The Spoken and the Unspoken: A Pedagogical Perspective on Balinese Gamelan

by Leslie A. Tilley

Abstract (English and Indonesian)
This article considers the pedagogy of gamelan ensembles outside Indonesia, drawing on my experiences as both learner and teacher of Balinese gamelan as well as on the voices of my teachers, students, and colleagues across the transnational gamelan community. The article has two distinct halves, which are designed to complement and nuance one another but may also be read independently. Part I is more theoretical and big-picture, presenting some of the logistical and ethical decisions one might need to make when leading a gamelan ensemble outside Indonesia. I approach these questions through discussions of goal setting, repertoire choices, the concept of "tradition," the potential value of student composition, and the possible role of notation in gamelan pedagogy. Part II is a practical discussion of pedagogical technique. I first examine the traditional pedagogical approaches of my Balinese teachers, highlighting both their benefits and challenges to unenculturated gamelan learners. I then present in detail some of the ways I have modified these pedagogies in my own North American gamelan gong kebyar ensembles, techniques that aim to foster the gamelan-specific embodiment and understandings most of my students' musical enculturations lacked. I hope the article will serve as a catalyst for further discussion and idea-sharing among gamelan teachers and learners.

Artikel ini membahas metode pengajaran (pedagogi) gamelan di luar Indonesia, yang berdasarkan pengalaman saya sebagai murid dan juga guru gamelan Bali serta dengan melibatkan opini dari para guru, siswa, dan kolega saya di komunitas gamelan transnasional. Artikel ini memiliki dua bagian yang dirancang untuk saling melengkapi namun tetap bisa dibaca secara tersendiri. Bagian pertama memberikan gambaran umum yang lebih bersifat teoretis, menyajikan beberapa pertimbangan logistik dan etik yang perlu dilakukan oleh seseorang ketika memimpin ansambel gamelan di luar Indonesia. Saya mendekati persoalan tersebut melalui diskusi tentang penetapan tujuan, pilihan repertoar, konsep "tradisi", nilai serta potensi dari komposisi yang dibuat oleh siswa, serta peranan notasi dalam metode pembelajaran gamelan. Bagian kedua berisikan pembahasan mengenai teknik-teknik pedagogis. Pertama-tama saya menilik metode pedagogis tradisional dari guru-guru Bali saya, menyoroti manfaat dan tantangannya bagi pelajar gamelan yang tidak terenkulturasi. Saya kemudian menjelaskan secara detail beberapa metode pedagogis yang telah saya modifikasi dalam mengajarkan ansambel gamelan gong kebyar di Amerika Utara: teknik yang bertujuan untuk mendorong pemahaman secara khusus mengenai gamelan yang kurang dimiliki oleh sebagian besar siswa saya..Saya berharap tulisan ini dapat menjadi pemantik pembahasan lebih lanjut sekaligus berbagi gagasan dengan guru-guru gamelan dan segenap peserta didik.
—Translation by I Gde Made Indra Sadguna

"This is the part I still don't understand," *I exclaimed suddenly, interrupting the flow of drumming and emphatically pointing at the* kendang *in my lap as though the gesture might somehow underscore the point. Pak Sidja stopped playing his own* kendang *a moment later, spat out his tobacco, and with an ever-patient smile said, "OK,* lagi*." Again. We didn't discuss the eight beats of drumming I was struggling with—we never did—nor did Pak Sidja seem easily able to isolate the excerpt in order to work on it with me, although he did try for a moment or two before giving up and simply starting from the beginning once more. I knew that two and a half minutes into the piece, I'd hit that same passage with no better idea of the combination of drum strokes that properly complemented Pak Sidja's pattern than I'd had the last four times we tried.*

Though very different from the talk-based, explicit learning styles of the Western music traditions I'd studied, I was by no means unfamiliar with this approach by the time I met Pak Sidja in the summer of 2007.[1] *In my now two decades of study, learning the intricate interlocking melodies and rhythms of Bali's gamelan traditions with master* seniman alam*—"natural artists"—like I Madé Sidja has almost invariably proceeded in this way: hours of repeating long passages of music learned by rote without comment or segmentation. The same was true in the Vancouver-based gamelan Gita Asmara, my home ensemble from 2000 to 2015, which I joined while pursuing graduate studies in ethnomusicology at the University of British Columbia (UBC). Sure, some of my younger Balinese teachers, through study at Bali's arts conservatories and years of working with non-Balinese students like me, had learned to break the music into smaller*

1. See Brinner 1995 on these different styles of learning and the diverse forms of knowledge they create.

chunks or overtly discuss structural features.[2] *But for those 15 years, whether with Gita Asmara's Canadian-American director Michael Tenzer, with the various Balinese artists the ensemble hosted, or with my many teachers across all generations in Bali, gamelan was something to be learned by rote, with no discussion of the relationships between musical strands. It was something to be performed in* pakaian adat*, traditional clothing, something to be used for largely traditional and neo-traditional (*kreasi baru*) music, with truly modern, experimental, or fusion works (*musik kontemporer*) reserved for special projects. And it was something patently to be learned without notation in what I came affectionately to dub the "learn-forget-learn-forget-learn-remember" method. Frustrating though it could sometimes be, I'd come to accept that this was "the Balinese way."*

I was to call such learning experiences sharply to mind when I moved to Cambridge, Massachusetts, in 2015 and encountered Gamelan Galak Tika, the mixed student-and-community gamelan gong kebyar ensemble based at the Massachusetts Institute of Technology (MIT). Co-founded by Balinese master musicians and dancers I Nyoman Catra and Desak Madé Suarti Laksmi with American composer-performer Evan Ziporyn, but at that time led by two of its community members, Galak Tika was unlike any gamelan I knew, purposefully eschewing many commonly embraced practices. They wore non-traditional costumes and had a stated mission to be "at the forefront of innovative, cross-cultural music for Balinese gamelan,"[3] *playing programs that emphasized modernist fusion works and new compositions by group members. They learned pieces aided by isolated parts recordings stored in a Dropbox and, most surprisingly for me, using both cipher and Western notation. One member even played the final concert that year reading her notation on a cell phone, held not quite covertly enough in her lap.*

While this approach was all a bit unfamiliar, what was most notable to me was my immediate and vehement reaction against it. Where did that come from? My knee-jerk instinct was to argue what I had heard countless teachers, both Balinese and non-Balinese, say: "The Balinese just don't do it that way." But, as Ziporyn pointedly observes: "Who are these 'the Balinese' of whom you speak?" (interview 2017). Was it a measure of respect for my Balinese teachers to staunchly maintain these attitudes, or was I simply reifying a static notion of "tradition," reinforcing what Nigerian author Chimamanda Ngozi Adichie (2009) would call a "single story" of Balinese gamelan? In that complicated dichotomy, what are the roles and responsibilities of a

Photo 1. Playing kendang *with I Wayan Sudirana. Pengosekan, Bali, Indonesia, 2003. Photo: Nicole Walker. Used with permission.*

gamelan ensemble, like Gita Asmara or Galak Tika, which is peopled, taught, and operated outside of Indonesia? What can or should we aim for when teaching such ensembles? And what pedagogical approaches might we use to achieve these goals? When tasked with directing Galak Tika in the fall of 2017, I was forced head-on into this maelstrom of questions.

There is no cookie-cutter solution here. As Clendinning notes, "the aesthetics and ethics of gamelan practice can be interpreted in many ways, and notions of respect and creativity with regard to tradition and its transformation are highly personal" (2020:13). The choices we make as teachers and directors will necessarily be shaped by, among other things, our own experience levels and pedagogical lineages; available budgets, resources, and institutional support; time constraints and levels of student turnover; the educational expectations and make-up of our particular ensembles; and our own personal beliefs around representation, transmission, and transformation. We can approach these questions from several angles too, from labor concerns in how instructors are hired and ensembles supported, to representational questions about what such ensembles can or should mean to students, audiences, and institutions.[4] My focus here is on the practical pedagogical choices that shape our day-to-day interactions with students, and the aims of this article are twofold.

Part I examines some of the logistical and ethical decisions that go into teaching gamelan groups outside Indonesia. Drawing on my very contrasting experiences in Gita Asmara and Galak Tika, and centering the words of my teachers and co-performers as well as those of other so-called "world music ensemble" instructors, I think through goal setting, repertoire choices, the concept of "tradition," the potential value of student composition, and the possible

2. Sudirana 2018, Susilo 2010, Sumarsam 2004, Bakan 1993, and Clendinning 2020 all address pedagogical adaptations by Indonesian musicians teaching transnationally. Each also touches on distinctions between traditional and conservatory-style gamelan teaching-and-learning, including the long-standing Western influences and priorities of conservatory teaching in Indonesia. Conversations with many Indonesian friends and teachers corroborate their observations and assessments.

