accents" (*samniang*), described in section 2.1b, above. *Khaek* refers to a Persian or Arab "accent."

Consider the central melody for *Khaek Bora Tet*, presented in three versions, stacked on top of each other for easy comparison (see. Figure 2.14 below). The final note in all three variations is marked by a *ching*/gong sign, denoting its importance to all three melodies. As the comparison illustrates, the "pillar tones" will not always correspond, but the hierarchically significant tones are rarely missed. For example, in *Khaek Bora Tet*, the level 3 augmentation has a *ching* stroke every two measures, it appears the Level 2 version possesses all the same notes, as expected. The 1st level variation (*Chan Dio*, the short one on bottom) only shares two "*Luk Tok*" (pillar tones) with the others, and we should remark that they are on the metrically "strong" beats of 2 and 4 (as counted in Thai, the Western analogue being beats 3 and 1), the *ching-gong* strike on the final melodic note C, and the damped *ching* accent on E, as well (these two are more important than the remaining two strikes in a cycle of 4).

Pillar tones in *Khaek Bora Tet*

The following example is a transcription of a lesson recording I had made at the Thai center in Berkeley. The bottom staff is my *ranat thum* rendition, which is apparently

pretty close to the original *luk khong*, and the top staff shows the *ranat ek* playing in his corresponding *thang*, characteristically running 16th-note lines between the structural pitches. In following along with the melody, and observing the most important structural tones, the reader should quickly grasp the concept.

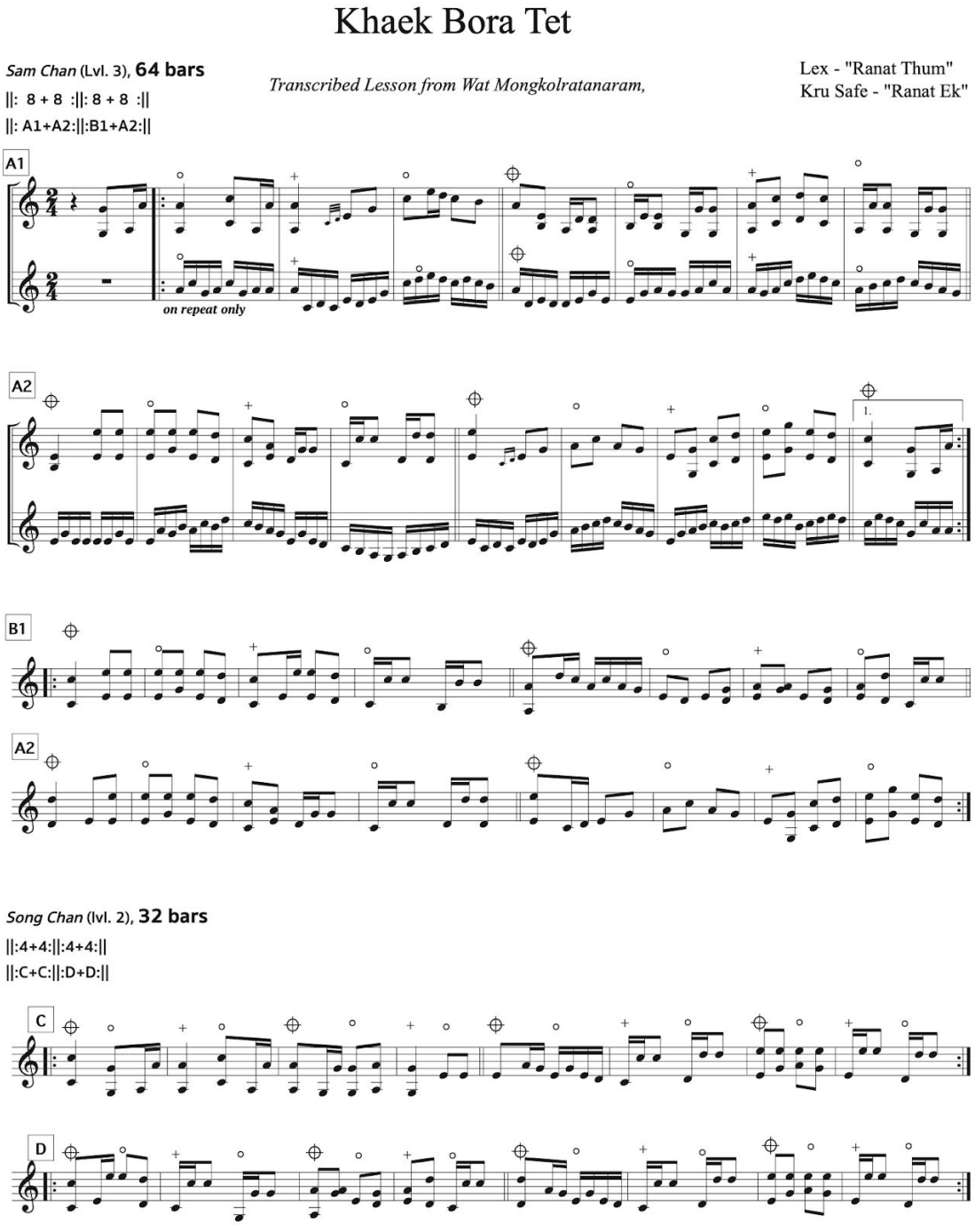


Fig. 2.14 *Khaek Bora Tet*, transcription

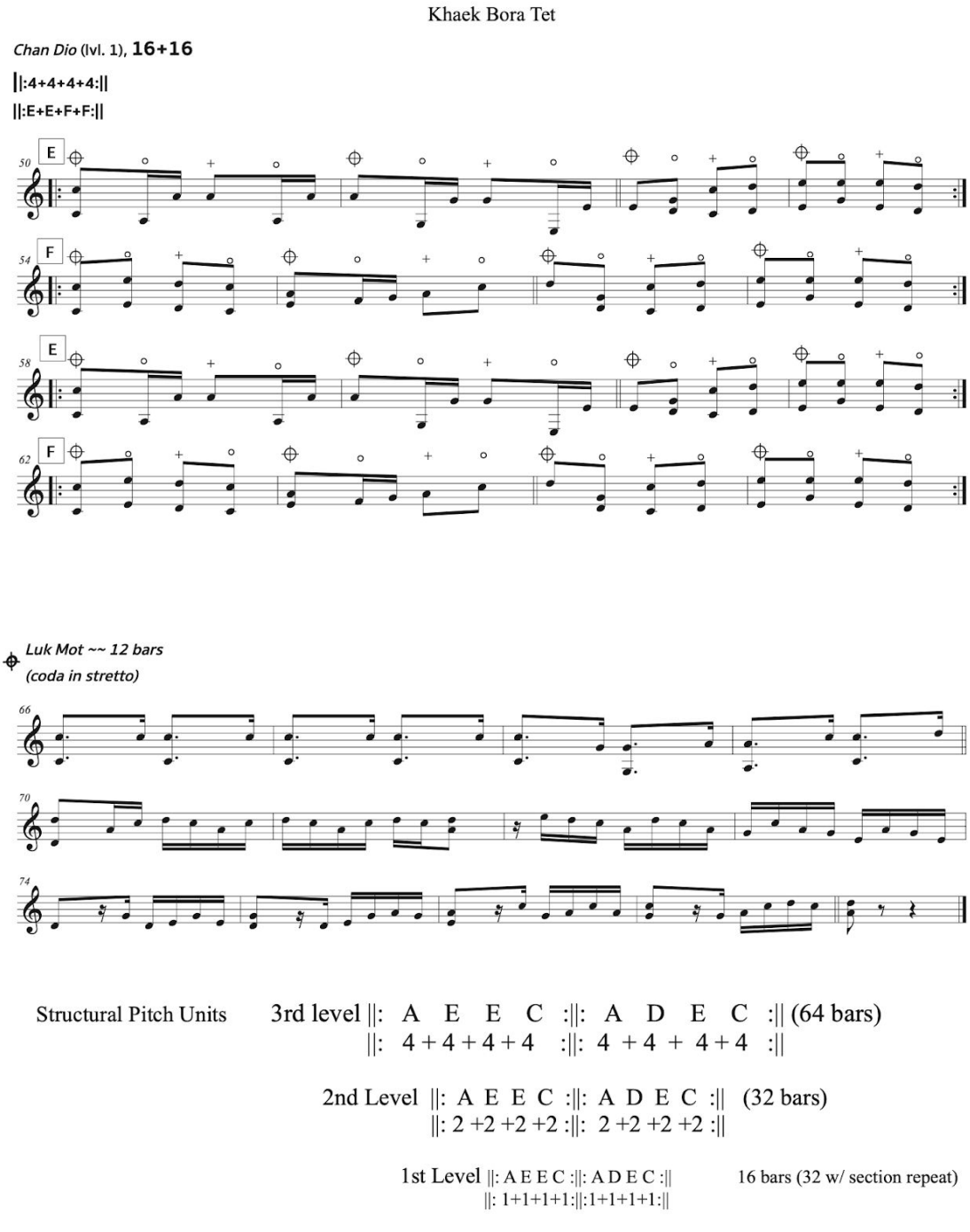


Fig. 2.15 *Khaek Bora Tet,* cntd.

This particular melody appears to stick pretty close to itself, so although it may appear that we are skipping important tones, we are simply outlining the most important ones. If we compare the notes falling under the *ching/gong* symbol in A1, (for example, see measure 17) we get the notes C, then A (from m. 21), E from m. 25, then another E in m. 25. For the sake of continuity, let's continue analyzing the "B" phrases, which are still in the *sam chan* rhythmic level. At m. 33, C, then another A at. m. 37, a D at m. 41, and an E at m. 45. After consolidating that information, we have compiled the essence of all melodic variations.

One common aspect of the *Thao* is the ending, often called the "*la*" or "farewell" song, this tagged ending frequently features half the group playing a precomposed melody, and the other half playing the same melody 2 beats late. The overlapping of melodies at a close interval (referred to as stretto in Baroque music) creates excitement and surprise, it certainly obfuscates the rhythm, and perhaps most significantly, it creates pitch density (which, in Thai 7-TET, acts as the building dissonance that resolves through pitch unity (at the important structural tones).

2.3d *Thao* in Impulse Control

The Thao form was the inspiration for the three movements in Impulse Control, with a slower introduction, a medium tempo middle, and a faster end, though I took compositional liberties with my variations.

Consider the figure below: the three melodic variations from Impulse Control are stacked up for an easy comparison of structural tones. Once again, I am choosing to focus only on the MOST important structural tones. Accordingly, we can extract the pitch set, E and B (I prefer to envision the important tones as derived from *song chan*, E, B, E, F#).

With some imagination, I hope the reader will see the proportional relationship between *song chan* and the 4-measure *chan dio*.

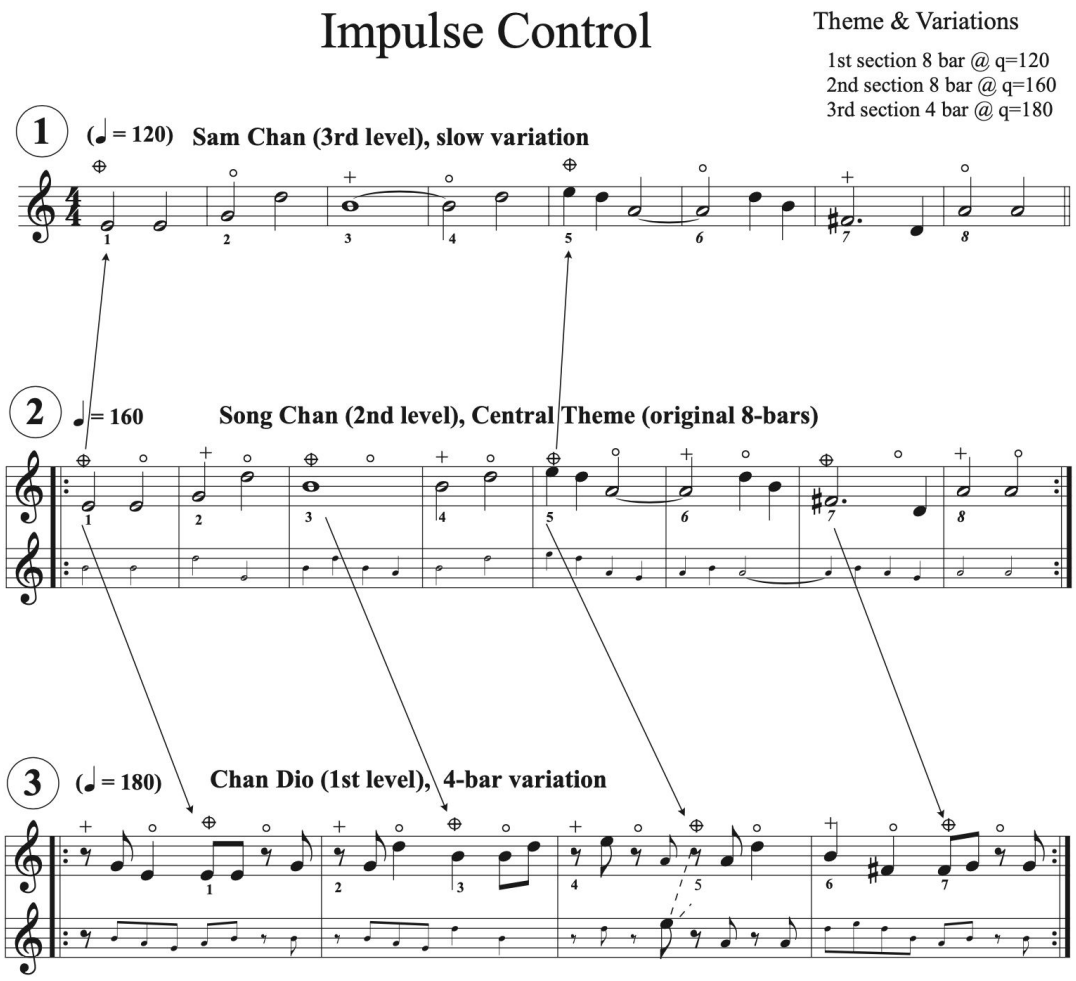


Fig. 2.16 → the *Thao* form applied to *Impulse Control*

Chapter 3

3.1 Reflections on Cross-Cultural processes in musical practice

The following section recounts my subjective experience of the process of cross-cultural engagement. Finding a balance between composing in the abstract, on paper or with a D.A.W., and writing music intended to facilitate and feature the strengths of the musicians within the contexts of their own traditions, was challenging, but ultimately very rewarding. Effective communication took some time, due to my subpar command of the Thai language. I had prepared a bunch of different phrases to communicate my ideas to the students in the first class, but that effort proved futile when I couldn't understand a word in reply (though luckily, they collectively possessed enough English to make up for my deficiencies). By the end of the first week, however, the basic Thai latent in my subconscious from early childhood started coming back to me, and the conversations started flowing more naturally. There was plenty of opportunity for genuine interaction, for laughs in rehearsal, for chatting over noodles, and for conveying conceptual abstractions from our respective musical wheelhouses.

