Gamelan Gender Wayang of Bali: Form and Style

by
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A thesis submitted to the faculty
of Wesleyan University in partial fulfillment of
the requirements for the degree of Master of Arts in Music

Middletown, Connecticut

May, 2000
My teacher, Kak Luweng, and myself playing *gender* (above) and just sitting (below).
Introduction and Acknowledgements

I began studying *gamelan* music in 1994 while I was an undergraduate at the Massachusetts Institute of Technology. No one tends offhand to associate *gamelan* with MIT, but there it is. Professor Evan Ziporyn has been directing the *gong kebyar* ensemble Gamelan Galak Tika at MIT since 1993, and I was an active member from 1994 until 1997. Unfortunately the pressure of my studies at Wesleyan has not allowed me to play with Galak Tika as much as I would like in the past few years. For the three years of my tenure with Galak Tika we were blessed with the artistry of the Balinese husband and wife team of I Nyoman Catra and Desak Made Suarti Laksmi. The magnificent teaching and performance prowess of Evan, Catra and Desak formed the basis of my introduction to *gamelan* music. In 1997 I came to Wesleyan University to study for the degree of Master of Arts in Music, of which this thesis is a part. Here at Wesleyan I have had the great honor of studying with I. M. Harjito and Sumarsam, two Javanese artists. I sincerely thank them for broadening my awareness of the multifaceted natures of Indonesian music and for sharing with me the great beauty of the central Javanese court *gamelan*.

I studied at Wesleyan for a year, after which time I spent a year in Indonesia studying Balinese *gender wayang* in particular and *gamelan* music in general, in both Bali and Java. In the fall of 1999 I returned to Wesleyan to complete the second and final year of my MA. For my thesis work, my focus is on the performance and teaching of the repertoire of *gamelan gender wayang*, and of my own compositions. Included with this written thesis are two compact disc recordings, archived in the Wesleyan University library. One is of Kak Luweng and myself playing at home (tracks 1 through 5) and
performing at a ceremony in Bali (tracks 6 through 15). The CD other contains my own work, and is entitled “Garden of Earthly Delights”. I feel that the music itself speaks far better than I do, so I do not wish to spend very much time writing about it here. A comparison of my own work with the traditional repertoire may give the listener some idea of elements I have incorporated from the Balinese tradition, and some I have borrowed from other traditions or invented myself.

When I first arrived in Bali I stayed for a month at Desak and Catra’s house in Denpasar, the capital city of Bali. Going to performances with Desak (Catra was teaching and performing in California at the time), I began to meet musicians and make connections. I finally had the great stroke of luck to come across my long-term gender teacher, I Kethut Pelug. Pelug is his given name, but in general everyone calls him Kak Luweng (Grandfather Luweng), so that is how I refer to him in this document. His home is in Sibanggede Village, a few kilometers north of Denpasar. Kak Luweng is by any account a master of gamelan gender wayang. I count my blessings that I had the incredible fortune to be able to sit across the genders from him for a few hours every day from October 1998 to July 1999. He started playing gender with his father when he was around four, and by now has over eighty years’ experience. I guess that Kak Luweng was born some time in the nineteen tens. Dates were not kept so strictly back then. It was a different world, hard for me to imagine. There were not even bicycles on the island of Bali, let alone the now-ubiquitous motorbikes and cars. You can feel the ancient tradition impregnating the slightest figure he plays. Regardless of the long passage of years, Kak Luweng has a sprightly twinkle in his eyes when he plays a tune. He still works in the fields most mornings before coming home to nap (or teach me)
through the hottest part of the day. My favorite time was the rainy season. I had to be very aware of the weather, since I had to drive a motorbike for a half hour to get from my house to Kak’s. I loved to get to the house just before the clouds burst in torrents cascading down onto the land. We’d sit on the balé, a roofed but open-walled porch, and watch the rain pour down. It’s good for the flowers. Kak with his tobacco and betel nut and me with my tea, we’d play gender until neither of us could think straight anymore.

Our communication is an interesting thing. Kak speaks only the Balinese language. I learned Indonesian, the country’s national language, but not very much Balinese. The Indonesian language is a form of Malay, and has been used as a lingua franca among the seafaring folk in Indonesia for many years. Yet until Indonesia was created as a country at the end of WWII, most people didn’t speak it. Most folks who were young at that time have learned it, but only people who have grown up within the past few decades have spoken Indonesian since childhood. Outside the cities, schools and offices, daily life is carried out by the Balinese in their native tongue. Of course Kak recognizes some Indonesian, just from being around it all the time. But consider that he was around forty in 1945. Now and then I would ask some of Kak’s family members to translate, but most of the time we were on our own. The good thing is that many of the words used for gamelan are the same anywhere you go. Everyone uses the Balinese words for them. In addition to this, the genders are good translators. The instruments communicate volumes. For instance, I could pretty easily tell from Kak Luweng’s facial expression when I had played something wrong. Instead of explaining my difficulty, he would just play it the right way, and I would listen and repeat it until he was satisfied. Kak Luweng and I got to the point where we could understand each other pretty well,
once we could read each other’s facial expressions and knew each other’s tendencies. We pieced together a sort of pidgin, gesturally- and musically-based language which was functional enough. Music crosses such boundaries. I could usually tell how he was feeling; if he was tired, or in a joking mood or whatever, by how he played. I could tell if what he was playing was intended as only one of several possible variations, or rather as the way to play a pattern every time. We spoke together through the instruments. In fact, it was a long time before he and I could really understand each other without the genders between us to translate.

Please listen to the compact disc I am including with this thesis, of Kak Luweng and myself playing at a ceremony. I will make reference to particular songs in the course of my writing. Those familiar with gamelan gender wayang will recognize the ancient nature of the playing style. It has been conserved fairly well against the craze of fiery kebyar style which has swept across the face of Balinese music since the inception of gong kebyar in the early part of this century. This being an oral tradition, the composers of the songs are anonymous. Many of the songs Kak Luweng taught me have existed since long before he was born. In some cases he has made changes, often to smooth over parts he felt were not alus enough. Alus is an important word in the Balinese language, and in Javanese and Indonesian for that matter. It is especially important when discussing matters of culture, aesthetics, and art. Alus may be defined as refined, courtly or smoothly elegant. Alus quality is a cultural ideal, aspired to by all. In some cases Kak would take two versions of the same song, originating from different villages, and compose a transition between them to play them as two sections of the same song. These types of changes are inherent in the nature of oral tradition. In my writing I try to present...
a picture of gender playing as I have abstracted it from my previous knowledge of
Balinese musical idioms, and specifically from my studies with Kak Luweng and my
analyses of his playing style. I must credit him foremost as the wellspring of my
knowledge and aesthetic sensibility. I hope that I do him justice in writing from this
academic viewpoint.
Gamelan gender wayang, in the five-tone scale called slendro. Each two-octave instrument consists of ten bronze keys, suspended over bamboo resonators. They are played with mallets called pangguls. Above right: lower pitched pemade pair. Above left: the higher pitched kantilan pair doubles one octave and continues an octave higher. Below: detail of the pemade pair. These are my instruments, which I bought in the village of Tenganan Pegringsingan, West Bali.
Some Important Terms

• The term *gamelan* may be loosely translated as ‘musical ensemble’ or ‘orchestra’. It refers to the traditional musical ensembles found on the Indonesian islands of Bali, Java and a few others.

• A *gender* is a xylophone consisting of bronze keys suspended over tuned tube resonators. There are various types of *genders*, however for purposes of the present work, the term *gender* refers to the Balinese instrument defined below as *gender wayang*.

• *Wayang* means 'shadow', 'puppet', 'shadow puppet' and 'shadow puppet performance.' The puppets are flat painted leather, painstakingly carved.

• *Gamelan gender wayang* is named for its role in accompanying the *wayang* shadow puppet play, although its use is not limited to this function. The *gamelan* consists principally of four bronze-keyed xylophones, interchangeably referred to as *gender* or *gender wayang*. Each *gender* has ten bronze keys suspended over tuned bamboo tube resonators. These ten keys span two octaves of the five-tone scale, which is called *slendro*. Two of the instruments, called *pemade*, sound in the low and middle octaves. They are complemented by the two *kantilan*, which double the middle octave and continue into the high octave. Thus, *gamelan gender wayang* has a total range of three octaves. *Wayang* stories are generally drawn from the Hindu epic the Mahabharata. The ensemble may be expanded to include a variety of bamboo flutes, gongs, drums, and metal cymbals. In this case it is called *gamelan gender wayang batel*, and is used to dramatize stories drawn from the Hindu Ramayana.

• The *dalang* completes the ensemble of *gender wayang* if the context is a *wayang* performance. He is the puppetmaster who plays the puppets and narrates the story in the many voices of all the characters. The *dalang* also sings songs and directs the musicians.
Most stories of Balinese wayang originate from the Hindu epics the Ramayana and the Mahabharata. By the flicker of an oil lamp, the dalang casts the shadows of the wayang puppets dancing across a screen interposed between himself and the musicians on one side, and the audience on the other. The flat leather puppets are perforated with many tiny holes which let light through to the screen amidst the shadow of the body of the puppet, creating a mystical, dreamlike effect. By the dalang's side sits a heavy wooden box. It is the wayang storage box, but has a musical function during the performance. The dalang holds a carved wooden knocker between the largest two toes of one foot, and raps on the box with it. This percussive crack has many functions, among which are giving cues to the musicians, emphasizing key statements in the dialogue, and supplying sound effects for fight scenes. The dalang also has one or two assistants with duties such as packing and unpacking the wayang puppets, preparing them for use, and tending the oil lamp.
• *Slendro* is the five-tone scale used for *gender wayang*. The intervals between the notes are fairly evenly spaced across the octave, but the actual intervals of the scale vary considerably from ensemble to ensemble. The Balinese use a system similar to solfege to refer to scale tones, in which the pitches are sung as dong, deng, dung, dang, and ding. In many instances the 'd' is replaced by 'n' or 'nd', giving the notes as ndong, ndeng, ndung, ndang and nding. The *gender*'s ten-note span includes two full octaves. For simplicity, the present work will primarily utilize numbers. Scale tone 1 will be referred to as t1, scale tone 2 will be referred to as t2, and so on. If the reader would like to play a pseudo-*slendro* scale on a western instrument, a fair approximation is given by a minor pentatonic, for instance the E-flat scale made up of the black keys on a piano: E-flat, G-flat, A-flat, B-flat, D-flat.

• *Upacara* is the Balinese word for 'ceremony'. *Gender wayang* is often called upon to provide music for ceremonies. In these cases the *dalang* is not present and often the higher-pitched *kantilan* pair is omitted, leaving only the lower-pitched *pemade* pair. Balinese Hindu priests and priestesses are called *pemangku*.

• *Alus* may be defined as refined, or smoothly elegant. A cultural ideal, the concept of *alus* is very important when talking about *gamelan*, and about Indonesian culture in general. Its opposite is *kasar*, which means coarse, unrefined, and brutish.