3. www.galaktika.org/about.html. Accessed December 30, 2020.

4. See Vetter 2004, Harnish 2004, Susilo 2010, Sumarsam 2004 and 2016, and Clendinning 2020 on these and other concerns and challenges.

role(s) of notation in gamelan learning. Five voices in particular are featured throughout this section, all musicians who have fundamentally shaped my experience of gamelan pedagogy outside Bali: longtime Gita Asmara teachers and composer-ethnomusicologists I Wayan Sudirana and Michael Tenzer, Gita Asmara co-performer and composer-musician Colin MacDonald, Galak Tika director, composer, co-performer, and sometimes co-teacher Evan Ziporyn, and musician, teacher, and composer I Dewa Ketut Alit, who has worked extensively with both Gita Asmara and Galak Tika.

Part II zooms in for a practical discussion of pedagogical technique. I first examine how the four-step traditional approach to pedagogy described by Balinese musician and scholar I Wayan Sudirana (interview 2017, 2018) leads to a particular kind of musical enculturation for gamelan players in Bali. Then, through a discussion of techniques I developed teaching gamelan gong kebyar to the UBC student gamelan, MIT student gamelan, and Gamelan Galak Tika, I outline specific ways that instructors of gamelan groups outside Indonesia might thoughtfully alter traditional pedagogies to help students gain some of the enculturation they lack. Like many other transnational gamelan instructors' methods, mine is a conceptual hybrid between the traditional oral pedagogies of *seniman alam* like Pak Sidja and the analytical approaches that have helped me get inside the music. My aim is to help my students experience, embody, and know the music in new and hopefully meaningful ways by accelerating for them the musical understandings that eased my own learning and thus deepened my enjoyment of gamelan.

Of course, my pedagogical lineage—teachers who may be radical composers and thinkers but strongly favor traditional approaches to pedagogy—has given me a very particular lens through which to think through these issues, as has my training as an analytical ethnomusicologist, born and educated in Canada, who first encountered gamelan as an adult. I hope other transnational gamelan instructors, both Indonesian and non-Indonesian, will share their techniques, opinions, and experiences too. "As our understanding of best practices in world music education continues to evolve," Mellizo argues, "often, our most powerful learning opportunities come from each other" (2019:19). Through continued dialogue, we as a gamelan community can co-create a multidimensional guide to transnational gamelan pedagogies.

PART I: DECISIONS

Goals

It is a deceptively complex task to establish goals for a gamelan ensemble outside Indonesia. The university affiliation held by around 60% of U.S. gamelan ensembles[5] leads to an obvious equating of gamelan with other for-credit ensembles, which prioritize high-level playing in semesterly concerts. Yet, while this may be a primary purpose our institutions imagine for our ensembles, it can also demand pedagogical compromises that bump up against what many ethnomusicologists believe: that "just getting people to sound right may be good music making," as Nettl notes, "but it's not any good -ology" (quoted in Lieberson 2017:219–220). Ethnomusicology is also about thoughtfully representing music cultures: amplifying different ways of thinking, learning, and knowing to facilitate musical experiences that are creative and edifying as well as satisfying. But how can we accomplish these larger goals in an ensemble bound to the academic calendar, expected to prepare a concert with students who may not even know how to hold their mallets on Day One, and knowing that our predominantly non-Indonesian audiences may see that concert "as a metonym for Balinese culture as a whole—a heavy burden to place on a beginning group" (Clendinning 2020:103)?

Among my teachers and collaborators, answering this question begins—always—with a firmly-held belief that "no teaching has absolutes" (MacDonald interview 2017). As Sudirana contends:

> *It depends on the situation as well. It depends on the student. It depends on a lot of things. You can't generalize the way you organize gamelan, the way you use methodology [. . .] Each university will have a different character. Each student has a different character. They are human. They have different needs. So, you know, although you will have the same model each time you teach, that model can only be like a raw model (interview 2017).*

Alit agrees, noting: "For me, I have to change myself. So where we are, where I am. So we are building that music there. So that actually is my purpose" (interview 2017).

Deciding on goals for a particular group, then, is a creative and flexible process. Recalling two and a half decades of Javanese gamelan teaching in the U.S., Roger Vetter (2004) reflects on how his goals have shifted over time. His early objectives, "held uncritically," he says, "throughout much of my career," emphasized playing proficiency, technical knowledge, aural learning, and an understanding of the music's social context (117). These goals will likely feel familiar to readers who have learned (or taught) gamelan outside Indonesia. Vetter's more recent goals, by contrast, are broader, prioritizing an ensemble experience that "prepar[es students] for life-long musical and social encounters," and stressing "the educational merit of going through the process of learning a second musical language, even if fluency in that second language cannot realistically be achieved" (119). Rather than being in tension, however, I believe these sets of goals can be mutually supporting. My own goals for teaching gamelan gong kebyar, developed in conversation with many gamelan teachers and co-performers over many years, contain

5. Statistics from the American Gamelan Institute, http://www.gamelan.org/directories/directoryusa/ Accessed March 21, 2022.

elements of both. A first trio more closely resembles Vetter's early career goals: 1) help students gain some technical proficiency on one or more gong kebyar instrument(s), playing gamelan repertoire of an appropriate difficulty level with fluency and confidence; 2) enable engagement with Balinese aural/oral pedagogies; and 3) give students some understanding of the breadth, variability, and complexity of Balinese gamelan. But, as Javanese musician Hardja Susilo contends:

> *Just as important as learning to do it is learning to think the way the Javanese [or Balinese] musicians think. [. . .] I can teach a total novice to play a piece in an hour. But learning to be reactive, proactive, flexible... that takes years. More than that, though, the students should learn to feel or think the way a native thinks when playing gamelan. I don't mean just emphasizing beat eight instead of beat one, but actually feeling that a gong signals the end of a phrase, rather than the beginning (Susilo et.al. 2004:57).*

In a similar vein, music education scholar Juliet Hess argues:

> *A liberal view of expanding the curriculum may allow students to know more than one music, but a radical music education teaches students there are multiple ways to think about music—that some musics require different epistemologies and that it is possible to consider the world from more than one orientation (2014:245).*

Sociologists and cultural anthropologists have shown that shared ways of thinking, such as those described by Susilo and Hess, are the result of *enculturation*: "the psychic structure of a societal group [that] is passed on through a cultural immersion process." When it comes to music, "a child develops an implicit understanding of the knowledge and values of a repertoire by nature of his or her membership and participation in [his or her] society" (Campbell 2018:92). Musical enculturation thus forms our musical *habitus*: tastes, expectations, attitudes, and dispositions about music that we acquire simply by belonging to particular cultures or social groups.[6] So my second trio of goals considers the contrasting enculturation and habitus of my Balinese teachers with those of my predominantly non-Indonesian students, and attempts to bridge the gap between them: 1) give students the tools to understand how what they play fits within the context of the music, and to hear *and feel* their part in relation to others; 2) enable an embodied experience of both music-making and music-learning from a culture that may be unfamiliar; and 3) facilitate an environment of collaboration, where students listen to and play off one another and find joy in the communal act of music-making.With these two sets of goals in mind, I turn to questions of repertoire and tradition, student composition, and notation.