The performance, staged a few weeks later, was very well received.[1] I believe that it succeeded at engaging the Thai audience with easily identifiable representations of *dontrii Thai* (Thai classical music), while drawing focus to points of departure from the familiar form and style, such as potentially unfamiliar textures, a few metrical abnormalities, and a series of individual and collective improvisations in a "Western" style.[2] Some of the

[1] In response to the Music Department's mailings (delivered to their regular mailing list), the audience members in attendance comprised music-enthusiasts and concert-frequenters from the surrounding community.

[2] I describe it as a "Western" style in so much as they constructed their solos with repeated rhythmic motifs, using the basic pentatonic scales with an auxiliary note or two, but without a melodic "referent" to guide them (as used in most Thai traditional music).

students really flourished with this approach, although some of the less experienced players requested that I compose a melody for them to play instead, which is why there is sometimes a contrapuntal line in the strings in "Impulse Control."

Over the past few years, I have reflected on the experience often. I learned a tremendous amount about Thai music, and more generally, about working with musicians cross-culturally (that is, Thai musicians focused on their native musical traditions, as opposed to Thai musicians focused on Western music). The opportunity to reconnect with the other half of my heritage had a transformative effect. Although I didn't realize it immediately, something had shifted in my perspective of musical value. Prior to the trip, I believe that on some unconscious level, I subscribed to a notion of Western cultural superiority. We do, reportedly, have the 'nicest toys', not to mention some conceptions of human rights that are not necessarily enjoyed reliably by people from all nations. We celebrate individualism and reward meritocracy, which had always seemed really important to me as a young competitive student, although I had been having doubts about authentic meritocracy in the academic context for some time. Likewise, as a young student of jazz, I attributed a clearly-defined notion of individualism to the guiding aesthetic principles of the genre as a whole. I focused on the development of my individual soloing to the near total exclusion of the development of my role as a member of a collective. With time, I learned that the development of my skills in a supporting role was arguably more important, as a harmonic foil to the soloist, syncing up with the drummer's snare hits, and working in tandem with the bass to create drive, while staying out of the soloist's register.

What confounded me most in Thailand was not anything specific to music, per se. I was struck by the communal nature of everyday Thai existence, by the proclivity towards being with a group of people for most of the day, and by the sense of modesty and humility demonstrated by everyone with whom I interacted. They seemed to be more community-oriented in all aspects of daily life. Of course, this was also evident in their approach to making music, and in their relationship with the act of improvisation. I suspect that the students would accept this characterization as fair. My impression was that for most of the students, the totality of all the improvised melodies, performed collectively and simultaneously (as in the Thai style), is of greater value than the individual expression of a single performer. This fact, of course, is due in part to the nature of the performance practice. Collective participation is the *modus operandi* of the Thai tradition, but I dare say that this tendency towards the group over the self extends well beyond the music. One might guess that the prioritization of the community over the self is a broader cultural distinction between East and West. True to some extent, this notion reduces a complex diversity of cultural belief systems and cultures into an overly simplistic world view.

In the context of Thailand, specifically, a possibility that strikes me as plausible (in the arts, at least) is this: Thai musicians, whether they actively contemplate it or not, understand their musical tradition to be part of something much larger than themselves, for the spiritual and sacred repertoire connects them to the origins of the known universe,

and this sacred knowledge has been bestowed upon them through a lineage of teachers over countless generations.[3]

The music is not exclusively religious. The Thai traditional ensemble does perform repertoire designated specifically for entertainment at secular events, but to this day, however, it plays an equally important role in the spiritual activities of the community, providing sacred music for religious ceremonies, funerals, celebrations, and other ritual occasions.

To explore the group / self dichotomy across cultures, we must take another look at the historical interactions between *Siam* and the West.

3.2 Colonialism and Modernization

Musical traditions are cultural artifacts with significant history. They develop over expanses of time in any group of humans living and working together, but they are quickly changed and lost when they come in contact with competing groups having greater economic and political influence. Thai traditional culture and music has not been immune.

In the 13th century, the Thai people migrated south from Mongolia and China. Their language is part of the Sino-Thai language group. Their music contains elements from both that heritage and the Khmer culture, which was heavily influenced, in turn, by the Hindu Brahman culture of India. The rise and fall of kingdoms, frequent wars

[3] See Appendix 2 for a more detailed description of the *Wai Khru* ceremony (a ritual honoring the teacher, and the generations of teachers constituting that lineage of transmission of the sacred music bestowed upon mankind as told in the *Ramakien,* theThai version of the Hindu creation epic, the *Ramayana*.)

between city-states, migrations, borrowings and takings, the flow of culture between groups of people — all contributed to the pluralist, tolerant, multicultural nature of Thai society prior to European colonial exposure.

Southeast Asian peoples and their kingdoms, alliances, vassal states and geographical territories ebbed and flowed for centuries. Modern borders were largely imposed by exploitative European colonial powers in competition for resources, territorial expansion and political domination. Diverse populations with a variety of languages, cultural practices, survival techniques and historical interrelationships, lived within the borders of each colonially-imposed "nation". Despite the variety of hill, valley, riverine, lake and marine peoples with their language and cultural diversity, the colonial powers sought to govern by elevating and colonially assimilating the dominant mono-ethnic group in each nation.[4]

Colonial threat to the Kingdom of Siam

Near the turn of the century, the competing colonial engines of Europe came knocking on all sides. England encroached from the west via India and Burma. France encroached from the north and east, via Cambodia, Vietnam, and Laos, (which they annexed to French Indochina following a defeat by the French in the Franco-Siamese War in 1893.)[5] The threat of invasion and extended military occupation became a watershed

[4] "The boundaries that demarcate the countries of Southeast Asia are largely colonial inventions of the past two centuries. Through a process of nationalization in most countries, regional and largely mono-ethnic communities have come to dominate the political and economic arenas (Tai in Thailand, Khmer in Cambodia)." (Douglas, pp. 71)

[5] Wikipedia contributors. "History of Thailand." *Wikipedia, The Free Encyclopedia*, 21 Jan. 2020. [Accessed on. 28 Jan. 2020.]

moment for the country. The fate of the society was in danger. Colonization seemed almost a foregone conclusion.

Gavin Douglas remarks that this period in the history of the Thai people presented the kingdom with an existential quandary:

> To what degree must a country abandon its long-held traditions in order to be respected and regarded as an equal in the national community?[6]

King Chulalongkorn found himself and his kingdom at a crossroads, and the path that he chose to travel would determine the future of his people and their way of life. As a result of an exploratory visit to Europe in 1897, he grew skeptical of the 'new' system of modernity, as defined by the frenetic cycle of production and consumption, noting the "glaring inequalities" he observed between increasingly stratified socio-economic classes.[7] The hypocrisy inherent in the contradiction between the stated egalitarian ideals of a country, and the actual behaviour of a country that exploits weaker societies through colonial occupation was apparent to all but the citizens of the offending countries. The Western attitude towards the Kingdom of Siam, the Thai language, customs, and culture was clearly one of pretension to superiority, made evident by the self-righteous belief that the colonial powers were doing their colonial subjects a favor by bringing them cultural enlightenment. The King also knew how they felt, which only made the imminent threat of invasion that much more tangible. Chulalongkorn surmised correctly that if he did nothing to modernize his kingdom, he would face certain invasion and forced occupation. Fortunately for the kingdom, he understood the realities of global politics. He cleverly

[6] Douglas, pg. 106.
[7] Douglas, pg. 133 - 134

identified a middle path, one that would preserve Thai customs, culture, and history, while also keeping the colonial powers out. The answer was not Westernization, but rather, Modernization.

As reported by The Bangkok Times in the January 26th edition of 1898, upon his return from his European visit, he declared:

> I am convinced....there exists no incompatibility between [the acquisition of European science] and the maintenance of our individuality as an independent Asiatic nation.[8]

A commitment to rapid modernization, diplomacy, and statesmanship succeeded in deterring the colonizers. The people of Siam sought to maintain their political independence through their own process of nationalization behind their monarch, language, religion, history and culture. Palace and temple art and architecture, music and dance along with religious practices preserved and embellished their classical roots. The people within the boundaries of Siam developed into a recognizable and cohesive nation-state led by their king.

3.3 Thai Nationalism and *Glocalization*

> National identity was created partly through the appropriation of Western ideology and techniques but also by simultaneously opposing Western domination.[9]

The subsequent monarch[10] created the template for a uniquely Thai nationalism, a phenomenon previously unknown in Siam. It was characterized by the unity of the nation, Buddhism, and kingship. The kingdom demanded loyalty to all three institutions.

---

[8] Wyatt, 2003.
[9] Douglas, Pg. 101
[10] The subsequent ruler was King Vajiravudh.

In some respects, Thai classical music is inextricable from these institutions. Customs, culture, music, arts and architecture were all employed in the strategic development of a strong national identity as a bulwark against colonial domination. This process, which occurred both in colonized and non-colonized countries, is described by Gavin Douglas as 'classicization.'

Douglas describes two important facets of 'classicization':

1. The presentation to other nations of refined and reformed culture, and
2. The sanitizing, organizing and standardizing of internal diversity.[11]

Under the reign of King Chulalongkorn (late 1800s to 1910), the Kingdom of Siam began the process of modernization. Although the kingdom was never actually colonized by the French nor the British, the threat of invasion was ever present. As suggested previously, the King realized that in order to maintain sovereignty, he would need to bring wide and sweeping reforms to the country, reforming almost every facet of government, in addition to adopting Western science and medicine in the universities. As part of his efforts to create a centralized culture around which to build nationalist sentiment, Western music theory, history, and performance practice were adopted by the state-sponsored university system, and the early 20th century saw the formation of the first Thai orchestra. The Traditional Court Music was still a major part of the royal culture, but modernists within the government considered the music primitive, and much preferred Western styles.[12]

---

[11] Douglas, Gavin. *Music in Mainland Southeast Asia: Experiencing Music, Expressing Culture.* Oxford University Press, 2010. P. 102

[12] Douglas, p. 103.

When Thailand became a constitutional monarchy after the political revolution of 1932, the military assumed control of the government for a period, during which the funding for the newly formed Western orchestra was cut, along with the funding for the traditional instrumental ensembles of the court (*dontrii Thai*).[13] [14]

Notwithstanding, the *junta* government developed an appetite for the new syncopated dance music coming out of America, even going so far as to instate jazz ensembles in various governmental sectors.[15]

The late beloved King Bumhidol, who came of age in the 1940s, was a jazz enthusiast. He started a palace jazz band, and learned to play the clarinet and alto saxophone. He composed jazz songs that have become part of the national identity. He even played with Benny Goodman, Jack Teagarden and Lionel Hampton.[16]

[13] "Court support for the arts ended in Thailand with the 1932 military coup that ended the absolute monarchy..... Today, Thai musical heritage is primarily disseminated through the national educational system, in programs supported or subsidized by the government." (Douglas, Pg. 54)

[14] Douglas, pg. 102.

[15] Nathinee, pp. 72.

[16] Douglas, p. 103.

Globalization and Local Adaptation

Some modern theories of globalization prophesied that the global Information Age would result in the formation of super-national cultures, connected to their communities of primary affiliation through global information and trade networks, reducing the power of the state to act as arbiter of culture. As Douglas states,

> In essence, the nation-state is no longer a central force in the formation of cultural identity." (Douglas, 127)[17]

This transference of cultural identity and affiliation has played out in some traditions within the country of Thailand, but not in the centers of political power, such as the central-Thai court tradition constituting the bulk of this study, but rather the globally informed hybrid genres resulting from local peoples, from the rural peripheries of Thai society, fusing their traditional practices with Western popular musical styles made available to them through the networks of global capitalism, including American military involvement in Southeast Asia. Douglas states,

> "This process has resulted in the ironic mix of Western-derived elements with selected elements of ancient or pre-colonial history – globally-informed aesthetics with locally determined manifestations."[18]

In the 1950s, as the United States prepared to combat the spread of communism in Asia, American troops arrived *en masse* in *Isan*, where they remained until the end of the Vietnam war. The influx of so many young Americans with government salaries and

[17] "In music scholarship, these two poles of thought have been debated at length for several decades. In the 1960s folklorist/ethnomusicologist Alan Lomax warned of "cultural grey-out," adopting the view that globalization causes musical forms to acculturate to the mainstream status quo and become homogenized — with the English language music industry dominant. Other, more recent studies argue the opposite: that population mobility and technology facilitate the creation of new musical forms." (ibid. Pg. 127)

[18] Douglas. pg. 102.

disposable incomes inadvertently spawned a night-life economy in one of the poorest and most rural regions of Thailand. Bars, clubs, and restaurants opened to provide the troops with the trappings of home. Local folk musicians performed for their entertainment. At the behest of the nostalgic soldiers, they learned and performed American jazz standards. Douglas notes that this crossing of musical cultures resulted in new hybrid genres that revitalized the traditional Laotian style of rhythmically focused sing/speak (setting poetry, rhymes, and everyday stories to accompanying traditional instruments, such as the *khaen* and the *phin*). The traditional folk style of singing is called *mawlam,* which is also the word used to describe the singers who specialize in its performance).[19] By combining elements of the traditional style with jazz and funk grooves, an authentically *Isan* hybrid genre spread in popularity, culminating in numerous bands and styles of fusion spanning two decades (these can be heard on two compilation albums, *The Sound of Siam, Vol.1 - Leftfield luk-thung, jazz, and Molam in Thailand, 1964 - 1975* & *Vol. 2 - Molam and Luk-Thung Isan from Northeast Thailand, 1970 - 1982).*[20] In turn, these hybrid forms had a strong influence on the contemporary style of *Luk-Thung,* colloquially known as "Thai country music," which has enjoyed its status as the most popular style of music in Thailand for a few decades.

Garzoli notes that given the country's relatively long period of exposure to jazz, and their continual integration of commercial Western music into variants of Thai pop,

[19] Sometimes referred to colloquially as "Lao rap," or "Isan hip-hop," at least since the elevation of hip-hop music from urban communities in American cities to the international stage (likely in the 1980s or 1990s).