• *Ngisep* and *ngumbang* are a complex pair of words. With relation to *gender wayang*, these terms have both a literal meaning and a metaphorical meaning. The metaphorical definition has to do with variations in the intensity of the playing style and feel. In this sense they could be defined as ebb and flow, respectively. One of the aesthetics of Balinese *gamelan* music is constant change in the dynamics and temporal flow, as well as the relative tenderness or forcefulness of the playing style. *Ngisep* means ebb or 'breathe' in the sense of
relaxing the tempo and dynamic level and playing in more tender style. *Ngumbang*, as the opposite of *ngisep*, means to increase the tempo and dynamics and play in a more forceful, percussive style. The idiom of *gender* music always contains wavelike swells in dynamics and tempo and in feel. These swells are crucial in delineating the overall structure of a piece, and also in interpreting and giving voice to either the action of the *wayang* shadow plays or the events taking place in a ceremony, depending on the setting. They provide a fertile mode of improvisation and interpretation which will be further discussed specifically in relation to the musical analyses which follow.

The literal meaning of *ngisep* and *ngumbang* has to do with the tuning of the two pairs of *genders*, the lower-pitched *pemade* pair and the higher-pitched *kantilan* pair. Each scale tone is given a slightly different literal pitch manifestation on each instrument of each pair. The higher-tuned instrument of the pair is called the *pengisep* and the lower-tuned instrument is called the *pengumbang*. When these two slightly differently-tuned notes are struck simultaneously they create an acoustical beating phenomena which gives Balinese *gamelan* its classic shimmering sound quality. This composite tone is considered the full manifestation of each scale tone, and a single note played by itself is considered naked, dry and incomplete. The rate of the beating depends on the ratio of the two frequencies (*pengumbang* and *pengisep*) comprising the full manifestation of each scale tone. A certain frequency ratio gives rise to beating of a certain rate and quality. For consistency, it is optimal to conserve the number of beats per second across all notes of all octaves of an ensemble. This ratio-based conservation of the number of beats per second results in a smaller interval between the *pengumbang* and *pengisep* pitches in higher octaves than in lower octaves. In the highest octaves the interval may be barely noticeable, whereas in the
lowest octave of the *gamelan* it may be more than a half-step. It must be stressed that the
nature of each scale tone is defined not as a single frequency, but as the complex interaction
of the many different literal pitch manifestations of that tone included in the *gamelan* (which
are neither pure octaves nor pure unisons).
The inside of a large temple (*guna*). Most Balinese people are devout Hindus. Daily life is run according to a complex system of overlapping cycles of days, months and years. Each village has at least three temples, each with specific functions, and in addition each Balinese home has a house shrine (*sangga*). Notice the large covered platforms (*balé*). At ceremonies, the priests (*pemangku*) and musicians set up on a *balé*, and all ceremonial attendees retreat to their shelter in case of rain.
The seaside gates to the *pura* (temple) at Tanah Lot. The temple itself (not shown) is built on a rocky promontory. At high tide it becomes an island, cut off from the surrounding land by a considerable stretch of water.
The pemangku (holy man) is blessing a small shrine in Kak Luweng’s house. This is not the sangga, (main house shrine). It is a smaller shrine. At the base of the shrine and also in the mounted baskets, offerings are made.
Mek Tut, a neighbor, blessing the sangga (main family shrine) in Kak Luwengs’s house. The sangga is a walled enclosure at the back of the house, three or four meters on a side. Every Balinese household has a sangga, and holds a twice-yearly purification ceremony for the sangga itself, as well as many other rituals throughout the course of the year.
Another view of the *sangga* (main house shrine) in Kak Luweng's house. In the center is an offering of coconut shells (partly burnt), flowers and holy water.
**Gamelan Gender Wayang:**

**Basic Playing Style**

The *gender* is played in a two-handed technique. Each hand holds a mallet called a *panggul*. The *panggul* stems are round wooden sticks about eight inches long, upon which are mounted round wooden disc-shaped heads about an inch and a half in diameter. The stem is held between the pointer and middle fingers of the hand, approximately a third of the way down from the head, and is balanced on top by the thumb, approximately a third of the way up from the tip of the stem. The keys are struck by the head of the *panggul* propelled by a flick of the fingers and wrist. Once struck, a bronze key may ring for anywhere from 30 seconds to several minutes, depending on its size and the weight of the strike. It must therefore be damped when the melody moves to the next note, or else in only a short time the melodic tapestry would become totally muddled and indistinct. This damping is accomplished with the two little fingers of the striking hand, along with the side of the palm.

In their most basic form, *gender* songs consist of either a melody or a repeated rhythmic riff played by the performers' left hands in the lower octave of the instrument. The core melody is complemented by rhythmic and melodic elaboration played by the right hand. This simple structure allows analysis of the most basic nature of the music and clearly shows how the core melody is elaborated in a standard, idiomatic way. Discussion of the standard form will lead into a discussion of some of the finer points of how the elaborating patterns may be varied. Variation in the patterns may be based on nothing more than the musician's whim, just to keep
things interesting. However, it will be shown that in determining the elaborating pattern to be played, great consideration is given to the performance context, the mood of a particular scene of the wayang shadow play, and the physical constraints of damping keys after they have been struck. There can be great variation in the relative tenderness or forcefulness of the playing style called for in a certain setting. The elaboration of a certain melodic phrase may be given very different treatment depending on whether the performance context is the refined, tender and upliftingly serene mood of a temple ceremony (upacara), or on the other hand the lively, crashing excitement of the wayang shadow play. Within wayang performance, changes of scene require clear changes in the mood and style of the playing. Gender wayang musicians have at their command many different methods of playing and harmonizing each melody or pattern, and sometimes must respond to a change in situation with only a split second’s notice.

In Balinese gamelan music, the most fundamental style of rhythmically elaborating the core melody is called kotekan. For the introduction of kotekan I have chosen to analyze the song “Angklung”. It is so named because it derives originally from the four-tone Angklung ensemble. On the gender, the four tones included in the song are deng, dung, dang, and ding, the four highest keys. Dong, the lowest key of the gender, is omitted. For simplicity in the present work, the four tones will be referred to as t1, t2, t3, and t4, with t1 being the lowest and t4 the highest. Readers wishing to play the musical examples on a Western instrument could play the scale from t1 to t4 as G-flat, A-flat, B-flat, D-flat.
Figure 1: Orchestration of the song Angklung.

- Bottom left: of the five-tone slendro scale, Angklung draws a four-tone mode: deng, dung, dang, ding. The scale repeats in the higher octave. The lower pitched pemade each play the core melody in the lower octave and half of the kotekan in the higher octave.
- Bottom right: one kantilan plays the polos half of the kotekan with both hands.
- Top right: the other kantilan plays the sangsih half of the kotekan with both hands.
- Top left: kempyung is an interval spanning four keys, in this case between deng (tone 1) and ding (tone 4).
The lower octave of the instrument is used to play the core melody in unison. The higher octave is divided in half. One performer plays only t1 and t2. This is called the polos part, meaning the relatively straight-forward, on-the-beat part. The other performer plays t3 and t4 and is called the sangsih. Sangsih patterns are rhythmically off the beat, and serve the melodic function of harmonization. Polos patterns generally are more standardized, simply stating the melody, whereas the sangsih parts are the ones which tend to vary significantly as they dance in harmonization around the solid core of the polos. This higher-level, interpretive element of sangsih playing will be demonstrated as the analyses unfold. In some cases the polos player may double t3, the lower note of the sangsih half of the kotekan. This can add clarity to the melodic line by having the polos player play more continuously. The down side of having the polos player double the third note of the kotekan is that it makes that note stick out of the texture. In quiet, relaxed, alus songs such as Angklung it is best for each player to stick to only two notes. It keeps the texture of the music clear and even, and keeps the players from stepping on each other's toes as the song sweeps up and down in tempo and dynamic expression.

In my notation for Angklung, I use the Western staff, but only place notes in the spaces. The lowest space corresponds to t1, the second space is t2, the third space is t3, and the fourth is t4. Both staves are the same, except for the octave difference. The bottom staff indicates the core melody, played in unison by the performers' left hands. Only the lower pitched pemade pair plays the core melody. The higher-pitched kantilan pair plays the kotekan with both hands, in parallel octaves. The
notes on the top staff with stems pointing down indicate the *polos* patterns. The notes on the top staff with stems pointing up indicate the *sangsih* patterns. Eighth notes are barred across the half note to show the continuity of the patterns and help lock the patterns into a grid-like, delineated framework. This barring brings forth the interlocking relationships between the *polos* and *sangsih* and shows the composite nature of the figuration in the clearest way. In thinking about *kotekan*, it must be stressed that no individual player is playing a complete melody. When one player has a rest in his pattern he must mentally sing the note that fills it in, in order to really understand the full melody and to fit the nuances of playing style into a seamless composite. He must take into account not only his own notes and rests, but also his partner’s, as well as matching his partner’s attack, dynamics, damping style, etc. As such, rests are only included when the composite melody rests. When referring to a certain measure in the piece, I use the abbreviation of m1 for measure 1, m2 for measure 2, etc. The song’s introduction is not counted in this numbering system, as it is not part of the repeating cycle.
Figure 2: Angklung.
Analysis of the Song “Angklung”:

Actualization of a Theoretically-Derived Kotekan

Please listen to the accompanying CD, on which Angklung is track #7. The introduction to Angklung is a quick little pattern, played by the ensemble leader’s right hand alone. This calls the tune. In general in Balinese gamelan, songs are not called verbally, nor is the order of pieces to be played set beforehand. Perhaps the first and last tunes are set. Other than that, the musicians know what songs would be appropriate to a certain occasion and the leader draws from this repertoire depending on what is going on around the musicians. When playing at ceremonies, Kak Luweng was always very careful to place our instruments so that he could see what was going on. He would watch the pemangku (holy man), and pay attention to whether people were processing around the temple with offerings or sitting quietly praying. Angklung, being a very alus (refined, elegant) song, is usually played early in the ceremony while people were praying. Other songs have other functions throughout the course of the ceremony, depending on their style and the mood they portray. The ceremony pivots around the sound of the prayer bell (track #6 on my CD), which the pemangku rings while people sit in prayer. Angklung is played near the beginning of the ceremony. Sankrim (track #8) is a processional with a steady marchlike bassline and an even, classic melodic style. It is for processions around the temple with offerings. Bima Krodo (track #9) is a bit of a departure. This piece probably would be played while there is a lull in ceremonial activity, or else it would be shortened and slowed down a bit. At this particular ceremony it represented a brief moment of more of a performance-style setting, a song to be played and enjoyed for its own sake instead of having some literal ceremonial purpose. The
ceremony continued with more prayers and processions, not all of which fit on the CD I made. Track #13 is a song called Merak Ngelo, which Kak liked to play once the ceremony was basically over. Then there would be a few very short closing pieces and that would be it.