Repertoire, Fluidity, and "Tradition"

If a central goal of teaching gamelan outside Indonesia is to help students engage with the gamelan's musical systems and epistemologies, the instinct for many non-Indonesian teachers like myself is to prioritize traditional music, carefully replicating our teachers' styles. As Pond observes: "the combined logistical and ethical challenges of presuming to explain a tradition from a limited knowledge base comprise a common issue [… and] the default position is to favor preservation and reinforcement of tradition (and so, authenticity)" (2014:191,192). Even radical composer Colin MacDonald acknowledges a self-imposed restraint when working with gamelan music:

> *I have a great respect for this tradition and these instruments, and I can't just march in and fuck around and say "this is what I want you to do and… smash that gong, and bounce those balls off those things, and…" We certainly saw the Balinese guys doing crazy stuff like that, but […] that respect for it or that awareness of being an outsider sort of reined me in (interview 2017).*

Indeed, as Clendinning reports, of the 170 gamelan ensembles in the U.S. in 2015, "about 90 percent play traditional Indonesian repertoires as a core portion of their repertoires" (2016: paragraph 7). And Becker's observations of the 1983 American Javanese gamelan scene are as relevant today: for many ensembles, "imitation—as accurate an imitation of the Javanese model as possible—[is] the ideal" (84). I have always leaned this way too, as both performer and pedagogue. This is the music I love, learned with teachers I respect and admire from a culture outside my own; why wouldn't I replicate it as closely as possible? Yet Averill warns that such strict imitation may in fact constitute a kind of musical transvestitism: although "world music ensembles provide at best a pale simulacrum of 'the real thing'," he argues, "the implicit goal is still to maximize 'authenticity' by performing near exact replicas of musical models from other cultures" (2004:100).[7] And as Weiss contends, categorizing words like "authenticity" or "tradition" "suggest an immutability that may not be evident in the performed practice of the style or genre [and] such appellations articulate boundaries, imagined or real"

6. As Bourdieu and Wacquant describe, "[w]hen habitus encounters a social world of which it is the product, it is like a 'fish in water': it does not feel the weight of the water and it takes the world about itself for granted" (1992:127–28).

7. Similar arguments are made about ensembles of largely non-Indonesian musicians wearing traditional costumes, which Averill terms "ethno-drag." But on dressing as embodiment in American university Javanese gamelan settings, see Strohschein 2018:140–146.

(2014:510). When our students will only "glimpse the tip of the iceberg" of another culture (Becker 1983:84), these categories can be essentializing. They risk a conflation of the paired concepts Pond (2014) dubs tradition (without scare quotes) and "tradition": a shifting and dynamic set of musical norms and expectations mistaken for a fixed, ahistorical musical form.

The concept of "tradition" is particularly complex in Bali. During Dutch colonial rule, "the so-called 'Ethical Policy' was combined with the vision of Balinese culture held by the Orientalist tradition" (Picard 1990:39). Twentieth-century colonial rulers carefully curated Balinese cultural traditions through a policy of *Baliseering*, "Balinization," preserving and amplifying only those aspects of Balinese society seen as both favorable and marketable.[8] As McGraw observes: "the Dutch portrayed themselves as benevolently protecting the colony from the harsh modern world while [. . .] encouraging the aestheticization and homogenization of local culture, an attitude later adopted by both the Old and New Order" (2013:50).[9] The rhetoric of tradition looms large in Bali still today, further strengthened in the wake of the 2002 and 2005 Bali bombings and subsequent rise of *Ajeg Bali*, the "stand strong for Bali" movement.[10] This stance inescapably affects attitudes toward gamelan performance, composition, and innovation. As longtime arts conservatory instructor Ketut Gde Asnawa asserts: "If you make music without a sense of, or background in, tradition your creations will be malnourished and die. If you make something new, don't forget the traditional music. If you cut the roots the tree will die" (quoted in McGraw 2013:120). Yet, while these words may be good guiding principles for teachers of gamelan ensembles outside Indonesia, when teaching only the iceberg's tip, they may also work to uphold a fixed definition of "tradition." So how do we respect, value, and advocate for the traditions of our teachers while also honoring the changeability and resulting richness of their living practices?[11]

When teaching gamelan ensembles outside Indonesia, even my most radical Balinese composer friends believe it's essential to begin with traditional repertoire. Sudirana asserts: "gamelan groups outside of Bali should learn all the basics first. This means learning traditional pieces" (interview 2017). Alit agrees, noting:

> *Most of [the people in Galak Tika], they don't really understand how the gamelan works, how it's working together. [. . .] I want the musicians to understand feeling, right feeling. That's hard for them. So it's good if they can learn traditional pieces [. . .] Also, it's good if you know where the music you learn has come from. That's knowledge, and that makes your appreciation about what you're doing more deep [. . .] stronger. And that's good knowledge (interview 2017).*

Yet these musicians also point to ways we might nuance our presentation of traditional repertoires to keep from reifying "tradition." Experienced gamelan musicians will know that gamelan genres are fluid in a number of ways. First, many of these practices use improvisation, as in the flexible idioms of the Balinese *ugal* and *reyong*, Javanese *gender* and *rebab,* and *kendang* practices on both islands, to name a few.[12] Yet while such idioms are commonly considered essential to good gamelan performance, they are often not prioritized in ensembles outside Indonesia, particularly those with high student turnover. Ensemble instructors under time constraints will often settle instead on single "versions" of improvisable melodies and rhythms, teaching them as fixed entities without reference to the existence of improvisation. Susilo recalls, tellingly: "when I gave [students] parts that were different from my earlier lesson they were not happy. So I learned not to alter the part" (Susilo et.al. 2004:57).[13] But while teaching fixed parts may at times be a necessary compromise, some ethnomusicologists are finding new ways to enable improvisation, even in beginner-level ensembles. Teaching BaAka music, for instance, Kisliuk and Gross have prioritized "not *imitation* but *interpretation*" (2004:253). Rather than focusing on the specific notes BaAka musicians sing in a given performance, they emphasize instead the *ways* these musicians work creatively within their idioms. Students' acts of musical reinterpretation, though the resulting music may be quite different from a BaAka singer's, comprise for these scholars a more authentic performance. This reckoning demands a total redefinition of the concept of "authenticity," away from product and toward process. And while the tight interlocking idioms of gamelan practices like gong kebyar may preclude this level of student freedom on some instruments, I find the conceptual reorientation compelling. My own suggestions for teaching one of the gong kebyar's improvisational idioms are discussed in Part II.

8. See Vickers 1989.

9. See Seebass 1996 on the emergence of gamelan gong kebyar in this rhetorical landscape.

10. On *Ajeg Bali*, see Karuni and Suardana 2018; Picard 2009. On *Ajeg Bali* as transformed *Baliseering*, see Pageh, Arta, and Pardi 2020.

11. Here I'm inspired by Juliet Hess who, borrowing from Bakhtin, observes: "as humans we understand Others through the categories we construct, which are in fact closed and unfinalizable." Our "tendency to understand Others through our own frameworks," Hess argues, makes it more difficult for us to "both hono[r] unfinalizability and allo[w] for Others to also live as self-in-process" (2018:34–35).

12. See Tilley 2019 on improvisation in both *reyong* and paired *kendang* practices in Bali. See Sadguna (2022) on *kendang* improvisation in gamelan gong kebyar.

13. In later years, Susilo found a different compromise: teaching students several formulaic versions to mix and match. I also sometimes take this approach for improvising idioms.

Gamelan music's flexibility can also be seen in the varying regional styles and approaches to classic pieces—as in the distinct versions of Legong from Saba, Peliatan, Binoh, and ISI Denpasar—as well as in the alterations that individual musicians may make to a composition over time: "You know, I change a little bit," Alit laughs. "You know in Bali, we play and then get bored. […] Even if it's playing [the iconic dance piece] *Teruna Jaya*, [it's] not exactly the same" (interview 2017). For David Harnish, conveying this aspect of fluidity to his American gamelan students requires a personalization of the knowledge being passed on: "I try to avoid saying 'The Balinese do this' or 'They believe that,'" he explains, "because these objectify a group and make them abstract, romantic, and monolithic; instead I say 'I saw this' or 'My teacher said this' to explain music and culture, conveying personal experiences whenever possible." Though non-Balinese instructors may not have our Balinese teachers' depth of knowledge or fluency, we can still choose different versions of canonic pieces in different semesters, talking to our students about how they differ, playing recordings of alternate versions, sharing stories and advice from our teachers, and asking students to write program notes or give spoken concert introductions that contextualize this variability. Even these small changes will discourage the reification of tradition as a static object.

Many of my Balinese teachers furthermore see value in teaching neo-traditional and even contemporary compositions as vital parts of a gamelan tradition, and this inclination reflects a final, larger-scale aspect of fluidity in gamelan repertoire: the emergence of new styles over time (gong kebyar itself is little over a century old) and the vibrant communities of Indonesian composers working in both classic and contemporary forms. On the one hand, as Ziporyn argues, new-music gamelan works can still help our students embody traditional structures and techniques. When studying Lou Harrison's gamelan compositions, he recalls, it was imperative that students first learn traditional Javanese idioms (interview 2017). On the other hand, teaching new works can "evoke diversity by providing students with a multifaceted view of Indonesian culture" (Clendinning 2020:101). Composer Wayan Yudane's response to Asnawa's quote on the roots of tradition, cited above, is powerful: "I will make new trees with a strange fruit. One tree cannot contain us" (quoted in McGraw 2013:121). For Yudane, then, the authentic sonic picture of Bali encompasses its cutting edge alongside its classics. And while I agree that starting with traditional works gives students the best foundation for understanding gamelan music systems, this view encourages broad repertoire choices in ensembles outside Indonesia too. As Alit muses: "I think . . . I need both. You need both. [. . . To me they're] both good, because [. . .] it gives us inspiration. So a traditional thing is good because it has strong roots. But new is good because it gives you the future. So that should be balanced" (interview 2017).