[20] Garzoli, John. "Mawlam and jazz intercultural musical synthesis." *Rian Thai : International Journal of Thai Studies* Volume 11 | Number 1 | 2018, pg. 6.

the Thais tend not to consider the cultural and historical origins of jazz. In fact, due to the status held by jazz throughout Thai history, jazz writ-large is considered high-brow music, or the music of the affluent. [21]

3.4 Cultural Bias

The cultural artifacts and customs of any human society are fleeting and ephemeral, gradually changing with the passage of time, or suddenly disappearing as a result of hegemonic subjugation exerted by a dominant culture. For example, colonialist nations deliberately halted the practice and development of cultural artifacts that they deemed primitive or inferior, while absorbing artifacts that suited them. Strategically, the dissolution of cultural norms in colonized communities serves to tamp down resistance by muting the cultural practices that create a sense of community belonging, both of which may strengthen any form of political resistance.

Longstanding bias among Westerners towards music of other cultures is still prevalent in some circles, but that perspective seems to be trending down in recent decades, most notably since Judith Becker's article from 1986, "Is Western Art Music Superior?" In the article, she systematically dismantles the reasons most frequently given to justify the superiority of Western music, i.e. its alleged correspondence to the overtone series (given as a reason for its "naturalness"), its complexity (as demonstrated by internal cohesion, counterpoint, or overall form), and its meaningfulness (or rather, it's potential

[21] "Isolated from its cultural beginnings and separated from the social forces that shaped its historical development, other meanings have become attached to jazz. Most notably, jazz has been interpreted in Thailand as a signifier of a type of hi-society affluence and sophistication." Ibid., pg. 7.

for signification and representation). She demonstrates the absurdity of thinking that these properties are exclusively Western, particularly when one thoroughly examines the cultural depth associated with ANY other world musical tradition.[22]

"Music systems are simply incommensurable" is the last line of her article. Michael Tenzer argues against this notion, as he believes it negates the possibility of critical comparison. One must remember, however, that Becker makes the comment in the context of an article specifically addressing the biased value judgments commonly made by Western academic musicians regarding the superiority of their tradition. By this logic, she is absolutely correct -- the systems are incommensurable because the criteria for aesthetic and / or semiotic potential are completely culture-specific - there is no measuring stick for musical value that can be ascribed universally. This is simply factual, not an opinion (in my estimation). On the other hand, Tenzer uses the notion of musical incommensurability to make a broader point regarding universals in all musical traditions. While the history of musical (and cultural) comparisons between the Western tradition has obviously been skewed by the dogmatic presumptions of Western superiority, this does not necessarily mean that analytical comparison is not worthwhile. Comparison can demonstrate facets of both musical traditions being compared that do not exist in the other, while illuminating some of the similar qualities between them, potentially things that we take for granted when analyzing music in the West, but items which, nonetheless, suggest the notion that music, like language, is biological, growing in tandem with the evolution of homo sapiens

[22] Becker, Judith, "Is Western Art Music Superior?" *The Musical Quarterly,* Vol. 72, No. 3 (1986), pp. 341-359.

(and the neanderthals), corresponding to speech, bi-pedal development, paleolithic cultures, etc.

> And yet, Western cultural bias still dominates discourses on music.
>
> The belief that Western art music is inherently of deeper value than other musics surely persists among many admirers and practitioners of that tradition all over the world.[23]

Perhaps confirmation bias is strong enough as to perpetuate such a notion, even in light of the fact that anthropology has axiomatically regarded music as a cultural construct, and thus culture-bound, for nearly a century. And maybe the discoveries made in the field of music cognition will ultimately prove valuable for disabusing some of these notions.

3.5 Notation Revisited: Preservation, Pedagogy, and Classicization

Gavin Douglas presents some fundamental questions that should be considered in the context of cross-cultural work. First, he asks,

> "What is the cultural value of a notated piece (as opposed to one orally transmitted)?" [24]

To this question, Becker has already responded: the cultural value of each example is not quantifiable by the same aesthetic criteria, nor do they share a common set of culturally-based meanings, therefore it is impossible to justly compare the two. In order to arrive at Douglas' point, we might pursue this line of inquiry just a little further. From the Western vantage point, I will select two notated pieces of music, and discuss their relative

[23] Tenzer, pg. 358
[24] Douglas, pg. 137

aesthetic and cultural value within their cultural context. First, consider Bach's *Musical Offering*. The cultural value ascribed to this score is likely very high, for multiple reasons. As the foremost composer of fugue and counterpoint, the piece demonstrates a peak of human achievement in one of the most complex forms to arise from the Western tradition. It represents the best of the church musical tradition, and its preservation in notated form ensures its posterity. Its creation marked the denouement of the High-Baroque era, as well as the transition to a simpler style which was much more popular with the masses, the *style-gallant* and the subsequent styles and forms of the classical era. This period also marked a shift towards more harmonic stasis, and much less counterpoint. And finally, but no less significantly, it marks a transition in thought. The notion of composing solely for the glory of God, as an act of religious devotion and spiritual communion, was on its way out, as enlightenment ideals began to permeate the artistic disciplines. The historical pertinence alone is enough to warrant its great cultural value.

On the other hand, turning to the 20th century, what is the cultural value of a score—the written notation, that is—for the Broadway musical, "Cats?" Is this score representative of our most valued musical culture, such that we would feel the need to preserve it for the sake of posterity? Following this line, one might ask what other function does the notation serve? It facilitates the live reproduction of the orchestral score by hired professional musicians, skilled sight-readers with technical mastery who ensure a top-notch performance to a full house night after night. Without intending to offend anyone with strong proclivities towards Andrew Lloyd Webber, I suggest that the cultural value of this score is likely defined most by how profitable the show is, although I doubt anyone would

declare that its significance lies in its representation of a cultural artifact that should be preserved to ensure that generations of the future can study it. However, while the more insular Western art music world would probably attribute great value to the score of Alban Berg's *LuLu*, I don't know if the "Cats" crowd would concur. The claim to more or less cultural value, between musical artifacts within the same musical system, but which occupy separate cultural spaces in society, these notational representations are also incommensurable (not because of the musical systems, but because of the music's functional role in society at large).

In the Thai music tradition, the cultural value of an orally transmitted piece results from its significance in performing sacred rituals, or from its broad usage as a vehicle for improvisation and/or pedagogy. This means that the cultural value of the piece might be very high, or very low, but fundamentally, it has nothing to do with the means of transmission: its meaning is constructed through a culturally-bound set of musical practices and religious beliefs. This raises the question, can Thai traditional music be judged as an aesthetic object? As in the Western notion of "art for art's sake?" Again, the systems here are incommensurable. In fact, the notion of art for the sake of art is not very common, thus placing Western music at odds with most of the musical traditions of the world. If a piece of art music is to be distinguished from functional music, then Western art music may find that it is incommensurable with most musics, very few of which are valued for aesthetic merits alone.

Douglas then asks, "Whose interest might such a notion serve?" and, "How does this link with notions of copyright and ownership — [or]other value systems that circulate

through the global economy?[25] Douglas, like many other contemporary musicologists, believes that Western notation plays a role in the subsistence of a global market, one that provides school children, high-schools, and universities all across America and Europe (and these days, probably most of Asia, and much of Africa) with plastic factory-made instruments from Japan or China, it benefits publishing houses, copyright agencies, etc. Of course, it can benefit the rare composer, as well, but the handful of people worldwide who live off of royalties alone is, well, a handful. Moreover, the beneficiaries of copyright laws are more often popular artists than composers generating notated scores.

Turning now to the history of notation in Thailand, I will highlight some ways in which the use of notation appears to be an organic occurrence, and some ways in which it appears to have been foisted onto Thai culture through a wider program of cultural hegemony.

Why students of Thai traditional music are discouraged from reading

Pamela Myers-Moro studies the use of various types of notation in Thai music, identifying when each system came into use and under what historical context, in an attempt to discern how notation found its way into the everyday operations of an oral tradition.[26] As stated in the first chapter, there are three primary styles of notation currently in use, Western staff notation, Thai *solfège* cipher notation, and a two-lined form

[25] Douglas. pg. 137

[26] Myers-Moro alludes to the possibility that the creation of a notation system in Thailand may not have resulted from necessity, but rather may have been more of a political machination to deter the colonial powers at the gates.

"While considering the history and forms of musical notation in Thailand, one must ask why efforts to record music occurred when they did and not at some other time." (Myers, Moro, pg.102)

of tablature (specifically for the bowed string instruments, typically comprising only two strings). The use of notation has increased since the adoption of Traditional music programs in Universities, as students and teachers no longer engage in the traditional system of transmission, where a student would actually live with a teacher for a number of years as an apprentice.[27] Instead, traditional music in the university system functions very much on a Western schedule - weekly lessons with a private teacher, with the assumption that the student will practice on their own in the interim, while the traditional *guru-disciple* paradigm has all but passed into history.[28]

First off, she notes that the use of notation in any form is generally discouraged. This is because reading music does not necessarily contribute to memorization. In fact, many teachers make the claim that if students are reading notation, then they are not memorizing the music, nor learning the idiomatic improvisational rendering for their instrument, which results from the interaction with a memorized, but unstated, central melody, which serves as the common cognitive framework against which all the instruments are working.[29] The notion that reading music precludes efficient memorization is borne out in Western musical practice, as well, noticeable particularly between pianists who either rely solely on notation, or who are able to express and explore

[27] "The use of notation has become increasingly important in the past few decades as traditional lifestyles give way to the five day work week, a capitalist economy, and a faster pace of life." (Douglas. 137)

[28] Mantle Hood noted the same pattern in Java. Since 1945 the requirements of a program of compulsory mass education have virtually eliminated the oral tradition of musical training based on the guru-disciple educational process. -Miller, pg. 209

[29] "Learning to improvise is the hurdle that sets apart the more advanced students who may go on to become accomplished musicians. " - Myers-Moro, p. 102.

musical ideas through a developed aural ability, as well as through the application of learned theoretical concepts.[30]

The Preservation of music is not an indigenous concept

Comparing the spread of notational systems through Indonesia and through Thailand, Myers-Moro notes that the two countries both adopted the Western notation system during the 20th century, and as a result of contact with the west. She also notes that in both cultures, the very notion of musical preservation is simply a foreign concept. [31] Interestingly, the adoption of Western notation has produced diametrically opposed results. The development of greater complexity in *gamelan* music has proven Western notation to be a valuable asset in that tradition. But in Thai music, it is reputedly of no value in performance, and the Thai system of *solfège* is much preferred as an effective short-hand aid to memorization of a melodic 'referent.'[32] Moreover, as the bulk of the Thai musical repertoire was originally transcribed onto Western staves by Western-trained musicians (even if by those members of the monarchy who only studied music in Western programs of study,) the general consensus amongst the keepers of the tradition is that notated parts are wholly inaccurate or insufficient as a rule, and are therefore not trustworthy articles of transmission.

---

[30] It is not uncommon for a student pianist to train for many years, attaining a high level of proficiency and ability on the instrument, but who might not be able to reproduce any piece of music by memory. This is likely attributable to deficiencies in the pedagogical program followed, but the fact that these systems exclude basic ear-training supports the notion of the lower cultural value of improvisational abilities.

[31] Myers-Moro ponders, "... that a piece of music should be fixed at all rather than mutating through individual innovations over time) may well have come from the West, where we have written down "art music" for a long time." (Myers-Moro, pg. 103).

[32] This point is accented by the common notion that Thai music in Western notation is only used by academics and foreigners.

Her final observation derives again from a comparison with Indonesia. Notational literacy in *gamelan* traditions has fostered a national uniformity of style and technique. In Thailand, this stylistic homogeneity is undesirable, as the stylistic nuance and character of an improvisation on a given instrument is as much a product of one particular teacher-student lineage, as it is a product of idiomatic instrumental identity.

To summarize, Western notation in Thai music is used solely for preservation,[33] while the use of Thai *solfège* is the preferred aid to memorization. Given that the concept of musical notation (in any form, whatsoever) was borrowed from the West, Myers-Moro suggests the possibility that the adoption of Western music theory into the Thai education system was related to the broader phenomenon of increasing literacy throughout the country.[34] However, the historical context of the integration of Western notation strongly suggests that its adoption was part of the process of "classicization" as described by Gavin Douglas in section 3.3 (that is to say, it was only "for show" as a means to deter the threat of colonization by imperial Western powers).

[33] This, despite the fact that the notion of preserving music in a written form is a foreign concept and a potentially hegemonic cultural value.

[34] "The implementation of a national system of public schools, and the idea that all Thai citizens could become literate, developed in the first decades of the 20th century, coinciding with the advent of musical notation." (ibid.)

3.6 World Music as a Context for New Music

The case for World Music

> "We are on the verge of the beginning of a new world order in music... a new mainstream to which the tributaries of Europe, Asia, and other lands will converge."(Chou)[35]

Chou Wen-Chung's precipitous forecast for a new world order in music may have experienced a setback or two in recent years, as significant political opposition to globalism has emerged across the world, in the resurgence of isolationism over trans-national partnerships or alliances, ethno-nationalist factions, the global decline of democratic ideals and the rise of authoritarianism. And this sudden shift in trajectory was only a prelude to what many fear is a major global catastrophe looming around the corner. Whether this dooms-day scenario manifests as a global depression, a pandemic, massive population displacement resulting from rising sea levels, or political violence between nuclear powers is really anyone's guess.

And still, the world turns. If history is any indication, cultural exchange, which has been a reality for as long as recorded human history, will not cease. Despite the current political climate, the slow march towards one world continues. In some respects, the world seems more connected than ever before. A pandemic has a way of forcing empathy for one's fellow human being, while focusing our attention on things that truly matter in our lives. And the global nature of all the dangers facing our species will ultimately demand global cooperation - there is no other way. The current pandemic has already exposed the

[35] Chou Wen-chung, ed. Karen Reynolds, "Music: What is its future?" *SEARCH EVENT III*, at the UCSD Department of Music, University of California, San Diego, 2001.

fragility of the world economy, and the inability of any individual nation (save a few) to overcome the crisis alone. Setting aside these affairs beyond our control, let us assume that music, at least, continues on its trajectory towards Chou's "new mainstream" where we shall find the convergence of traditions, the creation of yet undiscovered hybrid forms, synthesizing classical and popular, Western and non-Western, with the myriad traditions of the world. The Western tradition is one among many, but its specific local origins (and native cultural value) will eventually be regarded as historical detail, just an afterthought to its use as part of one hybrid form or another.[36]

The reasons for cultural hybridity are many, but it will serve to list one or two here to illustrate the common perspective held by those choosing to work in the margin between cultural traditions. First, I posit that most if not all musicians working in this field believe that the hybridity of culture is inevitable, at least insofar as cultural exchange usually results in the integration of borrowed cultural artifacts into one's native tradition, thus becoming a hybrid version of its former self, and also one half of a future hybrid form.