To call the tune Angklung, Kak simply launches into the intro, called a ginoman. Ginomans are not shared between pieces, so the musicians know within seconds what the tune is. Entrances can be made either partway through the ginoman, or on the first left hand stroke of the repeating cycle. It doesn’t really matter. These songs grow in a very organic way, in the traditional performance context. They fade into being. At first the tone is naked and dry, not doubled and vibrant (see above, in the definition of ngisep/ngumbang). The ensemble leader starts and the players jump in after the song is already rolling. The kotekan seems to coalesce, squirming like a living thing as the polos and sangsih find each other, match and lock together. Along with this, the tempo can often fluctuate quite a bit at the beginning of a song. It starts pretty quickly, at about march tempo (quarter note > 100) but by the end of the intro slows to about 75% of that speed.

In gamelan gender wayang there are in fact no gongs or drums present to punctuate the gong cycle or to literally delineate the rhythmic structure. Nevertheless, the melodic elaboration of Angklung is so deftly constructed and must be so sensitively played as to fully assume this role. The first rule of fitting kotekan to a melody is that when the melody strikes a tone, the kotekan should strike that tone. Yet this rule is broken at once in Angklung. Upon the stroke of t3 by the left hand in m1, there is an omitted t3 in the sangsih part. In many ensembles of various forms of gamelan music it
is common for the elaborating texture to *ngisep* (rest and breathe calmly) on the beginning note of a cycle. By texture here I refer to elaborating instruments, singers, dancers; literally everything. Everything rests for a moment to give space and full respect to the stroke of the large gong, a stroke which is foreshadowed in various idiomatic ways as the previous cycle draws to a close. In this case, the anticipation comes in the form of an extreme slow-down as the implicit stroke of gong is approached. Even after this point, the repercussion of the power of the gong is felt as Kak Luweng would come in very late with the first t4 of the *sangsih* part. He would continue to pull on the flow of time, stretching it, and not until the downbeat of m2 would he be quite in time. This is an example of the use of the high t4 for signaling to control the ensemble’s dynamic range of expression, and to alter and direct the flow of time. Another, more developed example of this signaling use of t4 by the ensemble leader to get the players’ attention and take control of the ensemble will be found in the variation structure of m7-8, a structural turning point in this piece.

The first tone of the song Angklung is t3, and we begin with a hanging pattern which meditates upon this tone. The *kotekan* pattern used to elaborate t3 here has the sequence of tones 321232123, etc. The t4’s played have the role of harmonization. Hanging patterns used in Balinese *gamelan* are characterized by balanced, wavelike up-and-down motion. They both rise and fall in equal measure, and the tone being elaborated comes on the strong beats. M2 brings us t4 in the core melody but this does not change the tonal center at this point in the song. We know this because the *kotekan* remains as it is, as opposed to switching to an elaboration of t4. This t4 in the core melody of m2 acts as a harmonic anticipation looking towards m5, at which point we will
settle on t4 and rest, or hang, there. Before we can reach t4, the melody must foreshadow it. Anticipation patterns in Balinese music tend to follow a standard form. First the melody states where it is (m3, t3). Then it states where it is going (m3, t4). Then it moves in the opposite direction (m4, t2). This allows room for the idiomatically standard three-note approach scales used in Balinese gamelan (the sequence of tones 234). Once there is room, the melody begins to walk towards the target tone (m4, t3). It finally lands on the target tone (m5, t4) and rests there for two measures.

Angklung is based on simple alternation of resting/hanging patterns with movement/anticipation patterns. The first half of each four-measure rhythmic phrase consists of a resting elaboration of a single tone, struck at the beginning of the phrase (measures 1, 5, 9, 13). The second half of each phrase consists of an approach pattern anticipating the coming target tone. Melodic phrases and rhythmic fragments, such as these idiomatic hanging or movement patterns, are given life and elaborated in Balinese gamelan by way of telescoping levels of representation. Patterns repeat either shrunk down or expanded in timescale, often inside of themselves, nestled like fractal art. Take for example the approach to t4, m5. Its form is the sequence of tones 34234. The core melody plays this pattern spaced over half notes (m3-5). The elaborating kotekan plays this exact same pattern, starting at exactly the same place. The difference is that it is now in the timescale of eighth notes. The kotekan starts on the downbeat of m3 with tones 34234. It then repeats the three-note approach made by tones 234, marching steadily upwards until it lands resolutely on t4 at the downbeat of m5. It is not enough for the figuration to simply rise. In the deft overlapping of identical patterns starting at a precise point within their repeating cycle, the notes are woven into a tapestry such that every
stroke of the slow moving left hand melody is doubled by the same tone in the right hand kotekan.

*Gender wayang*, and much *gamelan* music in general, is characterized by a multitude of lines orbiting around parallel motion. Elaborating instruments run through patterns drawn from the idioms of structural movement, but each abstracted or harmonized in its own way. At this point a brief digression is warranted, to explain the system of harmonization used in Balinese *gamelan*. The system is based on an interval called *kempyung*, which is defined as being three notes above the note being harmonized. The *kempyung* of t1 is t4; that of t2 is t5; that of t3 is t1; that of t4 is t2; and that of t5 is t3. The actual interval of *kempyung*, if one were to measure it, ranges from some type of fourth to some type of sixth. The nature of *kempyung* depends on the scale and where one is in the scale. Interested readers may refer to the tone measurements of many different *gamelan* scales included in Colin McPhee's book “Music in Bali”, pp36-55. There is great variation in the literal intervallic form given to *gamelan* scales. *Kempyung* can not be thought of as a certain interval relationship. It is defined physically from the instruments, not from wavelength-based considerations. In most forms of Balinese *gamelan*, the *sangsih* player doubles extended melodic sections in *kempyung*. On the other hand, *kempyung* doesn't actually show itself very much in Angklung, since the melody and *kotekan* are both mono-octave and stay in their respective octaves. We have only one interval of *kempyung*, which is that between t1 and t4. A general rule in this type of four-note *kotekan* is that the two *kempyung* notes always strike together, while the two inner notes never strike together. One exception is the hanging pattern used, where we find t2 and t4 together and t1 and t3 alone. The reason for this reharmonization and
the difference it makes in the sonic texture will be analyzed when we reach m13. In
general, if the melody note is t1 then the polos plays that note in the kotekan and the
sangsih harmonizes with t4. If the melody note is t2 then t2 in the kotekan is played by
the polos while the sangsih rests, and the reverse is true for t3. T4 is played by the
sangsih while the polos harmonizes with t1.

Kempyung divides the rhythmic texture into groupings of eighth notes because of
the extra power inherent in a stroke harmonized by both polos and sangsih (t1 and t4) as
opposed to a single note (t2 or t3). The extra vibrancy of kempyung sticks out of the
texture, dividing m3 and m4 into groupings of 2+3+3+3+3 eighth notes, the last of
which lands on the downbeat of m5. The duple grouping at the beginning readjusts the
polyrhythmic approach scale and enables the triplet to be completed and land squarely on
beat one of a firmly delineated unit of 4/4 time. The interruption of the polyrhythm (the
duple group) comes at the beginning. Approaches grouped 3+3+2, such as the sequence
of tones 23423434, are not often used. It is more satisfying to start the polyrhythm off
right and then let it play itself out in a balanced fashion until the next structural point is
reached.

In m5-6 the kotekan meanders up and down, orbiting its home tone. The hanging
pattern here is almost identical to that found in m1-2. The difference is that it starts on t4
instead of t3, and the polos does not play the t2 that should literally land on the first
eighth note of the measure. This ngisep avoids the clouding of the tone of the core
melody, keeping the texture alus. Other than that, the texture is the same as that of the
first hanging pattern. A grace note at the end of m6 and a slight stumble in the rhythmic
flow bring us to m7 and the first serious departure from strict form. Measures 7 and 8
introduce the half-way point in the cycle. If this song was being played by the *gamelan* Angklung from which it is derived, then this central point in the cycle would be marked by a stroke of the *kenong*, which is a tight, high-pitched gong. Having no gongs, the *kotekan* itself takes on the role of marking this structural point. The players step out of the mode of *kotekan* as strict melodic elaboration, and assume a role of rhythmic interpretation in order to ornament the implicit stroke of *kenong*.

![Figure 3: The underlying kotekan of measures 7 and 8.](image)

Please see figure 3 for the theoretically-derived underlying *kotekan*. The reader may notice that it fulfills the requirement of coinciding with the melody at every beat, and rises as the melody rises. The original figure 1 contains one of many examples of what could be played here. This is not the only variation Kak Luweng played. A superposition of the these two possibilities shows that the variation in figure 1 has the theoretical pattern at its core, only it has been swung and warped a bit. In figure 1, the first t2 in the *polos* comes late, but the second one is in its place. The t3 in the *sangsih* on
the 5th eighth note in m7 is changed to a t4, the highest note in the scale, but that change is not always made. That note may retain its original identity. The next one remains t3 but in m8 Kak Luweng would play only t4, on the off beats. The polos responds to this by playing t1 on the downbeat of m8 to reinforce the sangsith’s erratic kempyung.

Usually the musician of the highest stature will be the pemade sangsith player and have the role of ensemble leader. The voice of the highest notes on a gender are markedly different in quality from that of lower notes. The bronze is very thick for the highest notes, and this gives them a particularly piercing, cutting quality. Those repeated notes can not be ignored, even through the clattering, shimmering texture of four genders, plus whatever gongs and drums may be involved with a particular wayang performance. Since those repeated t4’s really stick out of the texture, this is a common way of getting everyone’s attention. It enables the ensemble leader to exert fine control over the musicians’ playing style and to tug on the flow of time. The sangsith pattern played here is used to slow the ensemble down, to instill a sense of hanging, holding the beat back before the stroke of kenong. The rhythm is of a common type found in many types of Balinese gamelan, often used by the kendang (drums) and kajar (small gong struck with a hard mallet) to ornament kenong or another structural point. The last half-note of m8 brings us back gently into the realm of fully realized kotekan with an easy little riff lacking excessive harmonization. Its polos is drawn from m9 and slides comfortably into that groove as the sangsith then thickens the texture.

Kotekan is characterized by constant motion at the level of the smallest pulse subdivision. It is rare in Balinese gamelan for there to be holes in the rhythmic texture once a cycle is firmly established. This is especially true in the older, often ceremonially-
based musics, which predate the musical revolution of the 1920’s. This revolution came with the invention of new gamelan instruments called gong kebyar, a syncretic gamelan which grew out of older gamelan styles of gong gede, gender wayang, semar pegulingan, and gambuh. Gong kebyar instruments have relatively small keys. In addition, the playing style uses only one mallet, held in the right hand, while the left hand has damping as its sole function. The single-handed striking technique makes a big difference, allowing quicker playing and larger interval jumps. In many ways gong kebyar is more streamlined than its older analogs, making it physically easier to play faster and more dexterously. This enables older melodies and structural forms to be sped up and chopped into bits in a sort of post-modern recontextualization. Gong kebyar draws heavily from the ancient repertoires, reinterpreting them in light of new instrumental and compositional possibilities. Yet the fundamental idiom of kotekan elaboration remains that there should be no interruptions of the constant stream of eighth-notes. If there is an interruption, then it is invariably the case that there is some implicit but unstated musical material which fills in that hole. For instance this could be a point at which the entire ensemble hits a rhythmic break, called an angsel, which would be controlled by the kendang (drums). Angsels usually come right before the stroke of kenong or gong, and often are intimately connected with a dialogue between musicians and dancers.