What About Composing?

How far do we take Alit's call for balance between traditional and new in gamelan ensembles outside Indonesia? Patricia Shehan Campbell, who in the early 2000s popularized the concept of an informed World Music Pedagogy (2004, 2016), suggests that after learning about a genre through progressively more interactive listening exercises, students will benefit from what she calls Creating World Music: composing or improvising on learned musical models.[14] The goal here becomes not just encountering other musical systems and ways of thinking, but engaging with those systems personally and creatively.

When considering the broad musical education of my students, I strongly agree with Michael Tenzer that "higher doses of aural/oral learning, improvisation, and creative music making of all kinds are emphatically called for in [Western-based] music curricula" (2017a:169). But does this mean that I can or should enable my gamelan students to compose using their newly learned "vocabular[ies] of sonorous possibilities" (Campbell 2018:6)?[15] Or is such a practice, as Deborah Wong warns, an extension of ethnomusicology's colonial history, using "other cultures as if they're some sort of low hanging fruit […] That often implies that the West can access and use these cultural riches around the world for their purposes," Wong opines. "Such celebratory statements ignore the power relationships" (quoted in Chávez and Skelchy 2019:130).[16] I've generally been hesitant to compose for gamelan, or to encourage my students to do so, for these reasons. But, though my personal beliefs leave me more likely to agree with Wong than Campbell, working with a group like Galak Tika, where the performance of member compositions has a long history, has pushed me to revisit and unpack those hesitations. The arguments that Alit, Sudirana, and others make concerning repertoire might resonate here as well: that a composer should have some understanding of traditional gamelan idioms, and some embodiment in the specific practice from which they draw inspiration, before borrowing from or composing for those instruments.[17]

14. This is the fourth in a series of suggested steps. Steps 1–3 are addressed further on.

15. The tension in this question reflects opposing camps of world music pedagogues that Campbell (2004) dubs "expressionists" and "conservationists."

16. A growing body of research around decolonization and anti-racism has garnered increased attention in ethnomusicology since Danielle Brown's 2020 "Open Letter on Racism in Music Studies." While outside the scope of this article, these topics must be part of the larger conversation on gamelan pedagogy outside Indonesia.

17. Diamond 1998 makes these same distinctions in a review essay of 26 transnational gamelan albums, all of which include new works by group members. Of course many composers have created compelling gamelan-inspired works with limited knowledge (see Tilley 2020), but here I am concerned with the ethics of such encounters.

That said, as long as it's carefully framed, composition could enable for some students a deeper engagement with gamelan. As Sudirana describes:

> *When I learn something, I feel I'm eating something. Eat eat eat eat eat. So before I'm able to digest it, I don't want to use that. Because before you are able to digest it, it will just come out the same thing. So I'm digesting it, and then bring it out after that. So it's a completely different thing but based on like something that I've learned [. . .] something that I've experienced. I think the word that is good to use is "internalizing." Internalizing and then applying (interview 2017).*

Reflecting on his experience teaching gamelan almost exclusively to non-Balinese students, Balinese musician I Made Lasmawan expresses a familiar sentiment:

> *That's fine! Because the concept of gamelan is universal, is not only for [the] Balinese, you know? Not only for [the] Javanese. It is good, you know? A good gamelan player can be from another country […] because to study gamelan is just like to study other things, if you learn seriously, you get it. I'm ok with that (quoted in Clendinning 2020:99).*

Many of my Balinese teachers and friends, of all generations, apply this same logic to non-Indonesian composers wanting to work with gamelan instruments and idioms. I remember how excited the young musicians of Sudirana's Ubud-based gamelan Cenik Wayah were when learning new compositions by Colin MacDonald and, a few years later, American ethnomusicologist-composers Pete Steele and Paddy Sandino. Because all three were longtime gamelan players and avid gamelan listeners as well as experimental composers, the Balinese musicians could see how each stretched familiar idioms in fresh ways, and were elated by it. It was the composers' familiarity with gamelan norms and expectations that made their reinterpretations of them so stimulating. Ziporyn tellingly recalls the moment he was given a kind of permission to compose for gamelan: after traveling to Bali on a Fulbright and studying the full repertoire of the famed composer I Wayan Loceng, the day came when Loceng said, "OK, you're free to do with this what you want now." Loceng knew that the tradition had finally *masuk*, entered him (interview 2017). Of his own process, Tenzer recounts:

> *I went from being against composing for gamelan, because I didn't want to interfere in the tradition, to finally finding that I was generating compositional ideas against my own will. Like I was just starting to hear gamelan music. So then I just finally accepted that that's what I wanted to do (interview 2017b).*

Tenzer recalls the first time the American gamelan ensemble Sekar Jaya presented one of his compositions to an audience in Bali:

> *The Balinese thought [it] was cool. They wanted to learn it. And during our tour, [master musician and teacher I Wayan] Tembres and his cohort, they all came over and said "you've gotta teach us that pattern!" and we were so excited; I was so excited that they wanted to learn it (ibid.).*

Australian composer-ethnomusicologist Oscar Smith likewise describes the rich exchanges that arose when composing and teaching a new work to the Balinese experimental ensemble Gamelan Salukat, led by Alit. "[T]his hybridized context," Smith observes, "revealed interesting features of the Balinese conception of rhythm, including new strategies for learning and counting unfamiliar music" (2020:66). More crucially, the experience "enable[d] a reciprocal exchange [. . . that was] not only for the benefit of the scholar and their career, but rather, create[d] a dialogic feedback loop of value to both parties" (ibid.:65).

When non-Indonesians compose new works for gamelan, Alit argues, "that makes gamelan still alive. Because it's more knowledge of the gamelan. It's more possibility. […] And I think more people learn, more people play, more people care. And I believe in that" (interview 2017). Each of the compositional experiences just described is rich because it represents a meeting-in-the-middle, a true sharing of musical space and time in a living musical practice. Through simple pedagogical shifts, like the ones proposed in Part II, we can help students more quickly develop the internalization that enables such exchanges. Those who return semester after semester, who want to engage through composition, can then be empowered to create music that feels respectful while being innovative: music that is authentic not to the static definition of "tradition" but to the dialogue of the encounter.[18]

Notation or Not?

Can we also apply the concept of a dialogic encounter to the gamelan learning process? As many of this journal's readers will know, Pak Sidja's approach to gamelan pedagogy, described in this article's scene-setting opening, is the norm in Bali: as I discuss further on, learning gamelan generally involves imitating a teacher's sounds and movements, while talk is kept to a minimum. Young Balinese children often begin their enculturation through passive listening. They hear the music at local temple ceremonies or open rehearsals in the village's central *balé banjar* pavilion, and are free to experiment with the instruments when they're not in use. Children of musicians will often attend long gamelan rehearsals, even late into the night. Alit recalls

18. See Hughes 2004:278–280 for suggestions of graduated compositional activities.

Video 1*: When rehearsal time doubles as nap time: Learning* kendang *for Oleg Tumulilingan with I Wayan Sudirana and Gamelan Gita Asmara. Vancouver, Canada, 2011. Video: Jack Adams. Used with permission.*

sitting in his father's lap as a young boy, resting his small hands upon his father's as he drummed, and falling asleep there to the sound of the gamelan (personal communication, 2002). I saw the same process repeating itself in Vancouver when Sudirana's sons were young (adorably captured by cell phone camera in Video 1).