Christopher Adler cites two reasons benefitting the Western composer. He claims that working across cultures can liberate one from the ideological boundaries and aesthetics that govern the aesthetic valuation and perception of "art" music, while enabling the artist to engage in divergent musical interests.[37] On a more practical level, Adler states

[36] Similarly, the origins of and the socio-political circumstances surrounding the birth of jazz in the Jim Crow South, are either unknown by Thai musicians, or they attribute local cultural values to the adopted tradition (which, in Thailand, meant that Jazz music became associated with high-society, and is thus regarded widely as such throughout the country).

[37] Adler, 28.

that work in hybridity can be a "strategy for producing the newness and novelty mandated by the still influential modernist aesthetic and by the economics of the music industry."[38]

Tenzer contends that the influence of a modernist musical aesthetic is simply not the dominant discourse in today's musical landscape, demonstrated by the new generations of Western composers who do not acknowledge the historic distinction between high and low art, between art music and popular music, nor between world music traditions. Given the inevitably hybrid shape of "new" music to come, Tenzer proposes that we arrive at a new conception of Western "new" music's role in the 'new global mainstream.' He suggests that,

> New music is best seen neither as the pedigree descendant of the Western tradition nor the constantly renewing product of the music industry; it is now nothing if not equivalent to world music in its prismatic and hybridizing forms.[39] (Tenzer - Page 18)

The predominance of cross-genre, cross-cultural, cross-discipline interest amongst young composers is the primary reason given by Tenzer for the desirable integration of world music traditions.

Hybridity and the Politics of Representation

Adler warns us of complacency in the cross-cultural endeavor, as work at the margins of tradition is also fraught with potential for unbalanced representation, reflecting the "power relationships of its participants."[40] On the other hand, some believe that the

---

[38] Ibid.

[39] "Philip Bohlman (2002:36 - 39) defines world music as something unpredictable and fundamentally shaped by encounter and creative misunderstanding between people making music at cultural interstices, a formulation that admits a Self / Other distinction rather than an East / West one, and extends to what is conventionally called Western New Music." - Tenzer, pg. 18

[40] Adler, p. 28

hybrid space is "a site of creativity, power, and of resistance," as well as an opportunity to critique the "unequal distributions of power" between Western traditions, and other World traditions. [41]

Given these perspectives, Tenzer proposes a path forward, as a potential catalyst for the new global mainstream, but also as a means to greater understanding and efficient cross-cultural learning.

3.7 Towards a Global Music Theory

Reconciling cultural hegemony, relativism, and the pragmatism of a *lingua franca*

Western music theory is undoubtedly an adaptable analytical system that manages to explain the inner workings of qualitatively distinct musical cultures spanning nearly a thousand years of the Western music tradition, while also facilitating a means of historical comparison, giving life to musical concepts beyond the specific culture from which it originated, from the isometric rhythmic cycles of early European music to the early 20th century serialist works of Alban Berg, from the counterpoint of the Baroque to the directional voice-leading in the improvisational style of Charlie Parker. Still, there is some

[41] Ibid.

consensus by practitioners of various other musical traditions, that the Western system "fails to address the needs, selves, and likely life trajectories of more and more musicians."[42]

Acknowledging this fact, Tenzer admits that if we are repeatedly returning to the conclusion that the application of Western analytical models is inadequate in demonstrating musical meaning across cultures, then the models are likely in need of reform.[43]

> "Proponents of the status quo might aver that the point is not to reflect the world, but to recreate it. In any tradition, Theory (in whatever form it takes) is an aid to transmission and is emblematic of the need to sustain and protect the tradition itself and its distinctive identity. From that perspective the current system is hegemonic, but necessarily and effectively so: it sustains Western Art music. Any tradition would do the same in its own interests."[44]

The early 20th-century philosopher Antonio Gramsci would likely dispute this final point. He argues that cultural hegemony is not simply a means of ensuring one's cultural survival, but rather that it is a veiled tool of political control.[45] By standardizing cultural artistic expression, nationally or otherwise, the dominant cultural norms within a given society hold entirely too much power over the fates of the subsumed or oppressed cultures. Furthermore, I question the accuracy of the notion that "any tradition would do the same in its own interests." This deduction presumes an equal distribution of power between Western and non-Western musical traditions, and perhaps most significantly, it

---

[42] Tenzer, pg. 35

[43] "A music theory paradigm continuing to valorize the Western art tradition in the face of evidence that it only partly corresponds with the needs or experiences of musicians can ... be said to need reform." (Tenzer, 35.)

[44] Ibid., pg. 35

[45] West, Stephen. "Episode 131 – Antonio Gramsci on Cultural Hegemony." *Philosophize This!*, www.patreon.org, accessed on 1 May 2020, philosophizethis.org/category/episode/page/2/.

assumes a capitalist conception of limited accountability, where the idea that total self-interest, if practiced by all parties, is somehow morally and socially acceptable.[46]

Isaiah Berlin suggests that instead of cultural relativism, we should strive for pluralism, the distinction being that cultural relativism assumes total incommensurability between value systems and value judgments, and therefore is reducible to, "respectfully agree to disagree," while pluralism admits the fact that two different people may exist in diametric opposition to one another, one a far-right republican, deeply religious, and conservative, one a far-left progressive union organizer.[47] Cultural relativism only allows them to acknowledge the existence of the other. Pluralism is the admission that the enlightenment notion of universal truth is valuable in mathematics, physics, and other hard sciences, but in other areas, a single prescriptive solution for everything or everyone is usually inadequate. The idea is that for every problem, there is only one answer, and if we use reason to arrive at that answer, there is no way our answer could be anything but the correct one. Pluralism acknowledges that one person's political views, arrived at through reason, might be contrary to another's political views, also arrived at through reason, but that each person can respect the other person enough to believe that they have reasonably arrived at their political views due to their subjective life experience, the communities they belong to, the families that shaped them, etc., thus practicing respect, tolerance and

[46] "Martin Stokes (2001:394) summed up the prevailing perspective in his depiction of recent ethnomusicology written for the New Grove Dictionary: scholars are "ambivalent about the application of western music-theoretical systems to non-western musics"; applying theory and analysis amount to a "quasi-colonial form of ethnocentrism." (Tenzer, 8)

[47] West, Stephen. "Episode 140/141 – Isaiah Berlin pt. 1 & 2 - Pluralism and Culture." Philosophize This!, www.patreon.org, accessed on 1 May 2020, http://philosophizethis.org/pluralism-and-culture/

empathy, as opposed to reluctant co-existence with one's imagined enemy. Pluralism demands the intellectual honesty required to admit that we are all products of our environment, we all do the best we can, we socialize with communities that share our beliefs and values, we all use reason, but we have different viewpoints because of different life circumstances. There is no way to logically prove the validity of one point or the other, but there is a reasonable certainty that you both believe what you believe because of your subjective experience, and in this, you finally see your common humanity.

Supplementary Materials

Bibliography

Works Cited

Adler, Christopher. "Cross-Cultural Hybridity in Music Composition: Southeast Asia in Three Works from America." christopheradler.com/writings.

Alperson, Philip (1984), "On Musical Improvisation," *The Journal of Aesthetics and Art Criticism* 43/1 17-29.

Alperson, Philip (2010), "A Topography of Improvisation," *The Journal of Aesthetics and Art Criticism* 68/3:273-80

Bailey, Derek (1997), *Improvisation*. London: The British Library National Sound Archive

Chou, Wen-chung (2001, April). "Music: What Is Its Future?." *Search Event III.* Lecture conducted from Composition Area, Department Of Music, University Of California, San Diego, CA.[1]

Chucherdwatanasak, Nathinee. "Narong Prangcharoen and Thai Cross-Cultural Fusion in Contemporary Composition." Masters thesis, University of Missouri Kansas City, 2014, http://hdl.handle.net/10355/43578.

Dewey, John. *Art As Experience*. New York: Perigree, 1934.

Douglas, Gavin. *Music in Mainland Southeast Asia: Experiencing Music, Expressing Culture*. Oxford University Press, 2010.

Garzoli, John, and Bussakorn Binson. "Improvisation, Thang, and Thai Musical Structure." *Musicology Australia*, vol. 40, no. 1, Feb. 2018, pp. 45–62., doi:10.1080/08145857.2018.1480867.

[1] Published by Permission Online publishing and editing by Karen Reynolds All Rights Reserved. SEARCH EVENT III, 21 April 2001, University of California, San Diego The following TEXT was commissioned by the Composition Area, Department of Music, University of California, San Diego for its SEARCH initiative. The TEXT / TALK is copyrighted and appears in its original presentation here. While links TO this TEXT or recording from other sites are welcome, no part of this TEXT may be reproduced in any form or by any electronic storage or retrieval systems, without permission in writing from the copyright holders [Please contact Roger Reynolds: info@rogerreynolds.com to facilitate this.]

Garzoli, John. "Mawlam and Jazz in Intercultural Musical Synthesis." *Rian Thai International Journal*, Chulalongkorn University, Institute of Thai Studies, 1 Aug. 2019, http://www.rianthaijournal.org/book/rian-thai-volume-11-2018-number-1/.

Garzoli, John (2015a), 'Intonational, Idiomatic, and Historical Factors that Shape Contemporary Thai Fusion Music'. PhD dissertation, Monash University

Garzoli, John (2015b), 'The Myth of Equidistance in Thai Tuning'. Analytical Approaches to World Music 4/2: 1–29.

Gaston, Bruce (1990), liner notes for Fong Naam, Siamese Classical Music Volume 1. The Piphat Ensemble before 1400 A.D. Marco Polo audio CD B000YMLCP6.

Gaston, Bruce. Liner notes. "Gradus ad KowGrylas: Being a Practical Guide for the Development of Thai Listening Skills," from Ancient-Contemporary Music from Thailand. Music by Fong Naam. Celestial Harmonies, 1995, CD.

Hood, Mantle, The Ethnomusicologist. Kent: Kent State University Press, 1982.

Jirattikorn, Amporn. "Luk Thung: Authenticity and Modernity in Thai Country Music." *Asian Music*, vol. 37, no. 1, M 2006, pp. 24–50., doi:10.1353/amu.2006.0004.

Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Winter 2019 Edition), Edward N. Zalta (ed.), forthcoming URL = <https://plato.stanford.edu/archives/win2019/entries/dewey-aesthetics/>

Miller, Terry E. *Traditional Music of the Lao: Kaen Playing and Mawlum Singing in Northeast Thailand.* Greenwood Press, 1985.

Miller, Terry E. "The Theory and Practice of Thai Musical Notations." *Ethnomusicology*, vol. 36, no. 2, 1992, pp. 197–221., doi:10.2307/851914.

Monson, Ingrid. *Saying Something: Jazz Improvisation and Interaction*. University of Chicago Press, 1997.

Monson, Ingrid(2003), "Jazz improvisation," in Mervyn Cooke and David Horn(eds,) The Cambridge Companion to Jazz. Cambridge: Cambridge University Press, 114-32

Morton, David. *The Traditional Music of Thailand.* Berkeley: University of California Press, 1976.

Myers-Moro, Pamela. "Musical Notation in Thailand." *Journal of the Siam Society* 78(1):101-8.

Myers-Moro, Pamela. *Thai Music and Musicians in Contemporary Bangkok.* Berkeley: Centers for South and Southeast Asia Studies, University of California Berkeley, 1993.

Nattiez, Jean Jacques. *Music and Discourse: toward a Semiology of Music.* Translated by Carolyn Abbate, Princeton University Press, 1990.

Nakano, Koji. *Introduction to Living Composition: A New Approach to Asian Music, Culture and Spirituality.* Kuandu Music Journal: Taipei National University of the Arts, Taiwan, vol. 20, July 2014.

Pressing, Jeff (1984), "Cognitive Processes in Improvisation," in W. Ray Crozier and J. Chapman Anthony (eds) *Advances in Psychology*. Elsevier: North Holland, 345-63

Pressing, Jeff (1988), "Improvisation: Methods and Models" in John Sloboda(ed), *Generative Processes in Music: The Psychology of Performance, Improvisation, and Composition*. Oxford: Oxford University Press, 129-78

Pressing, Jeff (1998), "Psychological Constraints on Improvisational Expertise and Communication," in *Improvisation*. Chicago: University of Chicago Press

Said, Edward W. *Orientalism*. W. Ross MacDonald School, Resource Services Library, 2006.

Setabundhu, Jiradej. "Aspects of Thai Music and Compositional Techniques in Selected Works of Jiradej Setabundhu." Northwestern University, UMI, 2001, pp. 1–60.

Sethares, William A. *Tuning, Timbre, Spectrum, Scale*. Springer London Ltd, 2013.

Swangviboonpong, Dusadee. *Thai Classical Singing: Its History, Musical Characteristics and Transmission.* Aldershot: Ashgate, 2003.

Tenzer, Michael. *Analytical Studies in World Music*. Oxford University Press, 2006.

Tenzer, Michael, and John Roeder. *Analytical and Cross-Cultural Studies in World Music*. University Press, 2011.

Yanavut, Wannapha. "An exploration of Thai Traditional music for Western Percussion Instruments." DMA (Doctor of Musical Arts) thesis, University of Iowa: 2016. https://iruiowa.du/etd/3231.https://doiorg/10.17077/etd.hrz2wnbk

West, Stephen. "Episode 131 – Antonio Gramsci on Cultural Hegemony." Philosophize This!, www.patreon.org, accessed on 1 May 2020, http://philosophizethis.org/category/episode/page/2/

West, Stephen. "Episode 140/141 – Isaiah Berlin pt. 1 & 2 - Pluralism and Culture." Philosophize This!, www.patreon.org, accessed on 1 May 2020, http://philosophizethis.org/pluralism-and-culture/

Wong, Deborah, *Sounding the Center: History and Aesthetics in Thai Buddhist Performance*. Chicago: The University of Chicago Press, 2001.

Glossary

Ayutthaya (อยุธยา): 1. A province located in the central region of Thailand, about seventy kilometers north of Bangkok. 2. The second capital city of Siam, which lasted for 417 years, from 1350 to 1767. 3. The period during which Siam was ruled from Ayutthaya.

Chan dio (ชั้นเดียว): Literally, "first level." Of the three "tempos" common to Thai compositional forms, *chan dio* is the fastest.

Ching (ฉิ่ง): A pair of small thick bronze cymbals, similar to Western finger cymbals, in the shape of teacups or small, hollow cones.

Ching-chap (ฉิ่ง-ฉับ): The pair of strokes used on the *ching*: *ching* is the open sound, generally played on unaccented beats, and *chab* is the closed or damped sound, generally played on accented beats.

Dontrii (ดนตรี): The term for Thai classical music, applied to both instrumental and vocal genres.