In general, Balinese kotekan derives directly from the core melody, and its function is to fill in the texture of the song evenly and smoothly. This is true for nearly all kotekan, in one way or another. Analysis shows how the kotekan figuration fulfills this role in Angklung. Yet the gamelan gender wayang is the most flexible gamelan on the island of Bali in terms of how a theoretically-derived kotekan may be actualized.
This flexibility derives in large part from the *gamelan gender wayang*'s small size. *Gamelans* such as *gong kebyar* and *gamelan angklung* often have four people playing each half of the *kotekan*, in an ensemble of twenty or thirty musicians. *Gamelan gong gede* may include upwards of 50 musicians. If this large number of people does not play in perfect unison, then chaos results in short order. An individual performer's space for personal interpretation is quite limited in these large ensembles. One must be an indivisible part of the whole. On the other hand, in *gamelan gender wayang*, there are either two or only one performer playing each half of the *kotekan*. In this smaller ensemble the case is different, and individual style not only makes a big difference but is in fact crucial.

Slight differences in playing style greatly affect the overall sound. For instance, players often tap a key in the rest of their part of the *kotekan*, while fully damping that key. This doesn't sound as a discernable pitch, but gives the music a noticeably more percussive quality, a constant clicking underscoring the *kotekan* melody. This can help lock the *kotekan* sharply in time, and tighten up the damping. The technique is used in many types of *gamelan*, but it is in *gender wayang* that the general texture is clear enough that this type of thing can be heard clearly on an individual basis, and therefore used expressively. If I was playing Angklung at a ceremony, I wouldn't want to use this clicking technique all the time. It is too loud and crashing for the elevated, *alus* mood of the ceremony. But if used sparingly and carefully, a few extra clicks can go a long way to sweeten the texture. For instance, clicking the rests of m7-8 can be very effective in locking the *kotekan* together, reinforcing the slowdown and making the *kenong* that much sweeter before the *kotekan* snaps back into time in its more *alus* mode in m9. These
considerations are critical in the interpretation of mood. Most Balinese *gamelans* have *kendang*, *kajar*, and a row of tuned gongs (*reyong*) which take care of rhythmic hits, and are complete with hanging gongs (*gong ageng*, *kempul*, *kenong*) which delineate the cyclical structure (called *gongan*). This leaves the *gangsa* (*gender*-type instruments) free to concentrate solely on *kotekan*. This is, of course, an oversimplification, but illustrates the principle instrumental roles. In *gamelan gender wayang* the same musicians must serve all of these roles. The music is in fact totally through-composed, but is always played in context. One level of context is the gong structure. There is a probability distribution of change within the gong structure. Some areas are more prone to change than others. Another level of context is the performance situation. This makes it crucial that the musicians always keep focused on what the *dalang* is doing with the *wayang*, or on the progression of activity in the ceremony they are accompanying. The underlying context and the flow of emotional energy exert forces to mold the expression of precomposed patterns. In the words of Andrew Toth, (B. A. Wesleyan 1970, former Professor of Ethnomusicology at Brown University, current lecturer at STSI the arts university in Bali and *gender wayang* musician) “Although this ensemble does not use the gongs and other [structural] markers found in larger *gamelans*, the cyclical periods ... are still evident to the attentive listener. A convenient point for orientation is the *angsel*, a momentary break in the cycle that usually occurs before the beginning of the next [gong cycle]. The performers may add passing tones or subtle variations during repeats, another sign of their musicianship.”
Please refer to figure 4 for the literal form of the *kotekan* of measures 11 and 12. Notice the core melody fulfills the requirements stated above for this style of anticipatory movement pattern. The melody states where it is (t3, m11); it states where it is going (t1, m11); it goes back (t3, m12); walks toward its target (t2, m12) and finally lands there and rests (t1, m13). Also notice that the melodic movement is literally imbedded in the *kotekan*, starting it off with the sequence of tones 31321 and then repeating the falling scale made up of tones 321 until it lands on t1 on the downbeat of m13 and goes into a hanging pattern. In this case the sequence of tones making up the hanging pattern is 123212321.

Again in m11-12 we see a pronounced effect of context on the manifestation of the *kotekan*, as the song goes through its most pronounced *ngisep* (slowing, calming down). M13 brings the core melody to its lowest point (t1), where it will rest and breathe, gathering its energy before attempting the climb back up to t3 to begin the cycle.
again. The *kotekan ngiseps* on the first beat of m11, just as it did on gong (beat 1 of m1). Kak Luweng, playing the *sangsih*, immediately departs from the *kotekan* and takes control of the ensemble. He simply floats. In Balinese *gamelan* in general, it is the function of the *polos* to play the beat and to play the melody, while the *sangsih* plays off the beat and harmonizes the melody. But usually the two parts have a more literal connection than they do in m11. Normally the playing of t3 by the *sangsih* concurrently with t2 in the *polos* never happens in Balinese music. This can happen in *gamelan gender wayang*. The *kotekan* comes apart at the seam as Kak Luweng delays his notes and pulls on the reins controlling the flow of time. *Sangsih* playing is the most *alus* when it leaves a lot of space. A *sangsih* that plays all the time tends to clutter the clarity of the ensemble’s voice. This subject will come back in various forms as the current work unfolds. In slowing, calming *ngisep* of measures 11 and 12, the *sangsih* sits back and concentrates on tempo and feel. The *polos* takes care of the melodic material, keeping the descending line intact. The repeated t4’s and the loosening of the damping technique sweeten the texture of the song by focusing attention on the harmonization instead of the main melody. Notice that the *sangsih* never touches a downbeat in this entire two-measure phrase. It gives the *polos* space. I was always amazed at Kak Luweng’s note placement. He swings quite a bit more than would be allowable in a larger *gamelan*. The exact placement of where those offbeats come slows the *polos* down smoothly, yet lets the *polos* itself determine where the beat is. Once the slowdown has been effected, Kak Luweng jumps back into the *kotekan* for an instant, in m12, just to reassure the *polos* that it is in the right place, and then both float. At this point it is not necessary to damp anything. It is very beautiful if both players stop damping completely upon striking t1
and t4 in m12. At the end of m12, then, all four scale tones in the top octave could be ringing, with tones 2 and 3 in the bottom octave, or some subset thereof. Kak Luweng raises his hands from the instrument, conducting the floating feeling with a bravado and style common to Balinese ensemble leaders. All the notes shimmer and ring together, yet since there are only a small number of performers the texture does not become muddy, nor is the melodic direction clouded. The hole in the kotekan stretches over the longest half-note in the piece and is as noticeable as the stroke of a gong. Then on the downbeat everything but t1 (and t4 for the sangsih) must be damped. It’s really very beautiful.

After m12 hangs suspended in time, the song alights on t1 with its delicately refined sangsih. The harmonization found here in the hanging pattern of m13 is a more alus version of the hanging patterns used so far. It opens up the sonic texture, playing clearly and simply. Everything is stripped away except the wavelike rise and fall of the melody (the sequence of tones 123212321) and kempyung (t4). Especially after the kotekan frays, after the gong-like mixture of the voices of so many keys ringing together, this clear and literal, in-the-pocket sort of harmonization bursts with sweetness and life. The hanging pattern here contrasts strongly with that used previously. The coincident striking of t2 and t4, found in the previous hanging patterns, is a very vibrant, colorful harmonization. It is rather wild, a bit distracting and unclear in its tonal implications. Even though the polos pattern is identical (translated in time) the sangsih harmonization gives it a very different impact. The compositional construction of these contrasts shows foresight and brilliance. In this instance the players add a level of musicality above the level of strict adherence to form, in order to deal with issues of color, vibrancy, and presentation of the implicit gong structure. Under normal circumstances, the clarity-
driven idiom of Balinese gamelan does not include such experiments in sonic chaos as is found in m12. Yet when properly controlled, the antithesis of a musical idea can be used to strengthen that idea. Gender wayang presents musicians with the flexibility to interpret the expression of musical ideas from many different standpoints. Resting down there on t1, the melody breathes (ngisep) and gathers its strength. It marches up to t3, rests there for a moment in m15, zigzags through m16 before coming full circle. Notice that the sangsih of measures 8 and 16 are identical. I have written them slightly differently in figure 1, but the difference reflects only the superficial level of variation. Notation falls short of expressing the inherent possibilities. The underlying form is identical, whether orchestrating a slowdown in anticipation of kenong (m8) or towards gong (m16).

The overall melody of Angklung is binary and square in form. It consists of four melodic phrases, each four measures in length. Each phrase is further divided into halves. The first half of each phrase is the resting pattern. These patterns consist of long tones and establish a strong tonal center. The kotekan rises and falls evenly, starting on the tone of the core melody. The second half of each four-bar phrase is the movement pattern, a period of instability in approaching a new tonal center. The kotekan and the core melody take the exact same approach leading from one tonal center to the next, yet superimposed at telescoping levels of magnification. The great beauty of this song derives in large part from the simple perfection of its form. No gongs or drums are present to formally delineate the song cycle, yet none are needed since the form is so well composed into the construction of the melodic phrases. In addition to the even alternation of resting patterns with movement patterns within the four melodic phrases,
there is a larger-scale alternation in the stability of the melodic phrases themselves. The first phrase is stable. A period of instability is introduced before *kenong* (m7-8). The third phrase is fairly stable; even at the end of it when the *kotekan* unravels, the *polos* holds on to its pattern and keeps the descending melodic line (the sequence of tones 321) relatively intact. Right before the implicit stroke of gong (beat one of m1) the core melody gets weird and jumps around a lot. Until this point we have not had a half note in the middle of the second bar of a phrase, nor a whole note in the third. After zigzagging through m16 and holding back the tempo in anticipation, the melody finally settles on gong and moves forward. The format I have presented here is a standard way to play Angklung. In reality the song can speed up and slow down as the musicians please, as long as it sounds good. This basic style, however, presents the fundamental issues in their clearest incarnation.