When a Balinese musician begins to learn more formally, the process is equally embodied. Teachers may occasionally use notation as a memory aid, particularly for newly composed works, but it is generally not shared with students. And while Bali's arts conservatories have recently adopted notation in some teaching contexts, gamelan in the villages is still learned by rote.[19]

If a central goal of my gamelan ensembles is to give students embodied music-learning and music-making experiences, there are many practical arguments for rote teaching. As Tenzer maintains: "for me, the deepest value of doing gamelan without notation—which is basically my bottom line; I will *never* use notation—is because of its value for being an embodied musician." In many traditional university music programs, he observes, "they don't groove, they don't move, they don't sing, they don't use their bodies. And I think that is so important, and so life-giving in music. […] I feel like so much information is carried inside of that practice. I feel just the very experience of learning the music and embodying it to some degree is carrying the seed of all that they'll ever need to know" (interview 2017b). MacDonald, himself a professional saxophonist who has seen memorization in various Western genres go in and out of fashion, agrees:

> *The traditional way that we learn by rote was really valuable, and it actually was a real musical challenge to me, but also a very rewarding challenge [. . .] There's truth in it that it requires a deeper commitment or deeper understanding of the music itself. So it does contribute to stronger performances that way. And [. . .] once you've memorized this music, you can come back to it months or years later, and it's sort of still in your DNA somewhere. Your body plays it without you even thinking about it. So there's this deep connection to the music that doesn't happen when you're just reading the notes off the page and not really plugging in telepathically to everyone around you (interview 2017).*

Sudirana, likewise, contends that notation will "put up boundaries for [gamelan students] to be connected with the other players. How can you play interlocking if you just look at the notes?," he reasons. "So, then you are not able to interlock really well, especially when the tempo changes. How can your brain think about tempo changes when you're reading the score? You can't" (interview 2017). To these musicians, notation is a barrier to both the embodiment and the communal music-making experiences I've prioritized for my students.[20]

Of course many instructors of gamelan ensembles outside Bali do use notation, whether for expediency within time constraints or a desire for the students to have something familiar to grasp in an otherwise unfamiliar musical landscape. As Clendinning argues: "To teach an entire pokok [core melody] orally with but one teacher as a visual aid can be time-consuming [… And] after several unfamiliar melodies are added to the students' repertoires, it can be difficult for them to remember them or distinguish between them" (2020:96). Clendinning's teacher Lasmawan, who often works with ensembles just once a week, will provide cipher notation with structural gong strokes indicated for slower-moving core melodies, though he "prefers to use oral transmission for more rhythmically dense parts" (ibid:96). David Harnish likewise notates core melodies for his students, but then works to "wea[n] them off relying on notation" (2004:131–132). Many Galak Tika members swear by notation too. Some beginning members cling to cipher notation as the only way they feel they can absorb or remember a long core melody; some advanced members see Western notation as a way to quickly and independently learn complex elaborating melodies and drum parts.

Yet do these preferences simply reflect what Hess sees as "Western students' tendency to place (colonize?) world music into an epistemological framework that they understand" (2013:84)? It's notable that among my gamelan teachers of all generations, Balinese and North American, radical and traditionalist, conservatory-trained

19. See Downing 2019, Ch. 2 on embodiment in Balinese gamelan pedagogy.

20. Here a distinction should be made between Balinese and Javanese practices. Notation has a long history in Java and is commonly used and accepted by Javanese gamelan instructors, though its roots are Western. Many Javanese teachers nevertheless value rote learning for similar reasons. See Sumarsam 2004.

and *seniman alam*, there is an almost universal opposition to notation in Balinese gamelan pedagogy. As Sudirana insists: "In Bali, you already know, everything is based on our cultural background. Which is oral tradition. I should keep that one. And I don't want to change that" (interview 2017). Alit likewise opines, "it's better without notation. Because that's how a piece works. That's how the piece should be presented for people" (interview 2017). In semesters when he teaches Galak Tika, Alit grudgingly allows the most insistent students to use notation, but privately complains that this hinders their learning. Ziporyn, though he does sometimes use notation when teaching Galak Tika, also recognizes the value of rote learning in gamelan. This is true even for new compositions he argues: when non-Balinese composers consider "memorization-al-ability," the "internal logic" of the resulting work "seems more Balinese" (interview 2017).

What's more, as Susilo observes, "what is written [in gamelan notation] is incomplete information. It does not tell you when and how to accelerate, to stop, to get soft, to get loud, to drop off, to make transitions, etc. Secondly, it hinders your playing; it makes you less sensitive to interrelationship, less perceptive to signals, oblivious to concurrent events." (Susilo et.al. 2004:62). Using notation to learn gamelan, particularly for students versed in other notated practices, may thus engender what Andrea diSessa calls *phenomenological primitives*: "conceptual difficulties that learners might have when trying to apply prior knowledge to new constructs" (Strand and Rinehimer 2018:633). Such cognitive structures can "ad[d] up to incorrect explanatory reasoning about the music." Because of the students' own musical enculturations, Strand and Rinehimer maintain, "reliance on notation cause[s] more problems than it may […] solv[e]" (ibid.:633–634).

The act of transcription can be invaluable. I regularly make mnemonic transcriptions and cipher notations, both for my own research and when learning new pieces from recordings for my students. For me, the process is an active engagement with the music: a slowed down kind of listening that allows the transcriber to take in each note, see its relationships to others, and, as MacDonald describes, "teas[e] apart some of the complexities of the music" (interview 2017). So I'm happy if students want to transcribe their parts to better visualize or understand them, or to enhance practice with recordings outside of class time. But in semesters where Galak Tika students were given notation or otherwise encouraged to use it during rehearsal, though they initially seemed to learn more quickly, I consistently observed more confusion about a piece's structure, less awareness of musical relationships between instruments, more frustration and lack of focus, and less careful listening to co-performers.[21] What's more, many members would still not have a grasp of the pieces by semester's end, despite using a tool that was putatively helping them. And with half the ensemble staring at iPads or "cheat sheets" in their laps during rehearsal, there was far less of the communal pleasure in music-making I saw in other semesters. Thus, while reading notation may be an expedient way to learn for some, as MacDonald argues:

> *Relying on the notes on the page is part of what's holding us back. It's the non-verbal communication that the true Balinese ensembles have that we lack. [. . .] You can hear it in the way North American ensembles play compared to the Balinese ensembles. It's that tightness and that fine precision alignment in the music that comes from playing with your ears and with your body, and with your eyes on the other performers, rather than having your head down in the music (interview 2017).*

"Everyone in Bali whom I asked about the teaching and learning process," Sonja Downing reports, "stressed the importance of learning through physical movement, and most talked about the need to understand the 'feeling' of the music" (2019:120). Though many teachers of gamelan ensembles outside Indonesia, including Balinese musicians like Lasmawan, do use notation, I find the prevalence of this stance persuasive. It's clear that, while compromises are an inescapable part of such ensembles, for both Downing's teachers and mine, rote learning is a central pillar in the pedagogical approach that fosters that "feeling." So where do we compromise?

PART II: PEDAGOGICAL APPROACHES

Traditional Gamelan Pedagogies: Hand, Mallet, and Ears Before Feeling

The Balinese rote-learning approach is one of total embodiment: musicians learn physically, visually, aurally, and as feeling. The first step, Sudirana explains, is a kinesthetic process called *meguru lima*: "learning from the

Photo 2: Learning through meguru panggul *with I Dewa Ketut Alit. Vancouver, Canada, 2001. Photographer unknown.*

21. Bakan (1999) shares similar experiences.

hand" (interview 2017). In this physical approach, the teacher holds the student's hand on the mallet, moving it across the instrument so the student feels the proper motion. Perhaps most commonly cited in the literature on gamelan pedagogy is the second step: *meguru panggul*, learning from the mallet. In this visual technique, seen in Photo 2, the student watches and imitates as the teacher plays back-to-front with musicians across the ensemble.[22]

But the trouble with most non-Balinese gamelan groups, Sudirana contends, is that we then skip the third step and prematurely attempt step four: *meguru rasa*, learning from the feeling. Balinese teachers often speak of "feeling." "You have to feel it," they'll say, when we struggle with a subtle tempo shift. "It comes from my feeling," they'll say, when asked how they improvise elaborating melodies. Unfortunately for non-enculturated gamelan students, the reality of *rasa* is as elusive as it is essential. When asked what "feeling" is, our Balinese teachers often struggle to find the words. Alit explains:

> *I remember a student asked me "Alit, what do you mean feeling?" And at that time I remember I said "dynamics." Actually, for me, what I'm feeling, it's here [he points to his heart]. So, the word is feeling. But what is that? It's… uh… feeling [he laughs]. At that time, I understand, "oh they're not Balinese. So even if they know the notes…" Like for me, when I play [the classic style] lelambatan, here in my head is like a temple. I just feel the temple. I don't know. Like, even when I play in Boston, it's just, ok, this is a temple here. I think that's kind of feeling also. It's not just about dynamics. [… But] how can people imagine […] because some of them have never been to Bali, they don't know how's the temple, how people play in the temple. So I just try to explain about dynamics, here slowing down, getting faster, like that (interview 2017).*

Thus, while *rasa* has technical aspects, much of it has to do with a common enculturated understanding of the music. And while growing up in Bali may be necessary, Sudirana claims that what's really inhibiting a mastery of *rasa* in non-Balinese gamelan ensembles is the lack of step three: *meguru kuping*, learning from the ear.