Hariphunchai (หริภุญชัย): An ancient Mon Kingdom in the north of present-day Thailand, before the Lanna Kingdom (northern Thailand) was established around the thirteenth century. Its capital was at Lamphun, which at the time was also called Hariphunchai.

Cipher notation: System of musical notation where numbers denote particular pitches.

Isan (อีสาน): Another name for the northeast region of Thailand.

Kantrum (กันตรึม): 1. A style of southern Isan folk music, fast and dancelike, with vocals. 2. A southern Isan ensemble, consisting of vocals, percussion, and southern Isan *saw*.

Keb (เก็บ): A general playing technique of traditional Thai instruments, especially melodic percussion such as the *ranat* and *khong*. The technique is to play sixteenth notes evenly and continuously.

Khaen (แคน): A bamboo mouth organ, which is the most important instrument of Isan Thailand and also a symbol of northeastern Thai music, which was derived from Laos.

Khong (ฆ้อง): A bossed gong or gong-kettle. Many kinds of *khong* are used in ensembles.

Khong wong lek (ฆ้องวงเล็ก): A small circle of gongs, consisting of a set of eighteen gong-kettles placed horizontally, graduated in size and pitch from left to right, which rests on the floor. It plays a rapid variation of the principal melody for the piphat ensemble.

***Khong wong yai** (ฆ้องวงใหญ่):* A large circle of gongs, consisting of a set of sixteen gong-kettles placed horizontally, graduated in size and pitch from left to right, which rests on the floor. It plays the principal melody for the piphat ensemble.

***Khlui** (ขลุ่ย):* A vertical flute, generally made of bamboo. There are seven finger holes on the upper side and a thumbhole on the underside. It is found in the central and northern regions of Thailand; however, the northern Thai khlui has one less finger hole than the central Thai model.

***Khon** (คน):* A person.

***Khon Isan** (คนอีสาน):* an Isan person (northeast Thai) person.

***Khru** (ครู):* The Thai term for teacher, deriving from the Pali "guru."

***Khru dontri** (ครูดนตรี):* A music teacher.

Kui (กูย): Indigenous Mon-Khmer (Ancient Khmer) ethnic group in mainland Southeast Asia; surviving today as hill tribes.

***Kraw** (กรอ):* A general playing technique of Thai traditional instruments, including melodic percussion, hammered string, and plucked string instruments. The technique is to sustain notes and tones, similar to the Western roll or tremolo technique.

***Kwad** (กวาด):* A general playing technique of Thai traditional instruments, especially melodic percussion instruments. It literally means to sweep up and down or can refer to the Western glissando technique.

***Klawng** (กลอง):* The Thai term for drum. There are many kinds of drums, with different names and uses depending on the ensemble and the region.

***Lai** (ลาย):* A melody type or mode of northeast Thai music, which implements improvisation or characteristic motives, rhythms, and harmonic combinations from a given scale.

***Lai yai** (ลายใหญ่):* A melody type or mode of northeast Thai music generally used with the *khaen*. Usually, the main melody appears in the low-register notes.

***Lanna** (ลานนา): T*he Thai term referring to the people and cultural heritage of northern Thailand.

***Lao** (ลาว):* The Thai term for Laos.

***Lao Isan** (ลาว-อีสาน) or **Thai Lao** (ไทย-ลาว):* A label applied to northern Isan people.

***Long nan** (ล่องน่าน):* A type of melody of northern Thai music that originated in Nan province. Usually used in vocal songs that elaborate on nature.

***Luk khong** (ลูกฆ้อง):* The principal melody of a given composition, played by *khong wong yai*; other melodic percussion instruments elaborate on the part of the *luk khong*.

***Mahori** (มโหรี):* A Thai ensemble that consists of all kinds of instruments: winds (*khlui*), strings *(saw u, saw duang, saw sam sai*), melodic percussion (*ranat* and khong), and rhythmic percussion. It originated in the Ayutthaya period.

***Mawlam** (หมอลำ):* 1. A traditional singer in northern Isan. 2. A style of traditional folk music from Laos and northern Isan.

***Mon** (มอญ):* An ethnic group of people, the ancient Burmese, whose roots date back to the sixth to eleventh century.

***Mong** (โหม่ง):* Embossed hanging gong in a variety of sizes and pitches.

***Nathap** (หน้าทับ):* A drum pattern used to provide rhythm in compositions. It is usually played in cycles and can be improvised based on a given pattern.

***Nathap Prop kai** (หน้าทับ ปรบไก่):* A basic drum pattern (called *nathap*) for slow tempos, mostly used with the *taphon* (central Thai drum).

***Pali-sanskrit** (บาลี-สันสกฤต):* Classical language used in Thailand as the sacred language for Thai Buddhism; Pali was an ancient Indian language and Sanskrit was used in sacred Hinduism.

***Phin** (พิณ):* 1. The formal term for plucked lute; it does not appear in Thai traditional ensembles today. 2. Refers to the northeastern Thai *phin*.

***Phin bass** (พิณเบส):* Similar to the northern Isan *phin*, with lower sound and tone, used as a bass line.

***Phleng** (เพลง):* Thai term meaning song, piece, or composition.

***Phleng cha** (เพลงช้า):* A slow tempo section in the ceremonial *phleng ruang* suite.

***Phleng la** (เพลงลา):* 1. A closing piece in a performance. 2. A short composition played to indicate the end of a *phleng ruang* suite.

***Phleng naphat** (เพลงหน้าพาทย์):* A type of instrumental composition performed only by the *piphat mai khaeng* (hard-mallet piphat) ensemble. There are two types: high level, associated with ritual ceremonies, and normal level, which accompanies central Thai plays and dramas.

***Phleng reo** (เพลงเร็ว):* A fast tempo section of a *phleng ruang* suite.

***Phleng ruang** (เพลงเรื่อง):* A suite consisting of many pieces organized in three main sections—slow tempo (*phleng cha*), medium tempo (*sawng mai*), and fast tempo (*phleng reo*)—and generally ending with a coda (*phleng la)*.

***Phleng saw** (เพลงซอ):* A type of northern Thai (Lanna) music that contains lyrics, accompanied by northern Thai melodic instrument(s). Also called *thamnong saw*.

***Phleng song mai** (เพลงสองไม้):* A medium-tempo section of a *phleng ruang* suite.

***Pi** (ปี่) :* A quadruple-reed oboe, generally made of hardwood with reeds made from palm leaf.

***Pi nai** (ปีใน):* A large and low-pitched central Thai *pi*, used in the *piphat* ensemble for indoor performances.

***Piphat** (ปีพาทย์):* A standard type of a central Thai ensemble, consisting of melodic percussion and *pi nai*.

***Piphat mai khaeng** (ปีพาทย์ไม้แข็ง):* A *piphat* ensemble in which all melodic percussion instruments are played with hard mallets.

***Pong lang** (โปงลาง):* 1. An Isan vertical suspended log xylophone, used in the *pong lang* and *khaen* ensembles. 2. A northern Isan ensemble, consisting of *pong lang, khaen, wot, phin, hai song* or electric *phin* bass or electric bass, *klawng yao,* small *chab*, and large *chab*.

***Sukhothai** (สุโขทัย):* 1. A province located in the northern part of the central region of Thailand. 2. The first capital city of Siam, from 1235 to 1438. 3. The first capital city, Sukhothai, merged with Ayutthaya in 1378.

***Ranat** (ระนาด):* The Thai term for xylophone. The keys are made of bamboo or hardwood. There are two standard sizes: *ranat ek* and *ranat thum*; metallophones, *ranat ek lek* and *ranat thum lek,* were added during the reign of King Rama IV (1851–68).

***Ranat ek** (ระนาดเอก):* A high-pitched xylophone consisting of twenty-one bars; later some *ranat ek* were made with twenty-two bars for virtuoso works. Mainly used in the *piphat* ensemble.

***Ranat thum** (ระนาดทุ้ม):* A low-pitched xylophone consisting of seventeen keys, normally playing a variation of the *ranat ek* melody with complex syncopations. Mainly used in the *piphat* ensemble.

***Rueam** (เรือม):* The southern Isan dialect term for local dance.

***Rueam aunre** (เรือมอันเร):* The name of the pestle dance—a type of southern Isan dance and play.

***Rueam kranoab-ting-tong** (เรือมกระโน้บติงต็อง):* The name of the grasshopper dance—a type of southern Isan dance and play.

***Sabad** (สะบัด):* A technique mostly used by melodic percussion instruments, in which a melody is ornamented with interpolated short notes—usually by adding two to three thirty-second notes into a sixteenth note of a melody on an unaccented beat. Can be found both in ascending and descending lines, and either in order or in disordered pitches.

***Sam chan** (สามชั้น):* The slowest and longest of the three proportional tempos of Thai music.

***Salaw** (สะล้อ):* A northern Thai two-stringed fiddle. Mainly used in the *salaw-saw-sueng* ensemble.

***Salaw-saw-sueng** (สะล้อซอซึง):* A standard northern Thai (Lanna) musical ensemble, consisting of a *khlui, salaw, three sueng,* and a *klawng pong pong*; the *ching* and *chab* are sometimes found but not required.

***Saw** (ซอ):* 1. The generic term for a fiddle (bowed stringed instrument). 2. The northern Thai dialect term for singing or vocals.

***Saw duang** (ซอด้วง):* A high-pitched two-stringed fiddle with a sound box in a conical shape made of wood and covered with snakeskin on one end. Used in the central Thai string and mahori ensembles; also used to accompany the southern Thai string and mahori ensembles as well as the *Talung* performances, in which case its sound box is bigger than the central region model and sometimes the pole is curled into the shape of a Naga head.

***Saw u** (ซออู้) :* A low-pitched two-stringed fiddle with a sound box made from half a coconut shell with calfskin or goatskin stretched across its face. It is used 1) in central Thai string ensembles, and 2) to accompany the southern Thai *Talung* performances.

***Song chan** (สองชั้น):* The medium tempo of the three proportional tempos of Thai music.

***Siam** (สยาม):* The former name of Thailand until 1939. It was renamed Siam again from 1945 to 1949, after which the name again reverted to Thailand. Siam had four different capitals, each during a different time period. The first capital (1235–1438) was Sukhothai, located in the northern part of the central plain area. In 1378, Sukhothai merged with Ayutthaya, which became the second capital city from 1350 to 1767. The third capital was Thonburi, which lasted for only fifteen years after the fall of Ayutthaya and before the capital was moved across the Chao Phraya River to Bangkok. Bangkok has been the capital since 1782.

***Soui** (สุ่ย):* Another name for the *kui* people, see *Kui*.

***Sukhothai** (สุโขทัย):* 1. A province located in the northern part of the central region of Thailand. 2. The first capital city of Siam, from 1235 to 1438. 3. The first capital city, Sukhothai, merged with Ayutthaya in 1378.

***Tai lue** (ไทลื้อ):* An ethnic group of people in the northernmost area of Thailand, who immigrated from the far south of China.

***Tamra phleng mahori** (ตำราเพลงมโหรี): T*he name of the mahori songbook, a manuscript written in the traditional Thai music book from the first Bangkok period and including some music titles from the Ayutthaya period.

***Taphon** (ตะโพน):* A central Thai double-headed barrel drum made of jackfruit wood, generally set on a stand horizontally and played with the hands, mainly used in the *piphat* ensemble.

***Thao** (เพลงเถา):* A form of Thai composition, consisting of three continuous movements in three different proportional tempos, from slow to fast in tempo and long to short in length (*sam chan, sawng chan,* and *chan dio*).

***Thamnong** (ทำนอง):* A generic term for melody.

***Thamnong kroen** (ทำนองเกริ่น):* A beginning melody as introduction or prologue in Isan folk music.

***Thamnong lak** (ทำนองหลัก):* A main melody or main theme in Isan folk music.

***Thamnong yoi** (ทำนองย่อย):* A second theme or countermelody that interacts or trades off with the main melody in Isan folk music.

***Thamnong saw** (ทำนองซอ):* A type of northern Thai (Lanna) music that contains lyrics, accompanied by northern Thai melodic instrument(s). Also called *phleng saw*.

***Thang** (ทาง):* 1. The idiomatic style of playing a particular instrument. 2) Refers to two main Isan musical modes: *Thang san* (major modes) and *Thang yao* (minor modes).

***Thon** (1. โทน, 2. ทน):* 1. A small central Thai single-headed goblet drum with an open-ended side played with the right hand while the left hand is used for supporting or damping. 2. A southern Thai unequal double-headed drum used as a pair, played on the larger head with a hook-shaped wooden stick and played on the smaller head with the hand.

***Thonburi** (ธนบุรี) :* The third capital of Siam for a period of only fifteen years (1767–82) after the fall of Ayutthaya.

***Trae** (แตระ):* A southern Thai rhythmic idiophone, which is a wood or bamboo bar, used as a single bar or as a pair. There are two sizes, small and large, which accompany the *talung* ensemble. *Trae* is also called *krae*.

Appendix 1: Ensembles

3 basic types

Wong Piphat[2] - Small size – *khryang haa* (literally, instruments/five):

Pii naj or *khluj* (oboe or bamboo flute)
Ranaat eek (tenor xylophone)
Khawng wong jaj (large pitched-gong circle)
Taphon and/or *ching* (barrel drum and/or finger cymbals)
Kluang that or *ranat thum* (pair of large struck drums, or bass xylophone)

Wong khrueang sai **(String ensemble)**[3] - Small size:

Sau duang (Alto fiddle)
Sau uu (Tenor fiddle)
Cakhee (or *Jakh*e, plucked-string zither)
Khlui phiang au (bamboo flute tuned to accompany the strings)
Thon/rammana (set of hand drums, bass and snare)
Ching (finger cymbals)

Wong Mahori[4] (Small size)

Saw sam sai
Saw duang (Alto fiddle)
Saw u (Tenor fiddle)
Cakhee (or *Jakhe*, plucked-string zither)
Khlui phiang au (bamboo flute tuned to accompany the strings)
Thon/rammana (set of hand drums, bass and snare)
Ching (finger cymbals)
Ranat ek mahoorii (tenor xylophone)
Khong wong yai mahoorii (large pitched-gong circle)

---

[2] The medium sized ensemble (*khryang khuu*, literally: instruments/pair) is the same as the small ensemble above, but with some instruments "paired" with an additional instrument of the same type but of different register (the *pii nauk, ranaat thum, khaung wong lek*). The large sized ensemble (*khryang jaj*, literally, instruments / large), is the same as the medium sized ensemble, but with an added *ranat ek lek, ranat thum lek, chap lek*).

[3] The medium sized version can include some doubling instruments and some auxiliary percussion.