The building structure of these *kotekans* and melodies can be confusing to study because it is always zigzagging around; moving opposite to the direction of overall or ultimate motion. Resting patterns are not static, but rather rock with a wavelike or circular motion. Rising patterns fall before they rise and falling patterns rise before they fall, perhaps several times in more extended ornamenting styles than the basic style seen so far. It can be hard to tell when the line has been crossed between resting and movement patterns, especially when they may start off the same, and the patterns may be imbedded within themselves at various level of magnification. Add to this the variations made for expression of the underlying gong structure, and the reader may see what amazing music can be made an extremely limited set of pitch material. A great deal of anticipation and phrasing can be set up once the pitches are properly categorized. Really
only three notes are needed to play this tune in its skeletal form. One could play the whole song on only t1, t2, and t3, if one were to substitute t1 for t4. Yet in spite of this simplicity it is packed full of nuance and emotion. Angklung provides only the barest glimpse at the fertility of this organizational framework. Larger compositions with more instruments and longer cycles show greater expansion in the telescoping range of levels at which these basic patterns give form to the music, evolving over the course of several minutes. One must always be careful to keep in mind where the melody is and where it is going, in order to parse the elaboration from the core and keep everything straight.
Pak Sunggu (front) and another neighbor preparing food and offerings the morning before a ceremony.
The finished food and offerings. In back is an offering carved from the skin of a pig roasted for the ceremony. The roasted skin is cut into strips, shaped, and stuck with bamboo skewers onto a banana log. In front are bundles of *satay* (the most delicious food in the world: spiced, barbecued coconut with ground duck meat, barbecued on bamboo skewers over a slow fire of coconut shells).
Cultural Context:

*Upacara, Wayang and Simply Sitting*

*Gamelan gender wayang* has three basic roles in Balinese society. One is to accompany *upacara* (ceremonies). Another is to accompany the *wayang* shadow plays. The third is to provide personal satisfaction and entertainment for the musicians and their friends. These three contexts place differing demands on the musicians and likewise confer differing freedoms. In a ceremonial context, the *gender* must keep an *alus* mood, elevate the minds of the ceremonial attendees, and react to the ceremonial flow and what else is going on. The soundscape at a ceremony may include several *gamelans*, playing both sequentially and concurrently, in addition to singers and the prayers and readings of the *pemangku* and the ringing of the prayer bell. The vocalists interact with the *gamelan*, but the texts read and sung actually have no connection with the songs being played by the *gamelan*. The singers may get their tones from the *gamelan*, adjust their cadences to land with the *gamelan*, and so forth, but the musical streams retain their individual identities. They overlap in presentation, weaving in and out of each other. In *wayang* shadow plays, the *gender* provide musical accompaniment and sound effects of multifaceted natures. The musicians interact intimately with the *dalang*. When sitting at home, or at the *banjar* (village meeting/relaxing place) musicians are free from these roles and may play as they wish. This is the traditional context for lessons and also for the development of new styles, just hanging out and playing music for its own sake.

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kotekan, these can not be improvised in just any way. Totally improvised patterns would not lock together properly, would lose sight of the core melody, and everything would fall apart. Yet within compositions, a section is often repeated several times before moving on. Angklung, in fact, is complete with only one section. It usually takes about thirty seconds to play through it. In ceremonies Kak Luweng and I would commonly play Angklung for at least five minutes, or in other terms perhaps ten or fifteen repetitions of the cycle. This song is an endless source of beauty and amazement for me. It seems to float inside a cloud, mechanical in its precision, orbiting above the state of our physical world. It is amazing in its simplicity, running through its cycle, spinning the listener’s head. It seems so easy to follow, so literal in a certain sense. Yet in that very literal nature lies its least literal attributes. The anticipation/release structure is perfectly stated and clear; the song ripples smoothly up and down like a river. It gives the musicians a lot of room to breathe within it. It’s a bit like a blues form in that way, giving just enough structure to hang the emotional context on and no more. Especially since it never changes or descends from its tiny orbit in the clouds, Angklung takes on the irresistibly entrancing magic of meditation. One doesn’t really listen to it, rather it is like a little pulsing massage somewhere below the level of consciousness. The song Angklung is in fact used as a natural anaesthetic during the tooth-filing ceremonies (upacara potong gigi).

In Bali, traditional belief holds protruding, fang-like incisors to be symbolic of man’s animal nature. Such teeth are unrefined and inelegant, indicative of mankind’s animalistic tendencies which can lead to evil. Upon coming of age, therefore, the front four teeth are filed flat. The ceremony is often part of a marriage ceremony, as one must
file one’s teeth before marrying and having children. The priest uses a common metal file, the kind you can buy at the hardware store. There is an elaborate ritual associated with the filing, at which the presence of music is essential. *Gender wayang’s* delicate sensitivity makes it ideal for the occasion. Kak Luweng saves his most *alus* songs for while the actual filing was taking place. Angklung is always included. Other songs are Rebong, the entrance song used for a beautiful woman to the *wayang* shadow puppet play, and Mesem, which is for *wayang* crying scenes. On the accompanying CD, Rebong is track #12 and Mesem is track #10. Upon the completion of the filing Kak would launch into an *angkatan*, a style of song with a left-hand riff and a catchy, hip *kotekan*. An example of an *angkatan* is the song Bima Krodo, track #9 on my CD. *Angkatan* are used in the shadow plays when the *wayang* are walking through the jungle, joking and fighting in between religious and philosophical discourse. In the tooth-filing ceremony, the filee gets up and makes his or her way off to rest.

The use of the same songs for both *wayang* performances and ceremonies brings up an interesting point. *Wayang* are lively and often crashing, cacophonous affairs. They are full of jokes and battles. Ceremonies do have their lively moments, but generally are more sedate and courtly elegant. Everyone is dressed in their finest glittering sarongs and sashes, with formal shirts and jackets. There are processions with offerings of fruit and other foodstuffs in pyramids up to a meter high, laden with flowers. Kak Luweng is fully aware of changing context in considering how to give expression to the same literal material. Preparing for ceremony, he’d often wave his hands in a slowing-down gesture, and tell me to just relax and play slow. If you play too fast, he’d say, then the song just runs out on you. You may as well just play them chill and let the songs do the work for
you. There is no shortage of time. Some songs were never included in the repertoire for ceremonial use, because they are not alus enough, or because they are too long. Playing a song with too long of a basic cycle doesn’t give one enough opportunity to adjust to the ceremonial context; the musicians may get trapped inside a long form and not be able to change songs or make other adjustments at the appropriate time. It could also make the gender too obtrusive. In one case, Sekar Sungsang (the Upside-Down Song, track #5 on the CD), we would play the first section but not the second, because the second section is a bit too wild. But the first section is really beautiful, so we’d loop the first section for a few minutes and then end on the transition to the second section (at 3:30 on the track). In various ways, songs are played in more of a smooth, elegantly relaxed and straightforward manner at ceremonies. A big difference is that there is no dalang to interact with. Interactions between the musicians and the dalang often take place in the timeframe of seconds or less, whereas in a ceremonial context, interactions between the musicians and the ceremonial context stretch over a much longer timescale. They include considerations of how long people sit in prayer, the evolution of a procession with offerings, and so on.

Gender wayang is a very flexible ensemble. The fact that each player is intimately connected with both playing and elaborating the core melody, combined with the relative clarity of the sonic texture, makes it easy for players to spontaneously adjust to each other and to changes in their surroundings. At a ceremony, or when sitting at home, the lack of concrete ties to puppetry gives the musicians freedom to flex the fabric of time and to sculpt the evolution of the dynamics and tempo. Exaggerating the gong structure can really pull on ceremonial attendees’ heartstrings, taking them on an
emotional ride. It imbues the music with an irresistible soul. In a ceremony the music may float above the corporeal world, playing for its own sake in a way inappropriate to a wayang performance. In wayang the tempo and dynamic style are generally more consistent. They may change rapidly, but are more consistent once established. On such occasions the dalang's singing, narration and puppetry help to give the audience a concrete framework to relate to. The genders must be very grounded in a supportive role, and are not as free in their interpretation of a song. While playing a wayang, the musicians can never take their eyes off the dalang. Kak Luweng used to practice with a cloth tied over his eyes. The dalang's puppetry, singing and narration give the musicians hidden cues as to what song he is requesting. He will never call a tune literally by name. Especially in wayang the musicians must be on their toes.

One good example of the interaction between gender musicians and dalang is demonstrated by the playing of the song Rebong (track #12 on the CD). Rebong, as has been noted, originates from the wayang shadow play. It accompanies a beautiful woman as she ventures onto the scene. The structure of the song is closely tied to its functional purpose. Stories vary widely so anything is possible, but Rebong might come at the end of the introduction. The introductions to wayang are rather ceremonial and stereotyped in nature. In the words of Colin McPhee, "So stylized is the formal beginning of the play, with its many danced entrances of leading characters, that it is sometimes more than an hour before the audience will have any clue as to what story is being presented. Each character is presented through set conventions of movement, facial expression, and voice production, combined to create a special unity of personality which must be consistently preserved throughout the play." (Music in Bali, p 17) In this case McPhee was writing
about plays with human actors, however the case of wayang is analogous. The difference is that the facial expressions are fixed, carved into the leather of the puppets, and the dalang himself performs all the voices. The puppets are lined up on either side of the dalang, gods on one side, and demons on the other. Much respect is given to these representations of such power. The language is Kawi, an ancient scholarly language related to Sanskrit and Old Javanese. Most Balinese don’t speak it. They speak the Balinese and Indonesian languages. Only those interested enough in the technical aspects of wayang to actually study Kawi really understand any of it. However, the ubiquitous clown-retainer characters give running translations into colloquial Balinese.

Against this rather courtly and ritualized background the first female character may make her appearance. She is often the queen, or a beautiful princess with her dresses swishing. She is all dolled up and skips lightly across the wayang screen, dipping and curtsying. The music of Rebong matches her frolicking dance. Of course many different versions of Rebong exist on the island of Bali, but they share basic formal and melodic elements. The song comes in many short figures; just contours, really, separated by short pauses during which the last notes struck on the genders are left to ring. Little scales slide up and down, landing for a moment on a particular tone, before flitting off it again, often cutting symmetrical capers up and down the instrument. Rebong brings to mind a set of musical gestures tumbling over each other’s heels like flowers spilling from a basket. Perhaps the lady is chased by an ardent suitor. Yet she slips lightly away from him, gliding on a waving current of gender wayang. He is left hugging empty air, having as his only consolation the next musical gesture. Perhaps the musicians play it in a sedate, pensive style for him, to suit his meditations. They must always have their
attention glued to the *dalang*. There is constant interchange between musicians and *dalang*, focused through the *gender* ensemble leader. They will all have played together long enough to know each other’s propensities and standard tricks. Some sequences are explicitly worked out, but in most cases it is enough for the musicians to simply pay attention and follow the *dalang*, his puppetry being translated through the playing and cues of the *gender* ensemble leader. As such, *gender wayang* musicians must be quick-witted in their playing. Based on the *dalang*’s puppetry, they give musical support and interpret considerations of mood. His cues are often delivered by a sly pun or other innuendo woven into the narrative/vocal text. Cues can come from the play of the *wayang* puppets, or by the crack of the wooden knocker. The *dalang* holds it between the largest two toes of one foot, and hits it against the side of the wooden box used to store the *wayang* puppets. The ensemble reacts with split-second precision. The ensemble starts and stops on a dime, changes song or provides whatever sound effect is needed. This vibrant and unpredictable interaction adds to the fiery thrill of *wayang* performances. Rebong epitomizes one of the most fascinating forms of supple improvisatory response in *gender wayang*. The song is often performed outside the context of *wayang*. However, without its literal grounding in interpreting the capers of the *wayang*, Rebong takes on a different, often stately, quality. In *wayang* performance, the *dalang* and musicians influence each other in a collective creation of sound, mood, puppetry, and song.
Kak Luweng picks up his pangguls (*gender*-playing mallets, in the bag) on his way to an *upacara ngaben* (cremation ceremony). Look at his hands. He’s not a big man, but has the most incredible hands I’ve ever seen in my life.
Pak Luweng, my teacher's son, usually accompanies Kak on the gender for ceremonies and wayang performances. He was rather pleased when I started playing ceremonies, because he works all day in the fields, and needs his evenings to relax and rest. Sometimes I'd play alone with Kak, or else Pak Luweng and I would trade off as Kak worked through the repertoire.
Myself.
Taste and Style

“In my day, all music was nuance.”