"Once you master the first two," he explains, "then you start not using your visual as much, but you are using your ear to learn the part. […] By listening to the teacher play it, then you can just right away play it on the gamelan. It's a more advanced level" (interview 2017. See also Sudirana 2018). In traditional gamelan performance practices, where many instruments' parts can be formulaically derived from other parts, *meguru kuping* results in a level of enculturated structural understanding that expedites the learning of any new piece. As Balinese musician Nyoman Suadin describes, the music is already "in their head, the system, and they just have to learn the song" (quoted in Brashier 2017:3). Many Balinese genres use a technique, often called *kotekan*, where a melody is seamlessly shared between pairs of musicians.[23] Enculturation here means understanding one's part in the context of the whole. On teaching a new *kotekan* to the Balinese musicians of Cenik Wayah, MacDonald recalls: "When one half had learned their part, the other half was already trying to figure out his part to go with it, before I'd even shown it to them." This is something most gamelan players outside Bali cannot do. He continues:

> *And when I had shown it to them, they were looking back and forth, and already working out how it fits together as a composite. […] We never were that proactive in trying to figure out our parts. It was always just a case of "OK, show me what's the next note. Am I playing this right? What's the next note?" Like looking to the teacher for guidance, rather than just saying "OK, how is this supposed to sound together? Can we play it right together? Can we figure it out on our own?" […] Working it out on that level as a partnership within the ensemble was key to making it work and to holding it together in their own minds, I think. Like, making sense of it right at the moment of learning, rather than trying to hear it after you've learned your individual line (interview 2017).*

Listening thus becomes an active learning strategy: by understanding and embodying how their parts connect to their neighbors' parts, Balinese musicians become independent learners, able to teach themselves new pieces, recognize when they've made mistakes, and correct themselves.

In advocating World Music Pedagogy in the general music classroom, Campbell (2004, 2016) likewise prioritizes listening as a learning tool. She outlines five steps for the successful transmission of musics from other cultures, the first three of which are progressively more interactive listening exercises. In Attentive Listening, students are given activities for directed listening: focusing on specific elements, such as musical structure, while they listen. This leads to Engaged Listening, where students do a physical activity as they listen: singing a melody, moving to the beat, tapping a rhythm, and so on. Finally, in Enactive Listening, students re-create the music they've heard as accurately as possible through intense listening during performance. By the time they reach this stage, they

22. See Sudirana 2018, Clendinning 2020:95–99, Stuparitz 2020, and Bakan 1993.

23. While "*kotekan*" is generally the preferred term among non-Balinese musicians, Alit insists this generic term is not always appropriate. He prefers to call each technique by its specific name (personal communication, April 2017).

have already begun to embody the music, understanding it both cognitively and viscerally.

It's here that gamelan outside Indonesia often falls short. MacDonald muses: "I'm sure there's a lot of people who played in the gamelan who went through the same experience as us, just learning the pieces and playing the pieces, and were like 'yeah, I like this music. It's fun. I have *no* idea what's going on, still'" (interview 2017). Without understanding "what's going on," many non-Balinese musicians never achieve the kind of *meguru kuping* that eases the learning process. Of course, if I need to put on a concert in twelve or thirteen weeks, with just 2–4 hours of contact time each week, it's hard to dedicate significant class time to listening. Alit admits that, even in Bali, modernization has made such deep immersion challenging: "I think it's getting harder here. Because gamelan, you need more time. You need to sit down. […] You need to play, and think about what you play, talk about what you play, you know?" (interview 2017). Reflecting on his own gamelan learning, MacDonald reaches an important insight:

> *You have to do the ear training practice to hear those two or three things happening at the same time before that really makes sense. Otherwise you're trying to play your part and listen for something that you don't really understand. And it's almost too much information then, at that spot. But if you can take the time and do it really slowly, then I think you'll hit that Eureka point (interview 2017).*

Adapting Gamelan Pedagogies

When gamelan musicians like those in Cenik Wayah derive melodies and rhythms relatively effortlessly from their co-performers, it is thanks to their musical habitus. Like skilled musicians in any practice, they've developed through enculturation internal understandings about the structural relationships between musical strands, and thus have informed expectations about how different parts might fit together in any new work they encounter. Years of playing and research have given me similar skills, though I'm less proficient and the practice still takes mental effort.[24] Like many of my friends who began learning gamelan as adults, developing these understandings and expectations demanded active research, analysis, and discussion alongside performance. So when we teach our beginner gamelan students by rote, with no context for how each part relates musically to the others, though on the surface it looks very much like a traditional Balinese learning environment, *we're actually asking them to do something very different*. Something much more difficult. We're asking them to learn hundreds or thousands of notes without the fundamental, culturally-specific understanding that many of them are based in simple formulas, and that if they get lost, they can listen to a partner to find their way again. Without the necessary enculturative knowledge, what we're asking of them is needlessly abstract. As Alit observes of his non-Balinese students: "they have to understand how the gamelan works together to make music. But they don't" (interview 2017). Susilo recalls his early American teaching experiences:

> *People memorized their parts, then we put them together and boom, we had a Javanese ensemble! It was incredible, but it sounded stiff. Furthermore, it would only sound acceptable as long as nobody missed a note, or added notes, which would cause them to go out of synch with the rest of the ensemble. The problem was that when they got out of synch, they didn't know how to return to the ensemble, because they only knew their parts and not their relationship with the other instruments (Susilo et.al. 2004:56).*

Four decades of teaching in the U.S. showed Susilo that he must overtly "emphasize [those] relationships" for his students (ibid.:57). As inexperienced musicians, Diamond explains, "we need to build a gamelan inside us": to learn how to *know* what the other musicians are doing, and *recognize* how that relates to what we are doing. "What my [Javanese] teacher didn't understand," she asserts, is that when it comes to gamelan, "we're empty inside" (2017).

So how do we give our students that understanding, that gamelan inside them? As Lasmawan observes, the tripartite Balinese concepts of *desa*, *kala*, *patra* (place, time, situation) point to an inherent flexibility in gamelan teaching and playing, suggesting that what's appropriate will change with each new context.[25] And though we must be both aware and transparent "on whose terms such hybridization takes place" (Avis 2019:42), there are many possible ways to adapt gamelan pedagogies to suit non-Indonesian places, times, and contexts. We might thus view gamelan pedagogy outside Indonesia as "an ongoing dialectic with compromise" (Harnish 2004:132). For Vetter, such compromise is about overtly articulating abstracted musical principles, from the rhythmic building blocks of different instruments' idioms to the underlying structures of a piece. These strategies, he says "seem to provide for my students some cognitive bearings as I attempt to introduce to them simultaneously the Javanese music system, its repertoire, and its requisite instrumental and vocal skills and vocabularies" (2004:120). Adaptation for Susilo means giving students who lack the necessary enculturation to improvise on instruments like *gender* several "different options so as not to sound stale" (Susilo et.al. 2004:57). Harnish, meanwhile, prefers to "stop and discuss ways to hear musical relationships between parts and explain how melodies fall within gong cycles." He continues: "sometimes I have students clap out interlocking parts; other times I ask them to sing melodies" (2004:132).

24. See Barsalou et.al. 2003 on some of the cognitive elements of social embodiment.

25. See Macy 2017 and Clendinning 2020.

With thoughtful alterations to traditional pedagogies, each of these teachers has designed a personalized path to gamelan learning. My own adaptations, discussed in detail in the following sections, are customized to my stated pedagogical goals. Maintaining the aural, embodied approach my teachers prize, but supplementing through active instruction the enculturated knowledge my students lack, I aim to approximate the Balinese learning experience Sudirana describes, enabling those "Eureka moments" that a lifetime of *meguru kuping* allows. The specific techniques explored here were developed in open university-level gong kebyar classes and mixed student-and-community gamelan groups. They came into being collaboratively and experientially, emerging through shared frustrations and successes in North American ensembles, countless "what-if" conversations with gamelan friends, and valuable feedback from many students. While precise strategies will necessarily differ for each gamelan genre and playing environment, I envision similar techniques being used across these spectra.