[4] See following page for further details

The medium and larger version both add instruments in the same manner as above (string instruments are often doubled, winds are "paired" with a higher or lower pitched version, and higher and lower versions of the pitched percussion instruments are added). Two percussion instruments listed in Myers-Moro's charts that are not mentioned in my list are the *chaap*, which is a slightly larger pair of hand-cymbals, and it comes in two sizes (*lek* and *yaj*, meaning "small" and "large"). The *moong* is a hanging gong. A solo-vocalist can be added to any of the ensembles, assuming the repertoire being performed accommodates a singer. The singer usually alternates with either a solo instrumentalist or the entire ensemble, depending on the type of song being performed.

The three ensembles can usually share most repertoire, but certain repertoires are only played by specific ensemble-types (variations on the basic ones already listed). The pitched percussion instruments can use hard or soft mallets, and this is somewhat specific to the repertoire they are performing. The repertoire of any given ensemble will usually adhere to the *thang* of the wind or string instruments in the ensemble, so as to accommodate the easiest possible fingerings for these instruments.

Appendix 2: Cultural Context

A brief discussion of the history of Thai music is crucial to an understanding of its cultural value. Thailand is a mixture of several different indigenous groups from all over southeast Asia. The national religion is Theravada Buddhism, stemming from Indian influences, but the indigenous peoples practiced forms of animism. There is also abundant evidence of other influences stemming from India (a written language rooted in Sanskrit, many words with roots in Sanskrit, and a mythology filled with Hindu deities). The area belonging to current Thailand has belonged to many states, kingdoms, and empires. The first account of a Thai state, as such, began in 1238 AD, with the Kingdom of Sukhothai. Numerous changes in government have occurred since that time, but there has consistently been an absolute monarchy until the first half of the 20th century. The king was the political and spiritual leader of the country, and although Thailand currently operates under a constitutional monarchy with an elected legislature, the King is still viewed by the society at large as the spiritual leader. The music is inextricably connected to the country's history. The *naphat* repertoire (dating from pre-1782) best exemplifies this cultural context.

Wai Khru

> "One of the most important rituals for all Thai musicians is the *wai khru* ceremony of paying homage to the teacher (*khru* from the Indian guru). In this ceremony music considered to be the most important and of the highest status will be played. This ceremony is of fundamental importance in Thai music culture. Thai classical musicians must be initiated through a series of rituals before altars bearing masks of deified Hindu and Buddhist figures from Indian religious literature. Through this ritual, musicians (and many other artists such as boxers, dancers, and singers who have similar ceremonies) establish a relationship through their teachers, to their teachers' teachers, and to the Hindu-Buddhist deities and cosmology that underpin the arts. In a ceremony that lasts several hours a *piphat* ensemble performs highly revered compositions in alternation with a ritualist, who chants auspicious texts in the Pali language. The students in this ritual also are led through recitations of Buddhist scriptures in Pali language. The ceremony links the *piphat* ensemble to the students, the students to their teacher's lineage and the tradition's relationship to royalty and religion is reaffirmed (See Myers Moro 1988:319-327, and Wong 2001). The *piphat* ensemble, like many ritual ensembles, guides the progression of the ceremony, providing entry to an alternate state of mind. The overture (*homrong*) to the *wai khru* is an "ephemeral doorway through which deities can come and go, it is a frame of sound that is the sacred in action. Without this frame, deities could not be present and ritual events would not be sacred"(Wong and Lysloff 1991: 339).[5]

Waj khru ceremony

Deborah Wong's book, *Sounding the Center*, deals with these issues extensively, placing the music and act of performance in cultural context in a way that none of the other literature has. The book describes all aspects of the most important ceremony in the Thai musical world, the *wai khru* ceremony. This is a ceremony wherein students receive the privilege to perform the sacred repertoire. The term *wai* is the characteristic greeting in Thailand, whereby one places their hands together in front of them when greeting

[5] Douglas, pp. 62.

another. It is a physical gesture offering sincere respect to the recipient. *Khru* is the word for teacher. It comes from the Sanskrit, guru, and it carries the same spiritual implications. In addition to paying respects to the teachers immediately present, students are also paying respects to the lineage of teachers that passed the right to perform the repertoire down through the ages. The first teacher is known as the "Old Father."

"Old Father" – *Paw kha*

Wong summarizes the legend of the "Old Father" in a brief but poignant manner:

> "The first teacher of music and dance directly empowers living teachers. This teacher, referred to as the "Old Father" by performers, lived in the distant past and was an ascetic, a hermit – a man so totally dedicated to knowledge and learning that he lived apart from others in the forest, the better to devote himself to his craft. He was present at one of the moments when Shiva, creator and destroyer of the universe, danced the cosmos into oblivion and then created it anew. For reasons utterly unexplained, the Old Father lived through this ultimate, cyclic destruction and wrote down all of Shiva's music and dance. This repertoire is the basis for Thai ritual music and dance, and it comes to us from the Old Father."

The spiritual lore is a living and vibrant aspect of the ceremony. Once a musician has been officiated into the most sacred repertoire, that musician can become an officiant of the ceremony, the reciter of sacred incantations, and the closest link to the deities being conjured. As mentioned earlier, the songs and melodies function as leitmotifs, depicting stories of deities from the mythology, which are also acted out through masked-dance performances.

Wong describes two waj khru ceremonies at the beginning of the book. The first takes place at a large public Buddhist monastery. She described the atmosphere as almost carnivalesque. During the musical performances of the sacred pieces,

members of the listening audience manifest signs of demonic possession. The second ceremony took place at one of the major universities. This ceremony was significantly more restrained and austere, with a member of the royal family in attendance, but the grand offerings of the finest foods were still placed on altars for the invited deities. These two ceremonies demonstrate a few salient points about the music and Thai culture. First, the music is inextricably linked with Buddhism and the national lore. As such, the music finds one of its homes in the holiest of places, the Buddhist temple. Since the "bloodless" revolution of the 30's, the royal courts that patronized the musical ensembles ceased to exist, and the court musicians found homes in the newly developed government agencies supporting the preservation of Thai culture, specifically the Department of Fine Arts. Musicians also found work in universities. The ceremony held at the university initiates lower class men into the repertoire necessary to ascend to the next level, demonstrating the concurrence of spiritual, academic and musical progress.

There is a hierarchy of ritual repertoire that is performed at a waj khru ceremony, and it becomes available to students in stages. The first level, for beginning musicians, is the initiation. At a waj khru ceremony, the officiant grasps the hands of the student and plays through the melody of a song titled Saathukaan three times. This song is a virtual compendium of the important melodic building blocks discussed above. In this way, the waj khru ceremony and the naa phaat repertoire become an essential pedagogical tool. Before advancing to the next level, the student is expected to master this song (through study with the same teacher or

another), and to learn most of the Evening Overture. The second level introduces the student to the last part of the Evening Overture, Tra Hoomrong. In the third level, the student learns the Daytime Overture. In the fourth level, the student begins learning the high-level ritual pieces, beginning with the piece Baatsakuunii. In the fifth level, the student learns the highest piece of all, Ong Phra Phiraap. While in theory, all musicians should know the first piece, Saathukaan, the privilege to perform this last piece is quite rare. It is considered dangerous, in fact. Phra phiraap is the demonic deity of masked dance-drama (khoon). He is literally conjured to the ceremony. A poor performance of the piece risks angering him, and it could bring about illness, accidents, or death. The performance of the piece in the ritual requires silence from the audience, and Wong describes a palpably tense atmosphere. Among those musicians who reach the fifth level, a select few of them will be given the right of acting as officiant at the waj khru ceremony. This privilege is proliferated sparingly. These officiants become the top person in a chain of tutelage. Here we see another manner in which the term thang can be used. A student whose teacher's lineage stems from a particular master teacher is understood to play in that master's thang.

Prior to the 20th century, the concept of a composer in the Western sense was almost completely absent from the tradition. There was one eminently famous musician who is the exception to this rule, Luang Pradit Phairau. He was an exceptional musician from outside of Bangkok (the capital of the Kingdom). His virtuosity on the ranat ek was soon discovered by the king, and he was recruited to join the royal piphat ensemble.

Luang Pradit Phairau

He was the most important musician in Thai music history for a few different reasons. As he was a member of the royal court music ensembles during the transition to a constitutional monarchy in the 1930s, he was a vital figure in the preservation of the music. He was also a gifted composer, particularly prolific in the *thao* form variations of pre-existing and new songs. Many of these songs have become part of the standard repertoire. In accompanying the King on political visits, he heard songs from neighboring countries (Cambodia and Indonesia), and he created *thao* versions of them, many of which have also become part of the standard repertoire. Finally, he was an officiant of the *waj khruu* ceremony, and in a time when the music was in danger of extinction due to Western influences and the change in government, he passed the ritual rites to an unprecedented number of students (13, according to Wong's count), ensuring that the traditional process of transmission could continue. His son was a gifted musician, but he preferred Western music, and he would go on to become a reputable Thai composer of Western orchestral music. His daughter was also a gifted musician, studying both Thai music and Western music. Instead of the customary passing of ritual rites to his son, he gave them to his daughter, making her the first female officiant. Today, he is considered torch-bearer of the tradition. In his own day, he was deemed a musical revolutionary. In addition to being the most skilled and prolific composer in the music's history, he devised new ways of playing the instruments. As the foremost exponent of the *thao* form, the melodic improvisations and embellishments that he devised (the *klaun*) are part of today's standard vocabulary.

Institutionalization, Nationalism, and Spiritualism

Luang Pradit Phairau exemplifies the old style of transmission (the learning and teaching of the music). The historical custom for a young aspiring musician was to approach a teacher, and ask to be accepted into his home. The teacher might have many students living at his house. They would live and eat for free, but they were expected to contribute to all the daily affairs of the teacher (cleaning, cooking, subbing for gigs). And they would practice constantly. As notation is a somewhat recent development, the learning process consisted of the teacher sitting across from the student, playing the melody for the student line by line, and the student absorbing it all by memory and repetition (*Pradit Phairau* also developed a cipher notation system for the music's documentation, although it not employed in typical pedagogical contexts, as the improvisational approach specific to each instrument precludes its utility). The bond between teacher and student was extremely important, manifested ceremonially by the ritual of repertoire transmission, but practiced in life through living proximity and familial responsibility.

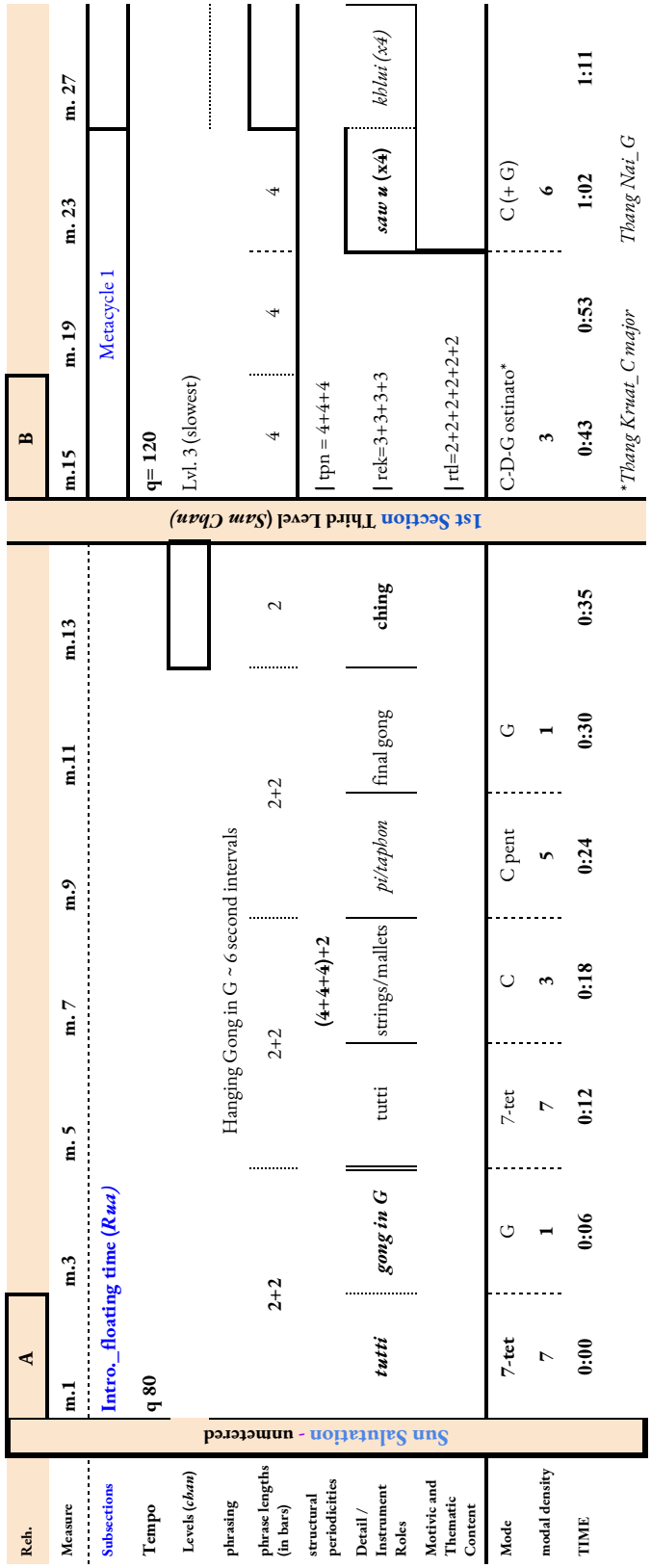
Luang Pradit Phairau's students were all embedded in the new musical world after the inception of the constitutional monarchy. As such, they found the highest positions in the government (the Department of Fine Arts) and in the universities. Today, the style of transmission has changed somewhat. It is unlikely that a student will live at a teacher's home. Instead, the student might study privately with a teacher or teachers at a local temple, perhaps very frequently, perhaps only once a week. When they are of university age, they might study at a music department to study directly with those most