- I Wayan Lotring, (1898–1984) master composer and performer of gamelan semar pegulingan. Quote found in the liner notes to a CD called “The Roots of Gamelan”.

In addition to studying with Kak Luweng, I took some gender lessons from a friend of mine at STSI, the arts university in Bali. His name is Kethut Ngurah Artawan, the son of Pak Widia, known island-wide as Topeng Carangsari (the Mask Dancer of Carangsari Village). In teaching me Rebong, Artawan told me to look towards the target point of each figure. It is fine if two people get there together but by different paths. Players often throw in a little ornament, a type of bounce or slide stroke, where there is space for that in the melody. There is a relatively standard repertoire of idiomatic ornaments which may either be applied or not, depending on the desired effect. A musician may feel like playing the melody straight at one place, and in the next repetition of the cycle he may make a harmonization, fill in a place where there was a slight pause in the melody, or choose an alternate but equivalent pattern. A predominantly unison melody might be spontaneously harmonized in kempyung. Having a mixture of unison and kempyung harmonization adds life to a piece. It doesn’t have to be the same way each time the cycle comes around. Rebong is not a kotekan-driven song, like Angklung. There is some kotekan in Rebong, especially in the second section, but the first section is primarily melodic. The players’ two hands generally move in parallel, whether in octaves or kempyung.
Since there is not as much strict rhythmic interlocking going on, players have a certain freedom to make little changes or twist the ornamentation slightly.

But even in Angklung there is a place where the sangsih player may decide to harmonize the core melody in kempyung. In m3 the core melody has a rising contour (t3, t4). It jumps down to t2 in m4, but the sangsih player may continue to rise, coming to note which is outside the scale. Remember that gamelan gender wayang uses a five-tone scale called siendro, but the scale used in Angklung is a four-tone scale. In the Balinese solfege system, the five pitches are sung (going up from the lowest key of the gender) as dong, deng, dung, dang, and ding. Dong is omitted in the angklung scale, leaving deng, dung, dang, and ding as the t1, t2, t3, and t4 referred to above (see fig 1). In the song Angklung, if the sangsih continues the rising line of m3, then on the downbeat of m4 he lands on dong. Dong is kempyung of the t2 (dung) inherent in the core melody. Kempyung harmonization by the sangsih is optional as a rule of thumb. However, in this case it introduces a note outside the scale. In Balinese gamelan, notes outside the scale are called pemero.

Andy McGraw, who happens to be my housemate as he pursues doctoral studies at Wesleyan University, has written an interesting paper dealing with the Balinese modal system. In it he explains some aspects of Balinese philosophy of modulation, in the words of two greatly renowned composers named I Nyoman Windha and I Kethut Gede Asnawa. Their conceptual framework for the use of modulation in their compositions gives insight into structural aspects of the music in general. “According to Windha, he employs modulation most often shortly before the
gong stroke, the point at which a section repeats or transitions into a new section. Furthermore, he feels that the technique should be used sparingly, only for clear changes in mood and that more than two or three modulations within a single work leads to an unclear and cluttered composition. Asnawa feels that a successful modulation in Balinese music should follow certain rules; specifically, that a smooth melodic line (mostly conjunct in construction) be used and that the new [mode] should be achieved by ascending into it... A stretched or jagged melody... should be avoided.”

The philosophies of Windha and Asnawa give great insight into the nature of the Balinese idiom. Firstly, they show the importance of setting the stage for the stroke of gong, which can be generalized to any major structural turning point in a piece. Whether one is speaking of rhythmic instability such as I have described above, or of harmonic instability introduced by the use of a pemero tone, the concept is the same. In addition, such use of a pemero tone often includes the same settling-down ngisep after the gong is passed. A pemero tone will never occur on gong, but rather comes right before gong where the gong then firmly establishes the tonic. Secondly, Asnawa gives voice to a common philosophy held within the idiom of Balinese gamelan, that melodic movement be generally smooth, conjunct, and wavelike. Perusal of the included notation for Angklung and Rebong shows them to conform to this philosophy. Disjoint melodies are uncommon in Balinese gamelan. Even when they do occur, it is usually the case that they are constructed by the chopping-up or warping of an underlying smoother, original melody. In some way
their disjunct nature is used to contrast such smoother melodies, as opposed to being the primary foundation of a piece. In his book “Music in Bali”, Colin McPhee reinforces this idea. In discussing the compositional style of I Wayan Lotring (1898-1983), master composer and performer of gamelan semar pegulingan, McPhee states that “a characteristic procedure was to drop a beat or a half-beat somewhere in the middle of the passage, disturbing the rhythmic balance and throwing the rest of the passage into rhythmic dislocation. The missing beat is never forgotten, however, but is inevitably restored through the extension of some phrase, though often at so distant a point in the composition as to create a new element of surprise.” (p 320)

Asnawa’s words teach that such instabilities must be used sparingly and be properly contextualized, lest they overrun the piece. This philosophy of smoothness; of scalar, wavelike melodies contrasts a bit with kempyung harmonization by a sangsih player and leads to a lot of interesting and difficult choices in how to harmonize things. Kempyung harmonization tends to pop out of the texture because in general not every note will be harmonized in kempyung. The sangsih often jumps back and forth between kempyung and unison. Perhaps kempyung runs off the end of the instrument, at which point the sangsih would jump down to unison. In some situations there is not enough time to get up to kempyung, or it would make the texture more vibrant than is desired, clouding the integrity of the melodic line. A sangsih player has to be very careful, in order to ornament the tune nicely and smoothly, without either getting in the way or leaving the tune too bare and dry. I
will evaluate these considerations in specific reference to sangsих ornamentation of a standard cadence style.

There are often several ways to ornament the landing of a cadence point. It could be a place in a song like Rebong, where the genders strike a tone and pause there for a moment, as at a fermata. Or it could be the introduction of a structural tone such as those found in the beginnings of the four phrases of Angklung. In approaching such a point, the players will often sweep upwards with both hands in a technique called oret (pronounced with a flapped 'r', halfway between the English 'r' and 'd'). This technique is an example of another overlapping level of parallel motion in the three-note approach scales to a sustained tone. The target tone is introduced by both hands playing the three-note approach in unison, as a string of notes at the smallest subdivision of the pulse. Please refer to figure 5: Styles of oret. Note that this oret overlaps exactly with the three-note approach scale in the kotekan moving towards a note, as analyzed with reference to the song Angklung. In general in Balinese gamelan, pickups are swung. This is also true in the oret style, where the last eighth note, the pickup before the downbeat, is swung late. The damping of oret is a critical concern. In general, the ideal damping for gender playing is dry and crisp. The voice of a note should not bleed over into the next one. It must be damped just as the next note is struck. Oret, on the other hand, is characterized by a very wet damping style. The left hand strikes all three tones (the two notes below the target tone and the target itself) and then continues its upward sweep vertically, away from the keys. The player's hand rises and floats above the instrument. All three tones
ring together, indicated in the notation by a tie. Only then does the left hand settle back down, damping the two keys below so that the target tone rings out clearly. The oret style helps to smooth the approach from three discrete steps into a single amorphous slide, filled with the vibrancy of combination tones coalescing onto the target tone. In its swing and its lack of strict definition, oret gives the standard approach sequence a much more alus realization. It sounds a bit like the notes exert surface tension forces on each other, clinging one to the other and smoothing the transitions between notes as the target note pulls the voice of its neighbor into itself.

![Figure 5: Styles of oret. Arrows and fermatas indicate the strong beats. The fermata is over the target note, which all players strike together, ornamenting as they approach it. Ties indicate notes left to ring temporarily, being damped only once the target note is reached. The clef is relative. Patterns transpose literally as the target note moves up or down the instrument. Style A shows the basic polos oret. Style B shows the polos oret with expanded ornamentation. Styles C through F show possible sangsih oret. The expanded ornamentation is left out here for simplicity, but it may well be played in some form.](image-url)
In this figure, tones are relative. The tone being approached could be anywhere on the instrument, and the patterns transpose literally unless they run off one end or the other of the ten-keyed gender. Before beginning the analysis of these styles of oret, it should be made clear that the styles of oret presented here are only six examples of many, many possible equivalent patterns. These samples serve to illustrate the basic form and conceptual development of approach oret and lead to consideration of some of the philosophy of ornamentation patterns in Balinese gamelan in general. Shown in A is the polos oret in its basic form. Style B shows the same polos pattern with expanded ornamentation. The ornamentation may be thus expanded at will by both polos and sangsih, if there is enough time to get all those notes in without cluttering the melody too much. It is a judgement call. In the figure, arrows indicate the beats of primary emphasis. Styles C through F show possible sangsih harmonizations of the basic polos oret style shown in A. For clarity the expanded ornamentation is left out, though it may well be played in some form. These approach slides may be used at almost any point in any song, when introducing a sustained note. In Angklung they may come as a pickup to any odd-numbered measure. Again, choices must be made by the musicians in order not to clutter the melody too much, but Angklung is slow enough that it’s not too much problem. Notice that the superposition of the oret style adds yet another zigzag to the melody. The approach pattern in the left hand of measures 3 and 4 of Angklung has as its basic form the sequence of tones 34234. Addition of oret would give it the form tones 3423(23)4, where the parenthetical addition stands for the eighth note oret. As
levels of ornamentation are added or stripped away, a musician must keep his ears focused on the overall melodic contour.

The *sangsih* may play the straight *polos oret*, and also has several choices for how to harmonize the basic pattern. Consideration of how to deal with this relatively simple, recurring pattern leads to fundamental issues in the philosophy of *sangsih* playing and the requirements placed upon a *sangsih*. While the harmonizations may not seem strikingly different on paper, they have marked effect on the character and mood of a piece. Proper choice makes all the difference between realizing the same song in a lively and exuberant style, or in a more understated, subtle style. As stated, styles A and B are *polos* patterns. The *sangsih* is free to play the *polos oret*. Sometimes unison *polos* playing is desired, especially when clarity of the melodic line is of paramount concern. Style C is derived from *kempyung* harmonization of the *polos*. T1 in the *polos* becomes t4 in the *sangsih*, in the right hand only. The other notes are unchanged. In this case the t3 in the right hand is a swung pickup to t4. T3 and t4 ring out together here, collapsed into a single sweeping motion, and are damped together as well. Unless the song is very fast, there is time for the hand to jump the distance from t4 down to t2, about six inches. Care must be taken when skipping a key in this way, to make sure that the damping is fully realized. It is difficult to damp when skipping over a key. The size of a player’s hands limits the number of keys which can be damped at a time. Normally two keys may be easily damped at a time, but exercising precise damping control over a three-key range (six or eight inches wide) is more difficult. Once the t3 t4 sweep has been damped, the
sangsih jumps down to t2 and joins the polos in its ascent. The melodic contour is highly preserved in sangsih oret of style C.