An Explicit Enculturation into Gamelan Gong Kebyar

The Basics

A brief introduction to some of gong kebyar's salient musical features will contextualize my pedagogical approach. As in many gamelan genres, gong kebyar music is generally built around a cyclic core melody, or *pokok*, often moving every two beats. Instruments play at different rhythmic densities, aligning with the *pokok* tones in a stratified heterophonic polyphony. Many instruments' idioms are pre-composed rather than improvised, though even these more fixed parts will vary by village style, specific composition, and sometimes individual preference. In the genre's most basic and idiomatically consistent melodic elaboration style, often called *norot*, fast-moving *gangsa* metallophones play a formulaic melody that tracks the *pokok* at eight times its density.[26] The most common *norot* idiom sees *gangsa* players alternate between the current core melody tone and its upper neighbor in the genre's five-tone scale. New *pokok* tones are anticipated by a three-note "pick-up" gesture that comprises the new tone twice and its scalar upper neighbor once; each two-beat segment ends with *gangsas* landing on the beat together with the *pokok*.

Figure 1 shows several examples of *norot* figuration. In this and other transcriptions, the Balinese solfège syllables *ding-dong-deng-dung-dang* are abbreviated i-o-e-u-a, with upper case letters denoting lower-octave tones in multi-octave instruments like *gangsa*. The ciphers 1-2-3-5-6 and Western tones C#-D-E-G#-A approximate the gong kebyar's *selisir* mode. To denote end-weighted meter, cyclic melodies are notated with the first tone, which actually belongs to the previous cycle, in parentheses. This gong tone is shown again at melody's end.

26. I have also heard *gangsa norot* called *noltol*, *notal*, and (in written sources like Vitale 1990) *nyok cok*.

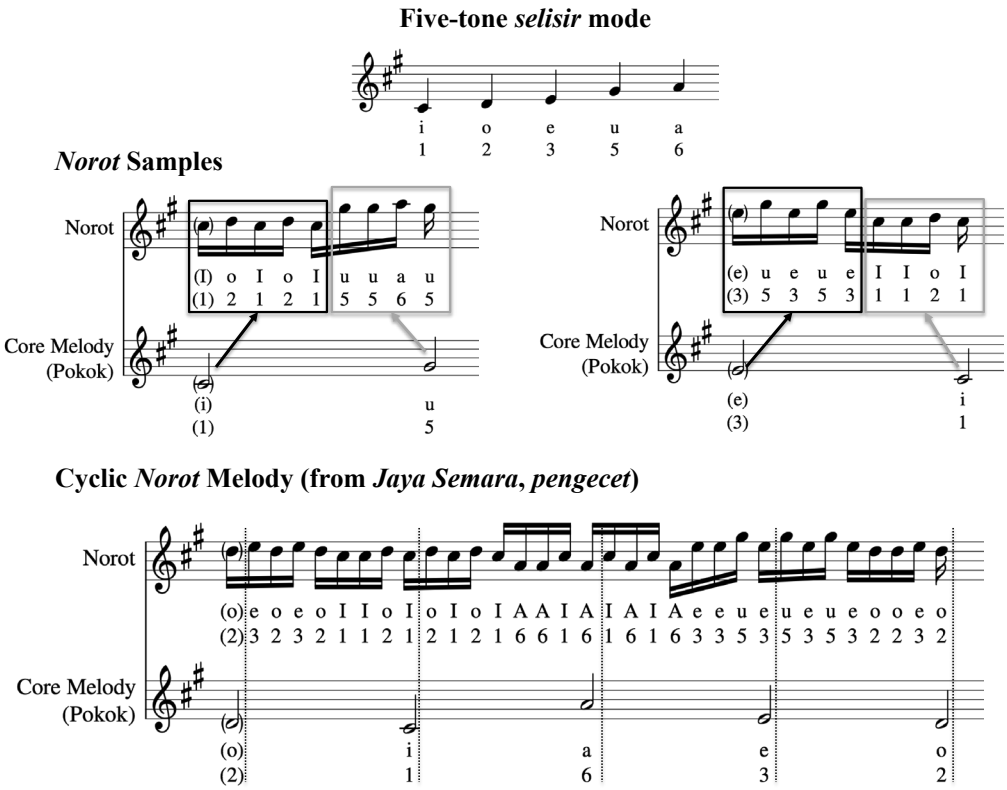

Figure 1. Examples of gangsa norot

Photo 3. (left) Playing kempli *as students figure out their* gangsa *parts. Cambridge, Massachusetts, 2016. Photo 4. (right) Holding up numbers for* pokok *tones as students derive* norot. *Cambridge, Massachusetts, 2016. Photos: John Sachs. Used with permission.*

Teaching Elaborating Idioms

When my students encounter a new melodic elaboration technique for the first time, I usually begin by teaching its fundamentals isolated from the piece we're working on. I want them to understand that its idioms are extractable, and that knowledge gained for one composition will often transfer to others. When teaching *norot*, I first briefly explain the principles of the technique, much as I've done here. Then, using numbers to identify notes, and playing the *pokok* myself on the lead metallophone *ugal*, I ask my students to derive *norot* figurations for isolated pairs of core melody tones (as in Figure 1).[27]

My goal in this exercise is for them not only to understand the technique in their minds, but, as quickly as possible, to actively hear it in relation to the *pokok* tones I'm playing, see the notes and contours on their instruments, and begin to embody them. This is certainly not a technique I've seen used in Bali, and it might seem a somewhat artificial process to some of my teachers there, but it provides my students with bite-sized chunks of music to grapple with as they learn a technique that's new to them. We try many different note pairs. I break them down slowly to start, first explaining and demonstrating the *norot* each time before we play, then asking different students to do so, but spoon-feed them less as they grow more confident. The beat-keeping *kempli* plays here too, even in these isolated exercises. I want my students to hear the figuration right away in the context of the beat, understanding and embodying its end-weightedness: the pick-up gesture beginning just after a beat and ending with the following one. This active awareness of the pattern's metric placement, even if they don't yet feel it as end-weighted, keeps students from getting lost if they fumble. Photos 3 and 4 show some of these techniques.[28]

Adding another layer of complexity, *gangsas* are normally divided into pairs, the "simple" or "direct" *polos* part differing from the "complementary" or "following" *sangsih*. Regardless of which elaboration technique is used (*norot* or something else), these strands generally relate in one of two ways. In so-called parallel figuration, the *polos* players perform all the notes of the basic pattern, as in the *norot* patterns just described. Their *sangsih* partners mirror that basic melody three scale tones up, coming into unison with *polos* on the instrument's top three tones, as on the *dung* (tone 5, G#) near the end of Figure 2 (overleaf).

Once students are relatively comfortable with the basic *norot* idiom, then, and depending on their experience with *sangsih* in other contexts, we may slowly break down some *norot* contours for *sangsih*'s parallel figuration as a group. Or I may immediately split the *gangsas* into their *polos* and *sangsih* pairs to try some isolated *norot* exercises together. I will continue to play *pokok* tones on the *ugal* through these exercises and, importantly, will have the *sangsih* players sing the *polos* part as they work on their own (I'll sing too). Having already embodied the *norot* idiom, these steps enable most *sangsih* players to figure out their parts with limited help from me, even in the difficult high range where melodic contours differ.

Melodic elaborations in gong kebyar can also be played using Bali's famous interlocking techniques, melodies shared between *polos* and *sangsih* rather than being played in parallel figuration. Interlocking *norot* on *gangsa* is utterly formulaic. *Polos* players strike their instruments largely on the beat, playing only

27. Though most Balinese gamelan players identify notes with solfège, I find numbers easier for unenculturated students. Notably, I've seen Balinese teachers of both Western and Balinese beginner ensembles hold up numbers on their fingers to help *pokok* players.

28. Note that these photos were taken in a smaller academic class I teach at MIT, called "Music of Indonesia." Though the end goal in this course is not performance, I use similar pedagogical techniques when teaching theory and composition to these students.