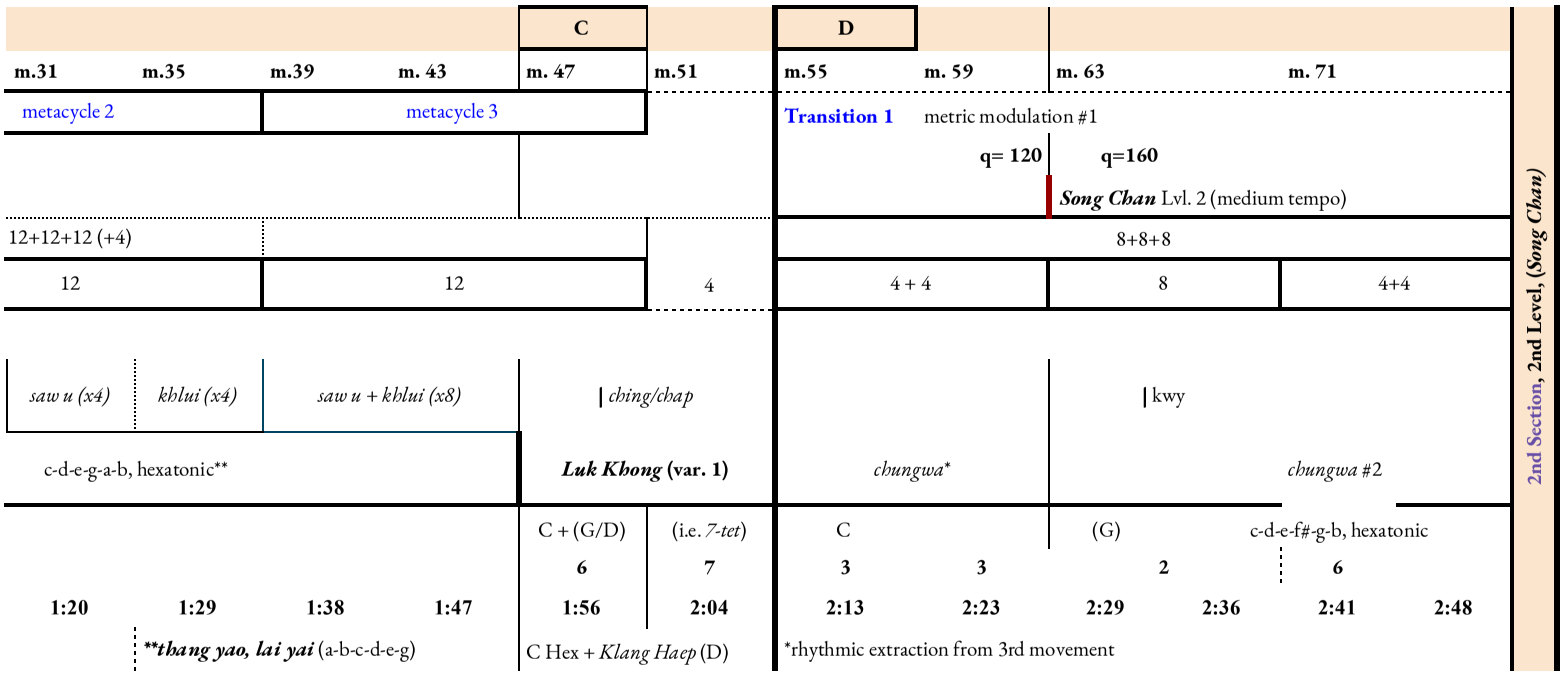
closely aligned with the lineage. The method of learning songs is still by ear, still with the teacher playing the melody for the student, and the student learning it by memory, piece by piece. Some students employ recording devices to make up for time away from the instrument, and the incorporation of Western *solfege* has also facilitated a verbal pedagogical tool.

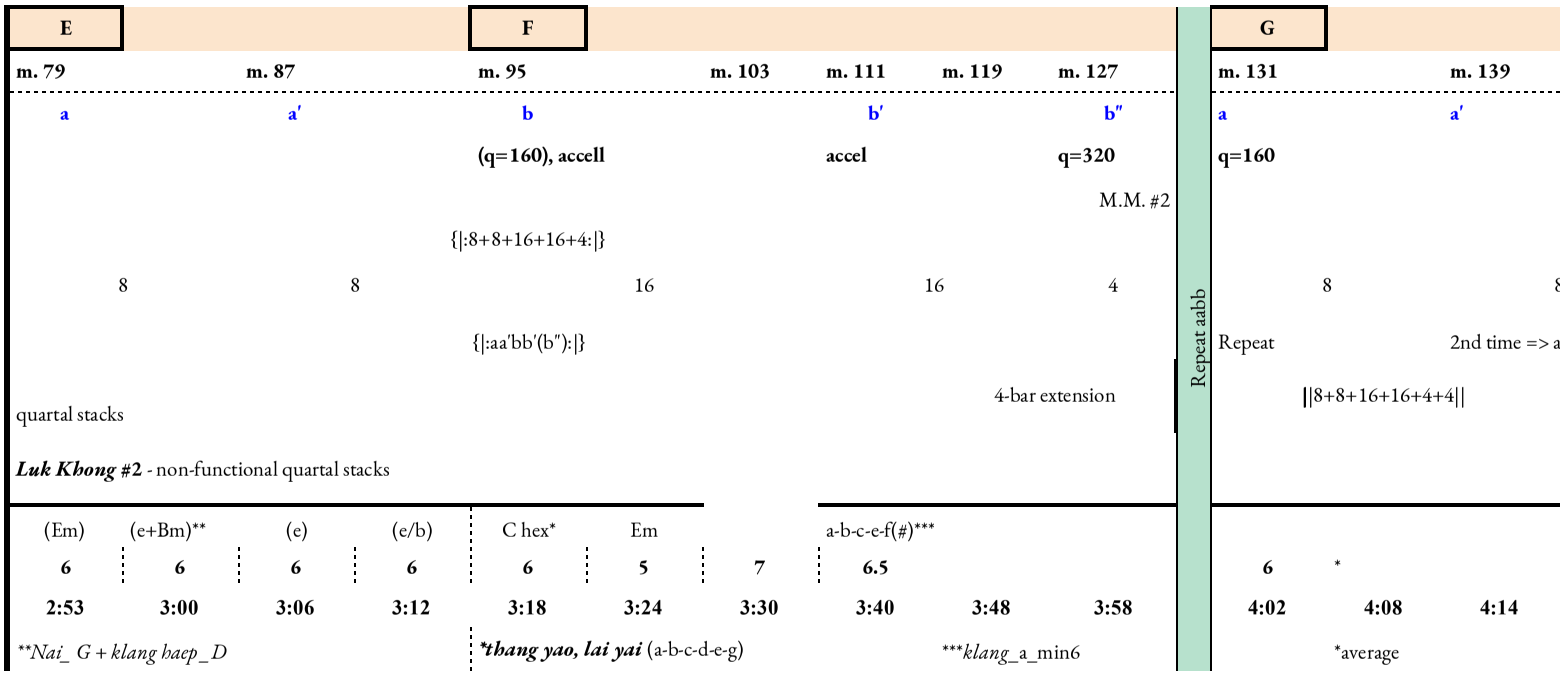
While the music within the university context has changed the process of transmission somewhat, the links to the original cultural contexts are still maintained by those high-level musicians with direct ties to the lineage. And although the political power in Thailand has shifted from the monarchy, the musical world still holds the King to be the highest spiritual being of the country. Wong illustrates this point in describing a situation in which the highest officiant of a particular style of dance-drama (*waj khruu* is not restricted to music) suddenly died. The Department of Fine Arts asked the King to bestow officiant rights to other high-level dancers, so the tradition could be carried forward. This view of the King as spiritual leader is evident in all walks of Thai culture. Most Thai homes contain a miniature altar placed high up on a wall, with images of the Buddha and/or the King.

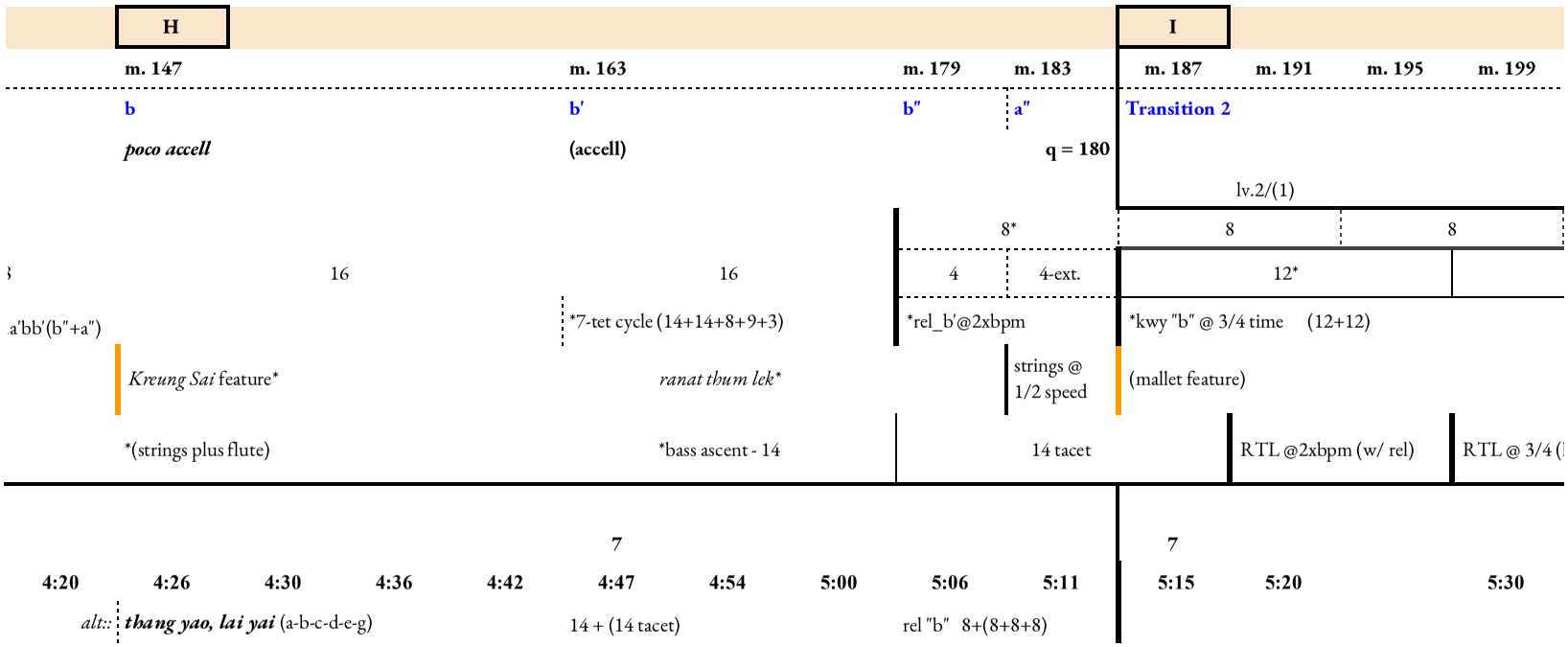
Through examination of the *waj khruu* ritual, we come to recognize how music is integrally linked to various Thai cultural values: the national religion (Theravada Buddhism) and the historical mythology, the pervading inclination towards spiritual unity under the guidance and leadership of the historically predominant form of government, and the interconnection between education, spiritualism, and power.