In oret style D the sangsih breaks from kempyung and opens the door to progressively more complex harmonization and rhythmic counterpoint playing. Style D calls for the sangsih's right hand to bounce on t4, damping in between strokes. In this case the right hand sequence t3 t4 is a single sweep, damped as a unit. Likewise, the sequence t4 t3 is a single sweep. Once the target t3 has been reached, the t4 in the right hand will be damped with t1 and t2 in the left hand, consistent with the general principle of a wash of sound coalescing onto the target t3. In oret style D the polos's t2 is harmonized by t4 in the sangsih, giving t2 and t4 converging on t3. This works well for functional reasons. It's simply easier for the sangsih to bounce on t4 than it is to jump down to t2, which is technically more correct. However, the t4 bounce doesn't sound good all the time. It is a choice which must be made in context.

The concurrent ringing of t3 and t4 here deserves explanation. These two tones will usually be either the highest two on the gender, or the second- and third-highest. The high notes, as has been noted above, have a different character than the other keys on a gender. They are the thickest, yet the smallest, having a compact shape. These keys support a very wide range of upper partials, which are very sensitive to the exact style of the strike. The highest keys have a distinct voice reaching high into the overtone series. When two keys of close pitch, both with such idiosyncratically wide ranges of overtones, ring simultaneously, then an incredible shower of combination tones is conjured forth. Each key has its own quality and
peculiarities of interaction with its neighbors. Certain keys, when struck together, give rise to beating patterns with odd percussive effects. Sometimes ghostly frequencies arise, lower than the fundamental as high partials beat at such a rate as to be audible as the creation of a new pitch, rather than simply the acoustic beating modulation of the fundamental. The fundamentals of the two keys are downplayed; they often seem to disappear entirely amidst the general *oret*. The beating evolves in fascinating ways as overtones fade out of the spectrum at different rates. Control of the subsequent and simultaneous ringing of these highest keys provides a platform for subtle manipulation of a shower of combination effects. Remember that the *sangsih* player is usually the senior musician and ensemble director. Regulating the density and wildness of the potentially harsh, yet potentially sweet, high overtones has great effect on the overall character of a piece.

*Oret* style D leads directly to style E, which adds another level of approach tones to style D. This operates on the principle of balanced motion as the *sangsih* player’s hands sweep out together and then in. Although it can cloud the melodic contour, this *oret* style is very beautiful in its striking sweeps complementing the steady rise of the *polos*. Its vibrancy and ring are unmatched. Style E must be used carefully or its exuberance will undermine the tonal consistency and calmness of a piece. Its use is perfect for introductory sections, such as the introduction to Kuncir Kuning, the first track on the accompanying CD. *Oret* style E is also great for the closing note of a piece, and wildly vibrant (*ngerengereng*, in the Balinese language) passages such as may be commonly found in *wayang* performance. It’s really nice to
use at the closing of Angklung, when no more notes will be struck. The spotlight of attention may be fully focused on the evolution of the many internal vagaries of the colorful shower of ringing, slowly stripped away to reveal the final note of the piece. It throws the damping technique into sharp contrast, showcasing the players’ ability to listen to the overall ensemble sound and evenly, smoothly, complement each other.

*Sangsih oret* styles C through E show a progression towards more complicated, abstract and showy playing. However, there comes a point where the *sangsih* is playing so many notes that it becomes difficult to get them all in smoothly and with an *alus* feel. Just as in any music, one must be wary of losing the melody in the elaborations. In Angklung, for instance, *sangsih oret* style D and E fit well, because the song is fairly slow, and the *sangsih*’s left hand is already down in the same pitch range as the *polos*’ left hand, so there is no problem getting to the notes. On the other hand, in a case such as Rebong, a primarily melodically-driven song (as opposed to Angklung, a *kotekan*-driven song), the *sangsih* is often harmonizing the melodic line in *kempyung*. This puts it three notes above the *polos* player’s left hand. For the *sangsih* player to bring his left hand into unison with the *polos* requires a leap of about eight or ten inches, no mean feet considering the time required to damp the high *kempyung* note, and the fact that the *oret* moves fairly quickly. The main point in these approach patterns is that they must be slick. That is paramount. They must be well executed and smooth as a single unified gesture. They may be surprising, perhaps, but should not be played in a jarring way. Coming from a situation of being up in *kempyung*, it may be difficult for the *sangsih* to fully damp the high *kempyung*
note and then sweep down to complete oret style D or E in time with the polos, without a jarring change in dynamics and playing style. The keys are sharp in their tone, being metal. Any lack of control in the quick jump down from such distance will manifest itself in a piercing blast of metallic overtones form the keys. Even when well controlled, singsih oret styles D and E are very lively and flashy; not suitable for all occasions.

A more delicately elegant singsih oret style is shown in F. This melodic and rhythmic harmonization allows quick, supple movement and keeps the harmonic spectrum unmuddied. The damping is clean on the first t4 in each hand. The descent from t4 to t3 could be a slurred sweep, or it could be clean and dry. The crispness of this oret harmonization is very useful in Rebong, for instance. The musicians stay alert and ready to move, ready to adjust their playing to what the dalang is doing. The interaction is not always predictable. In addition to this, the singsih is often up in kempyung, and will go back there after the sustained tone being ornamented here. In such a case it behooves the singsih player to keep himself free of the inertia of heavy damping responsibilities. The next phrase may follow right on the heels of the current one, and one must be ready. It’s not good for the singsih to play too many notes all the time. The greatest power of singsih lies in subtle harmonization; little twists on the main melody being carried by the polos player. A singsih that plays too much all the time only succeeds in clouding everything. If he uses up all his tricks the first time then he doesn’t have any tricks left, it’s as simple as that, and variation can not be appreciated as variation if it is played all the time. Finally, to close the
subject of *oret*, I must mention the song Mesem. It is track #10 on the accompanying CD. It may be used for ceremonies, but draws its origin from the *wayang* shadow plays, in which it accompanies crying scenes. The word *mesem* means ‘sadness’ in the Balinese language (oddly enough, *mesem* means ‘smile’ in Javanese). This is without a doubt the most *alus gender wayang* song I have ever heard or am likely to hear. The *oret* and damping concerns attain a paramount level of importance in Mesem unmatched by any other song.
Upacara ngaben. Balinese people cremate their dead. This is a ceremonial procession from the house of the deceased to the burning place, which is a field located near the Sibanggede, Kak Luweng’s village. The villagers lash bamboo stalks together to build the platform. Inside the tower the body is kept, and the pemangku (priest) and the gender musicians ride on the platform from the house to the burning place. On the left is Kak Luweng, on the right is Pak Luweng. The whole structure will be burned. The ride can be rather rocky, due to the extreme unwieldiness of the platform. To make matters worse, those carrying the platform take care to swing it around wildly and zigzag in unpredictable ways in order to confuse any evil spirits who may be pursuing the procession, and throw them off the track. In such a situation the gender musicians draw from a common repertoire, but they can’t hear each other and no one else can hear them, so they play independently. The music is for the gods. One of my favorite songs is called Cangak Merenang, a song which accompanies the ngaben procession. Unfortunately it is not included on my CD. The song interprets the motion of the feet of those carrying the heavy, unwieldy platform. They sway from side to side, struggling to keep their balance as their feet get tangled up beneath them and they are constantly on the verge of tripping. The song Cangak Merenang interprets this strangely off-balance yet always forward motion by cutting cycles up in strange ways. It sounds like the composer took a bunch of idiomatic cycles, chopped them up into oddly shaped bits and glued them together. Even in such extreme compositional technique, it is interesting and important to note that the gong structure is not disturbed. Near the end of the cycle, the kotekan goes right into the idiomatic three-note approach towards the implicit gong and the beginning of the next cycle, which comes exactly where it should for formal reasons. Extreme rhythmic instability is superimposed over a steady gong structure.
Above, a rear view of the cremation platform. Below, *gamelan beleganjur*, a marching ensemble of gongs, drums and cymbals also accompanied the *upacara ngaben*. The *beleganjur* plays concurrently with the genders, as the procession goes along.
Women at the *upacara ngaben*.
Conclusion

Not everyone may agree with the playing philosophy I present here, abstracted mostly from Kak Luweng’s playing. There are many styles of gender wayang. Some styles include much literal doubling of parts by polos and sangsih, whereas other styles may prefer to have as much harmonization and ornamentation as possible, with little overlap between players. In some cases a noisy, thick texture is desired, as opposed to a stripped-down, simple statement of the melody. Variations in style are endless, not only within a group, depending on the players’ mood or the occasion, but between villages and regions of Bali. There can be fierce competition between villages. In conducting the present work, I have done my best to parse this complicated situation and abstract some general principles illustrative of the roots of the Balinese aesthetic. In analyzing Kak Luweng’s playing style and trying to abstract the principles of his idiom, I have found it the most fruitful to concentrate on his style of sangsih playing and how he directs the ensemble. In playing sangsih, Kak Luweng likes to keep clear of the polos; to give the song a great deal of breathing space. A sangsih that plays too much risks stepping on the toes of the polos. It also can ground the sangsih too much. Having too much material to play may interfere with the sangsih’s ability to swing, to improvise little ornaments and to give signals to the ensemble. It is true that the literal role of the sangsih is to fill in the holes left in the main melody as played by the polos, but in addition to this first level, there is a whole hierarchy of alus natures to sangsih playing. It is usually the senior musician who plays the sangsih and takes charge of guiding and integrating the
ensemble as a whole. He is the musician with the fullest conception of the whole song and how the parts fit together. *Polos* players often do not know the *sangsih* parts, but *sangsih* players almost invariably have learnt the *polos* first. One of the most important things for a *sangsih* player to think about is how to harmonize, complete and direct the *polos* without getting in the way. It is a difference in conceptualization. The *polos* player has the melody. The *sangsih* doesn’t need to state the melody. What he needs to do is to sweeten and decorate it. If he decorates the whole thing, indiscriminately, then the decorations not only lose their sweetness but also get in the way. The *sangsih* reacts to, guides and refines the *polos*, and the ornamentation style defines the feel of a piece.

I have had many conversations with Evan Ziporyn, director of Gamelan Galak Tika at MIT, about Balinese *gamelan*. Evan has likened his *gender wayang* teacher, named I Wayan Loceng, to Charlie Parker (known colloquially as Bird) playing jazz in the reconstructional Be-bop style. Just as Bird did in jazz, Loceng and his fellow musicians and *dalangs* in Sukawati Village have been a strong force in the reconceptualization of the playing of *gender wayang*. Their style is heavily ornamented and devastatingly complex. The ancient roots are there, if you know where to look for them, but they are buried under such pyrotechnics as simply baffle the mind. Evan’s comment prompts me to think of Kak Luweng as the *gender wayang* equivalent of Dave Brubeck, or Duke Ellington. His sense of style and supreme elegance in note placement and harmonization are unparalleled. His deep roots in the most classic, *alus* aesthetic are paramount to his playing style. I first
noticed it in his playing of the *kotekan* for Angklung. He swings all over the place. I wasn’t sure if I should follow suit or not, or if so, then how. It’s hard to ask those types of technical questions across a language barrier. The concepts don’t translate, and even if they did I wouldn’t know how to phrase them. I carried out my learning almost exclusively in a non-linguistic modality. The concept of *oret* includes swing, but really it seems to derive more from damping concerns, mostly. *Oret* deals with trying to find ways of sliding between tones, and bending tones which can not be bent for reasons of the physical nature of the instruments. *Oret* is an attempt to move away from discreteness in playing *gender*.