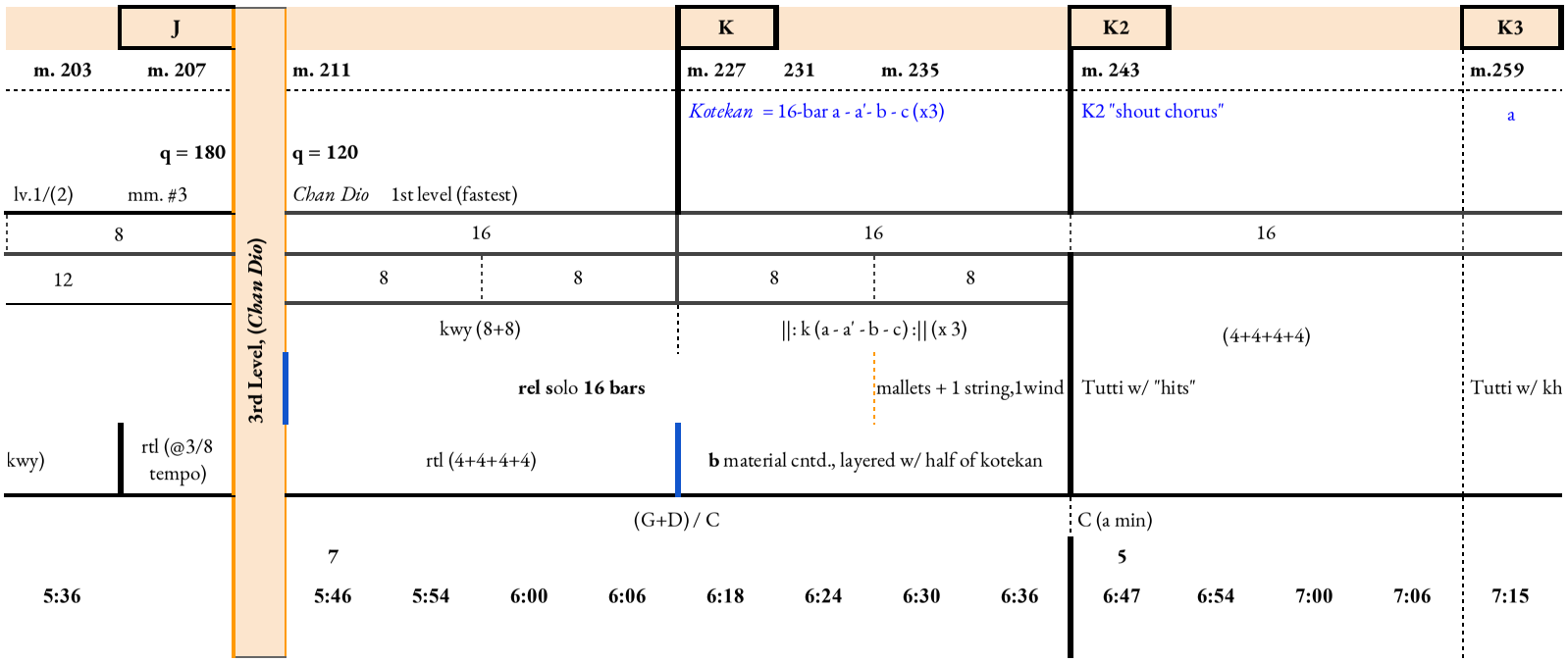
Appendix 3: Formal Structure over Time

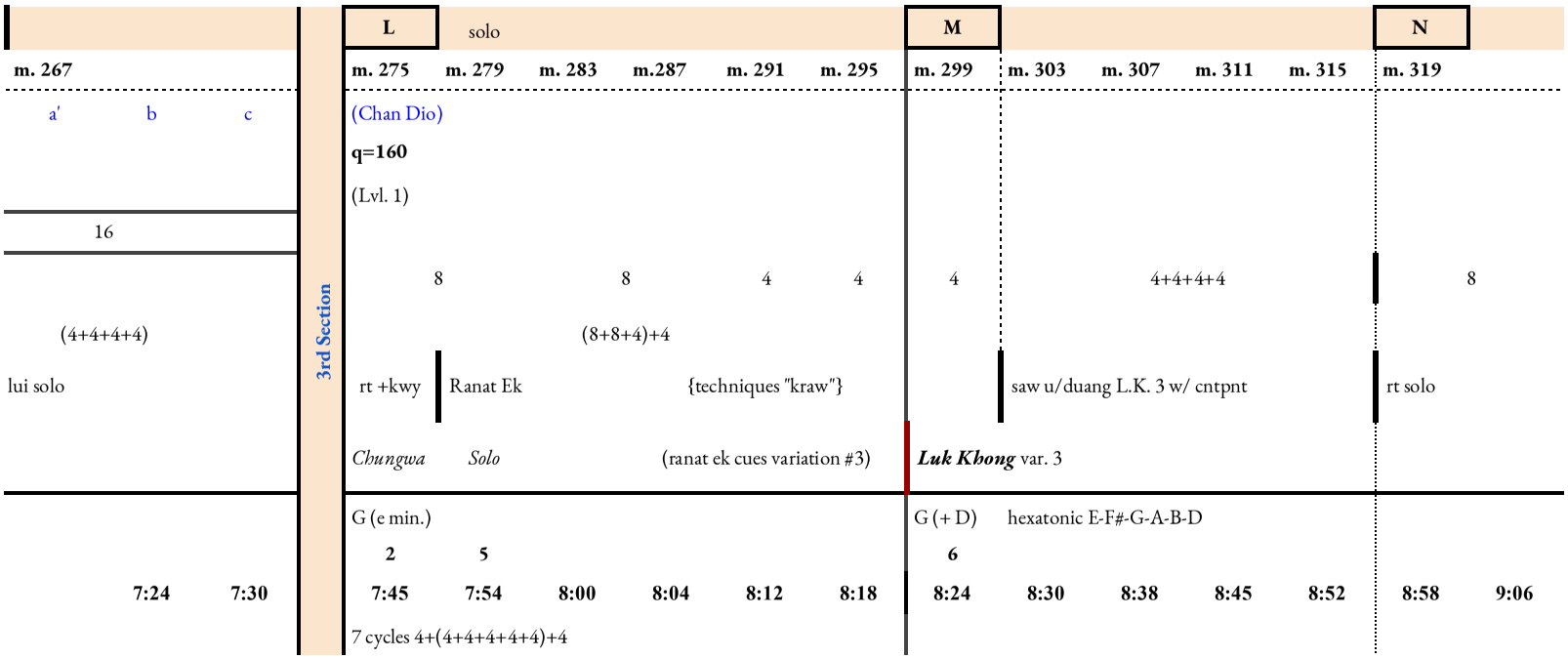


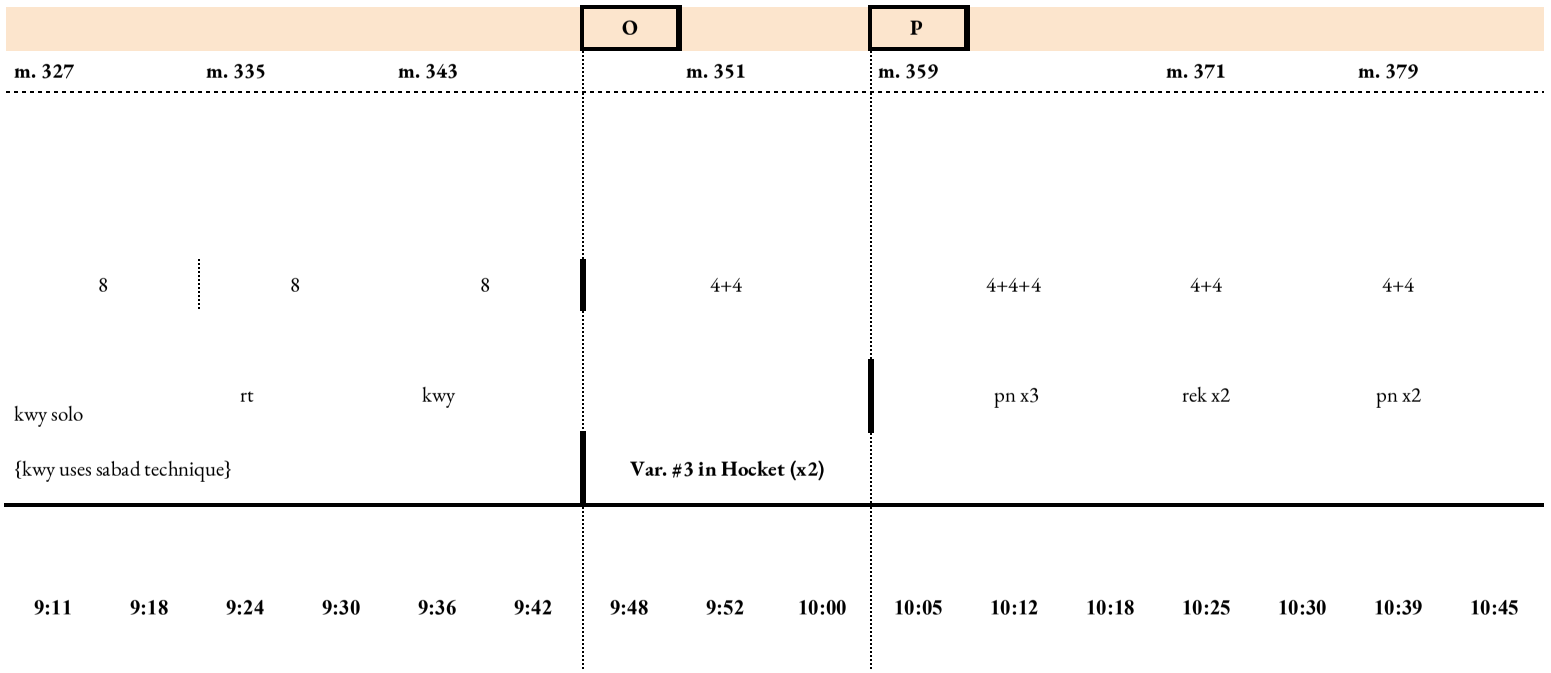

C
D
m.31
m.35
m.39
m. 43
m. 47
m.51
m.55
m. 59
m. 63
m. 71
metacycle 2
metacycle 3
Transition 1
metric modulation #1
q= 120
q=160
Song Chan Lvl. 2 (medium tempo)
12+12+12 (+4)
8+8+8
12
12
4
4 + 4
8
4+4
saw u (x4)
khlui (x4)
saw u + khlui (x8)
ching/chap
kwy
c-d-e-g-a-b, hexatonic**
Luk Khong (var. 1)
chungwa*
chungwa #2
C + (G/D)
(i.e. 7-tet)
C
(G)
c-d-e-f#-g-b, hexatonic
6
7
3
3
2
6
1:20
1:29
1:38
1:47
1:56
2:04
2:13
2:23
2:29
2:36
2:41
2:48
**thang yao, lai yai (a-b-c-d-e-g)
C Hex + Klang Haep (D)
*rhythmic extraction from 3rd movement
2nd Section, 2nd Level, (Song Chan)

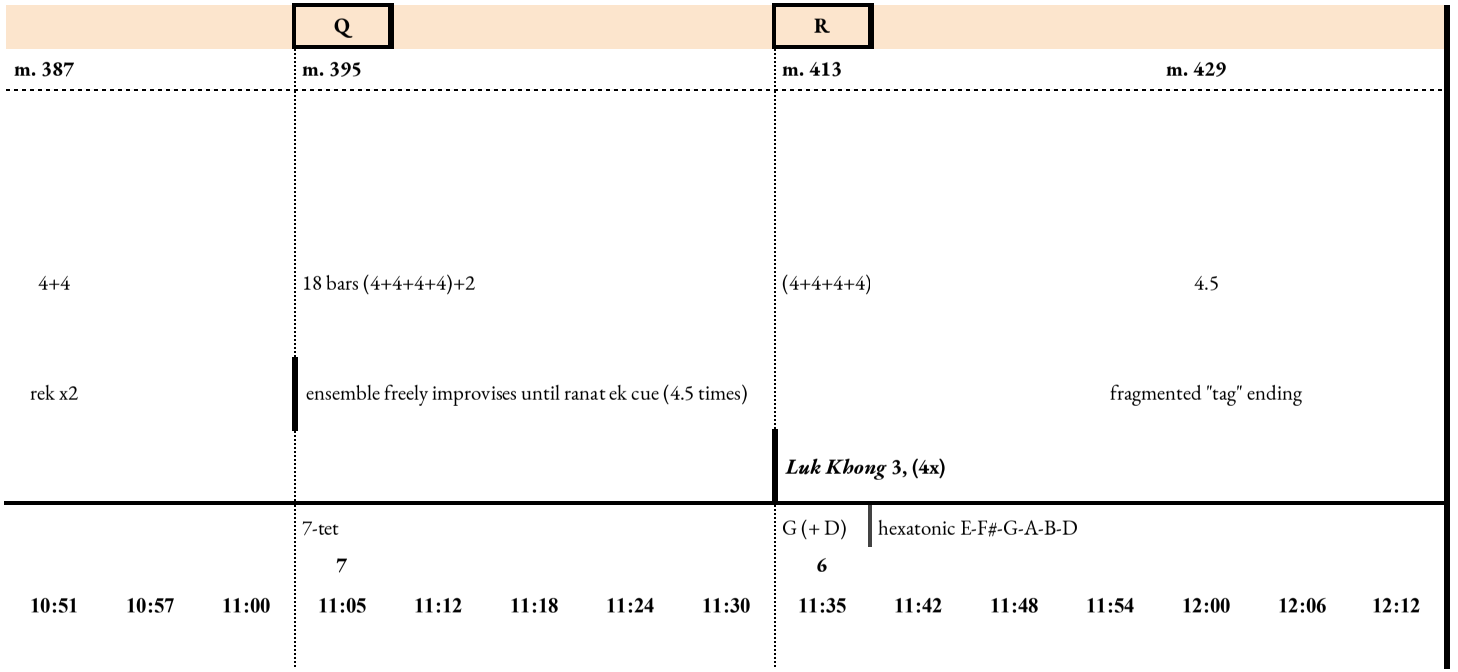

E
F
G
m. 79
m. 87
m. 95
m. 103
m. 111
m. 119
m. 127
m. 131
m. 139
a
a′
b
b′
b″
a
a′
(q=160), accell
accel
q=320
q=160
M.M. #2
{|:8+8+16+16+4:|}
8
8
16
16
4
8
8
{|:aa′bb′(b″):|}
Repeat
2nd time => a
4-bar extension
||8+8+16+16+4+4||
Repeat aabb
quartal stacks
Luk Khong #2 - non-functional quartal stacks
(Em)
(e+Bm)**
(e)
(e/b)
C hex*
Em
a-b-c-e-f(#)***
6
6
6
6
6
5
7
6.5
6
*
2:53
3:00
3:06
3:12
3:18
3:24
3:30
3:40
3:48
3:58
4:02
4:08
4:14
**Nai_ G + klang haep_D
*thang yao, lai yai (a-b-c-d-e-g)
***klang_a_min6
*average


H
I
m. 147
m. 163
m. 179
m. 183
m. 187
m. 191
m. 195
m. 199
b
b'
b"
a"
Transition 2
poco accell
(accell)
q = 180
lv.2/(1)
8*
8
8
16
16
4
4-ext.
12*
a'bb'(b"+a")
*7-tet cycle (14+14+8+9+3)
*rel_b'@2xbpm
*kwy "b" @ 3/4 time (12+12)
Kreung Sai feature*
ranat thum lek*
strings @ 1/2 speed
(mallet feature)
*(strings plus flute)
*bass ascent - 14
14 tacet
RTL @2xbpm (w/ rel)
RTL @ 3/4
7
7
4:20
4:26
4:30
4:36
4:42
4:47
4:54
5:00
5:06
5:11
5:15
5:20
5:30
alt::
thang yao, lai yai (a-b-c-d-e-g)
14 + (14 tacet)
rel "b" 8+(8+8+8)


J
K
K2
K3
m. 203
m. 207
m. 211
m. 227
231
m. 235
m. 243
m.259
Kotekan = 16-bar a - a'- b - c (x3)
K2 "shout chorus"
a
q = 180
q = 120
lv.1/(2)
mm. #3
Chan Dio 1st level (fastest)
8
16
16
16
12
8
8
8
8
kwy (8+8)
||: k (a - a' - b - c) :|| (x 3)
(4+4+4+4)
3rd Level, (Chan Dio)
rel solo 16 bars
mallets + 1 string,1wind
Tutti w/ "hits"
Tutti w/ kh
kwy)
rtl (@3/8 tempo)
rtl (4+4+4+4)
b material cntd., layered w/ half of kotekan
(G+D) / C
C (a min)
7
5
5:36
5:46
5:54
6:00
6:06
6:18
6:24
6:30
6:36
6:47
6:54
7:00
7:06
7:15


L
solo
M
N
m. 267
m. 275
m. 279
m. 283
m.287
m. 291
m. 295
m. 299
m. 303
m. 307
m. 311
m. 315
m. 319
a'
b
c
(Chan Dio)
q=160
(Lvl. 1)
16
8
8
4
4
4
4+4+4+4
8
(4+4+4+4)
(8+8+4)+4
lui solo
3rd Section
rt +kwy
Ranat Ek
{techniques "kraw"}
saw u/duang L.K. 3 w/ cntpnt
rt solo
Chungwa
Solo
(ranat ek cues variation #3)
Luk Khong var. 3
G (e min.)
G (+ D)
hexatonic E-F#-G-A-B-D
2
5
6
7:24
7:30
7:45
7:54
8:00
8:04
8:12
8:18
8:24
8:30
8:38
8:45
8:52
8:58
9:06
7 cycles 4+(4+4+4+4+4)+4


O
P
m. 327
m. 335
m. 343
m. 351
m. 359
m. 371
m. 379
8
8
8
4+4
4+4+4
4+4
4+4
kwy solo
rt
kwy
pn x3
rek x2
pn x2
{kwy uses sabad technique}
Var. #3 in Hocket (x2)
9:11
9:18
9:24
9:30
9:36
9:42
9:48
9:52
10:00
10:05
10:12
10:18
10:25
10:30
10:39
10:45


Q
R
m. 387
m. 395
m. 413
m. 429
4+4
18 bars (4+4+4+4)+2
(4+4+4+4)
4.5
rek x2
ensemble freely improvises until ranat ek cue (4.5 times)
fragmented "tag" ending
Luk Khong 3, (4x)
7-tet
G (+ D)
hexatonic E-F#-G-A-B-D
7
6
10:51
10:57
11:00
11:05
11:12
11:18
11:24
11:30
11:35
11:42
11:48
11:54
12:00
12:06
12:12