Loceng’s style, which Evan likened to Bird’s jazz playing, is a complex abstraction on established forms. The melody may be there, but is heavily ornamented and sometimes hidden. That style doesn’t include as much swing as Kak Luweng’s style; it is locked more strictly into time. In addition, there is not as constant attention on relaxation and flourishes, on smoothness. The style has an incredibly intense forward drive, which fits as a characterization of Bird’s playing as well. Kak Luweng, in keeping with the analogy to Duke Ellington and Dave Brubeck, gives a great deal of thought to how to sculpt the evolution of a song, how to present the melodic material in its clearest form, and so on, favoring songs which may not be as complex but which have a beautiful quality in their melodic nature.

In relation to the issue of swinging note placement, I was trying different styles as I practiced, but I wasn’t sure how much of it Kak would condone. So after a few weeks of confusion on my part I decided to perform an experiment. When I went
to my lesson that morning I swung the *polos* as hard as I could. For the most part Kak plays straight, refined and stately. But periods of instability come before key structural points, as has been noted. These periods follow a fairly stereotyped format. The space between beats stretches, the note placement swings and notes are left to ring more. Their voices mix together, finally opening up totally and hanging. I think of the swing as coming in waves; a wave of instability followed by a period of strict rhythmic lock. When Kak would swing I would match it and we’d get a resultant *kotekan* with hiccups and flams and weird spaces in it. I figured I’d play it as extreme as possible to make sure I got an answer to the nonverbal question I was posing him. After we ended the song Kak complemented me, saying I had played very well.

In conclusion I must again admit my relative inexperience in these matters. In my 6 years of studying *gamelan* I have learned many things, one of which is that I still have much to learn. Much of the philosophy of playing styles has been gleaned from watching Kak Luweng and other musicians. The musicological analysis is my own, but has been couched in terms learned from others. For instance, my recognition of the telescoping levels of representation of basic patterns derived in part from the teachings of I. M. Harjito and Sumarsam in the idiom of central Javanese court gamelan. Of course I throw my own spin on things. I hope that this writing does some justice to my many teachers, and shows them how much I appreciate their teachings. If nothing else, I wish the reader to take away an idea of some of the ways in which the patterns of Balinese *gamelan* music evolve and are extrapolated within a composition. That is the first level. The second level includes issues of style and
context. Since *gamelan gender wayang* is a small ensemble lacking drums and gongs, *gender* musicians necessarily spend a lot of time thinking about how to sculpt the sonic texture and thickness, and direct the evolution of the musical feeling to clearly present the gong structure as the cycle unfolds. There is a great deal of spontaneous adjustment done by the players. The song may suddenly soar into a new dynamic level. It may break from strict *kotekan*, often just before reaching a strong structural point. Passing notes may be added, reharmonizations made, and the playing technique varied. In addition to showcasing the musicians' skill, these variations add interest value and allow for personal interpretation, giving the music a great deal of forward momentum. In these ways and many others, the musicians who play *gamelan gender wayang* take totally precomposed songs and imbue each performance with uniqueness and vitality.
References

Herbst, Edward
The Roots of Gamelan (CD Sound Recording)
Published by World Arbiter
note: The quote was found in the liner notes to this CD, however, Ed Herbst undoubtedly got it from the writings of Colin McPhee. It is, however, unreferenced.

McGraw, Andrew
“The Development of the Gamelan Semara Dana and the Expansion of the Modal System in Bali, Indonesia”
Asian Music vol. XXXI #1, p78

McPhee, Colin
“Music in Bali”

Toth, Andrew
“Music of Bali: Gamelan Gender Wayang”
Ethnomusicology vol. XXVII #2, May 1983, p400.

Vitale, Wayne
“Kotekan, the Art of Interlocking Parts in Balinese Music”
Balungan, Fall 1990, p2
Appendix: Liner notes to the accompanying CD of my compositions

Garden of Earthly Delights
Kalafya Brown

1. Kuomboka
(K Brown)
Ernest Boamah: piano
Kalafya Brown: drumset
Sathya Burchman: double bass
Sam Hoyt: trumpet
Kevin O’Neil: guitar

The Lozi people of Zambia live in the floodplain of the Zambezi river. The Zambezi floods their lands annually, forcing the Lozi to migrate to the highlands until the waters recede and they can finally return. Kuomboka literally means ‘to get out of the water’ and is the name of the annual festival associated with the Lozi migration. My piece is about the cycles of life, about the coming of the rainstorm and the floating ceremonial procession, about balance and swaying motion, about tipping the canoe over. I invented the scale.

2. Don’t cry for me. I’m already dead.
(K Brown, melodic inspiration from a Balinese traditional)
Sasha Bogdanowitsch: voice and Indian bansuri (bamboo flute)
Kalafya Brown: Balinese 7-tone gender semar pegulingan (bronze-keyed xylophone)
Sathya Burchman: jazz guitar
Sumarsam: Javanese rebab (two-stringed fiddle)

There is a strong similarity between Indonesian wayang shadow plays and American cartoons. The fighting and clowing, the totally overdramatic nature of them. The title of this piece is a quote from Barney Gumboldt of “The Simpsons”. Springfield holds a spring festival, and everyone contributes a short film. Barney’s is a heartwrenching black and white ode to a gutter drunk. The only color in the film is a red rose. “Don’t cry for me. I’m already dead.” is Barney’s denoument, as he sinks into wasted oblivion. My song is based in part upon a Balinese traditional gender wayang song, called “Mesem”, meaning ‘sadness’. “Mesem” is played when the shadow puppets are crying. I totally recomposed it in transferring it from the traditional pentatonic instrument to a 7-tone instrument. Most of it is purely my own, but pieces of the traditional song bubble forth in warped forms. Most notably, the second repeating cycle starts (3:50 to 4:45) and ends (6:19 to 6:45) with semi-traditional material. In composing the tune I drew two five-tone modes from the full seven tones of my gender. The piece starts with the crying mode, and switches to the bright mode at 3:20, perhaps the most tearfully beautiful moment in the whole body of music I have composed. It switches back and forth between modes, adding a sense of colorful melodrama to the tune. I wanted to make this tune as ridiculously overdramatic as possible.
3. **Tsvorook Bleebskrop**  
*(K Brown)*  

Kalafya Brown: midi

This tune represents three months of intensive unemployment, late in the winter of 1997. I had just graduated from college. I quickly became disenchanted with my laboratory job, so I quit and spent all my time on my housemate Pete’s Mac with a midi sequencer and synthesizer. My first attempt at computer music. I wrote the beginning at the piano first, and you can notice the progression through the song as I became more comfortable with the midi environment. I think it’s pretty fat. I am especially happy with the basslines. It’s kind of hard to deal with the quantized midi interface and yet instill the necessary sense of slick swing and funk. I played everything in on a keyboard, tweaking the parameters I had access to. This is without a doubt the cleanest music I’ve ever made. I’d like to arrange the tune for a real jazz band one of these days, and see what form that would impose on it. Dig the bop-style head out, and the little Coltrane ending flutters (heh heh heh).

4. **Summertime**  
*(K Brown, lyrics and melodic inspiration from Ira and George Gershwin)*

Kalafya Brown: Balinese *gender wayang* (four bronze-keyed xylophones), gong, *kempul* (small gong), *gentorak* (bell tree), ride cymbal, high hat, voice. All overdubbed.

Now this is a tune in the wrong scale. And yet in its way consistent with the idioms of Balinese *gamelan* and jazz. It is very common in *gamelan* music for melodies to be imported from one ensemble to another. There are always changes made, to deal with register and fingering changes, or whatever idiosyncrasies of the instruments pop up. A song may have to jump an octave in a weird place, or substitute some tone depending how an old melody takes to the nuances of a new ensemble. Also in jazz, songs are constantly ported from one ensemble to another, rearranged and reconstructed to such an extent that two versions may be scarcely recognizable as siblings. Only the lyrics may show the identity, which is the one and only reason I sung the song for you. I like it a lot better without the vocals to muck it up, but that’s because I composed it and know the lyrical movement. Actually I can’t help cracking up whenever I listen to it, so if you laugh at my singing don’t worry about it.

The scale of my *genders* is a pentatonic scale derived from the seven-tone *gamelan slonding*. It is not the usual scale used for Balinese *gender*. So in that sense it’s the wrong scale again. The wrong scale is a concept I got from *gamelan slonding*. They have a mode called *saih salah*, meaning ‘the wrong scale’. It is not for ceremonial use. However there are songs composed in it. Composing this tune was a process of forcing the original Summertime melody onto the keys I had to work with, thinking not only tonally and melodically but relationally. I couched the narrative and emotional content of the lyrics in the voicing and rhythm when the actual pitch could not be approximated. I had a problem with the blue note in ‘cotton is high’. 
What I decided was to translate that harmonically destabilizing blue note into rhythmic destabilization instead. I added some lullabye sections. After the second chorus the song opens up into a massive widening (11:10), where the melodic structure is stretched out greatly, and a hidden realm of activity springs forth from the interstices. It is a common technique in many forms of gamelan to go through changes in the level of density of presentation of given melodic material. I derived a rhythmic kotekan ornament from each element of melodic movement and hung that ornament on the stretched-out time structure. I like thinking up funky patterns which interlock in totally non-Balinese ways. The inclusion of modulating riffs such as after ‘cotton is high’ (11:50) and ‘your momma’s good looking’ (12:30) was compositionally important because the jazz idiom includes so much use of modulating riffs. I did not use the traditional gamelan harmonic system, but invented a system based on chords and chordal extensions.

5. Sword Dance
(K Brown, arrangement of a Thai traditional)

Kalafya Brown: kendhang Banyuwangi (east Javanese hand drums)
Sathya Burchman: double bass
Jason Cady: contra alto clarinet
Candace McElroy: oboe
Justine Flynn: french horn
Sean Onsgard: piano

I transcribed this from a tape, and arranged it. In the Thai original, tattooed performers dance and swing their swords in time to the beat of gongs and a drum said to roar with the voice of a tiger. I arranged the gong to be played by my kendhang and the piano, added a soup section and a latin jazz section. It sounds kind of like Darth Vader’s entrance music, doesn’t it?

6. Gong-gongan
(Balinese traditional)


Overdubbed in four parts.

A nice little tune, from the pentatonic repertoire of gamelan gender wayang. I transferred it to a 7-tone scale of gamelan semar pegulingan. I added slight modulations, but the song is intact as the original. I really like this song. It has such a beautiful flow to it; lulling meditatively and swaying.

Many thanks to the many talented musicians who have shared their time and skill with me.

A Free Funk Production.

All mixing, editing, overdubs, mastering, publication, etc. at Wesleyan University by K Brown.

Woo-hoo! free studio time for grad students!
Kalafya, May 2000