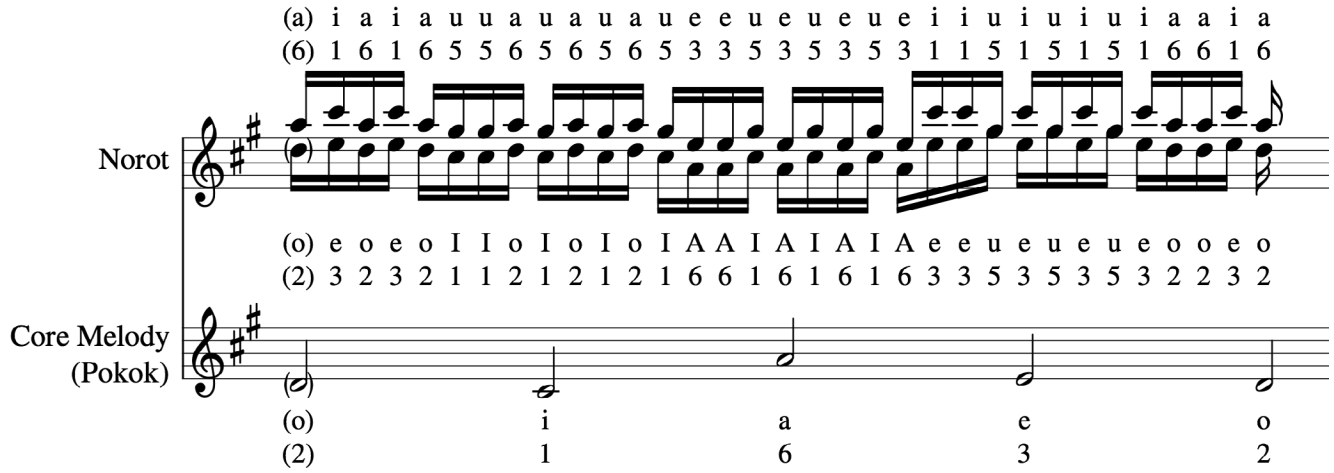

Figure 2. Parallel norot *figuration ("Jaya Semara,"* pengecet*).*

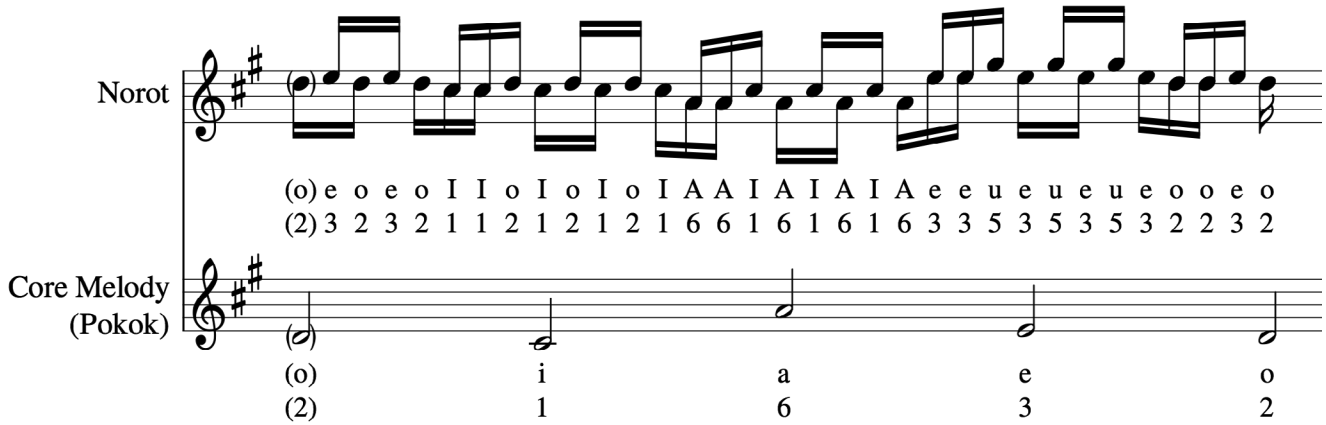

Figure 3. Interlocking gangsa norot *("Jaya Semara,"* pengecet*).*

pitches from the core melody, as in the stems-down strand in Figure 3. In an identical rhythm, offset by one subdivision, the *sangsih* (stems up) play the *norot*'s upper neighbor tones as well as the three notes of the pick-up gesture. Together these interlocking strands sound the full composite melody.

When non-Balinese musicians are taught interlocking parts simply by rote, more often than not the *polos* players are shown their strand in isolation, then the *sangsih*. They may be told that they "interlock," but there's generally no discussion of what that actually means. *Sangsih* players, desperately hanging onto their seemingly isolated offbeats, will often try to block out their *polos* partners so as not to fall into rhythmic unison. I remember one semester a professional percussionist joined the UBC student gamelan. He could confidently play off-beats with absolute precision and was thus almost always asked to play *sangsih*. But when things got really fast, or when we began incorporating the music's subtle tempo shifts, even he couldn't hold onto his conceptually isolated parts. This mental separation of *polos* and *sangsih* makes it a constant struggle in non-Indonesian gong kebyar ensembles to keep the *gangsas* from "swinging." Susilo observes:

> *sometimes I am amazed how one can learn a* sangsih *[…] alone, without having any idea how the* polos *[…] part sounds. To me it is like reading a book every other word. You might make some kind of sense out of it, but it's probably not the sense that the writer intends. You have to hear both parts even if you only play half of a pattern (Susilo et.al. 2004:58).*

Interlocking Balinese drum patterns are almost always taught as composites, the parts vocalized and learned from the start as inseparable. Balinese teachers often sing interlocking melodies in their composite forms too, but unenculturated students who learn their parts in isolation are frequently unable to hear those parts within the composite whole; they don't know how to "read the book as the writer intends." So when teaching a new interlocking technique, like *norot*, I explicitly articulate those connections with my students. I first explain and demonstrate how each part is derived from the whole, incorporating embodiment exercises specific to interlocking, like clapping the component rhythms while singing the composite melody. On our instruments again, we begin with isolated pairs of *pokok* tones to practice the technique.

I will often start by playing the composite *norot* melody on the *ugal* while everyone plays first the *polos* and then the *sangsih* strand in isolation. I ask everyone to sing the composite as they play, so they can begin to hear and embody each part within the whole. Then, when we play the interlocking exercises together, I will alternate between playing the composite melody and playing the *pokok* while singing the composite, helping my students hear (and learn to listen for) these various musical connections. Finally, when I teach a *norot* melody for a specific piece, even if it will be played exclusively interlocking in performance, I insist that students first learn to both sing and play the composite melody while I play the *pokok*. I then have them continue to sing that composite as they decipher their component parts. This less traditional approach helps students hear their parts as they're meant to be heard: not as independent syncopated melodies but as puzzle pieces that, together with other pieces, make a picture. Now, instead of trying to ignore one another when things get fast, they will help each other.

Importantly, I ask all members of the ensemble to participate in these various learning exercises, either on their own instruments or back-to-front with a *gangsa* player. A *pokok* player might hope to play *gangsa* in the future, and this exposure offers a lower-stakes introduction to its more technically challenging idioms. Perhaps more significantly, it encourages musicians to listen more widely across the ensemble. Outside Bali, slower-moving core melody instruments are frequently assigned to beginner-level students, who often see faster melodies as intimidating, impenetrable, and not obviously related to their own. Even brief practice playing elaborating parts like *norot*, though they may not yet have the technical proficiency to perform them well, facilitates for newer players an embodied familiarity with these idioms. It helps them to hear *norot* and other *gangsa* techniques as simple elaborations and anticipations of their own melodies, and to use them as aural markers if they get lost in performance. Thus, active engagement with their co-performers' idioms can help prevent the chaos that occurs when, as Susilo describes, students accidentally add or skip a note in performance. They now have the tools to hear themselves in relation to their co-performers, recognize when they have gotten out-of-sync, and find a way back. Conversely, the process ensures that more advanced players are independently able to help newer members learn, regardless of their instrument. An active knowledge of musical relationships can thus enable the kinds of collaborative teaching environments so common in Bali, engendering a sense of both musical and social connectedness.

Teaching Improvising Idioms

Norot is yet more complicated on the *reyong* gong-chime, because each of the four musicians sharing this instrument controls only a subset of the gong kebyar's five tones (see Figure 4, below, and Photo 5, on the following pages).

What's more, idiomatic *reyong norot* is not a fixed practice like *gangsa norot*, but rather an art of formulaic improvisation.[29] In most gamelan ensembles outside Indonesia, particularly those working in the time crunch of a semester system, teachers must make compromises with improvising idioms. Vetter explains of Javanese improvisation: "typically it takes more than a semester of study to gain a functional command of the technique for these instruments and to internalize the vocabulary of motivic modules that are used to generate the parts performed on them" (2004:123). Because of this, Benjamin Brinner notes, while some Javanese instructors "attempt to impart process and stylistic choices" for improvising instruments, others "simply make a recording to be emulated" (2016: para. 30). Quoting Marc Benamou, he adds: "[t]his has the distinct advantage of preventing us from doing some very unstylistic

29. See Tilley 2019, Ch. 2–3

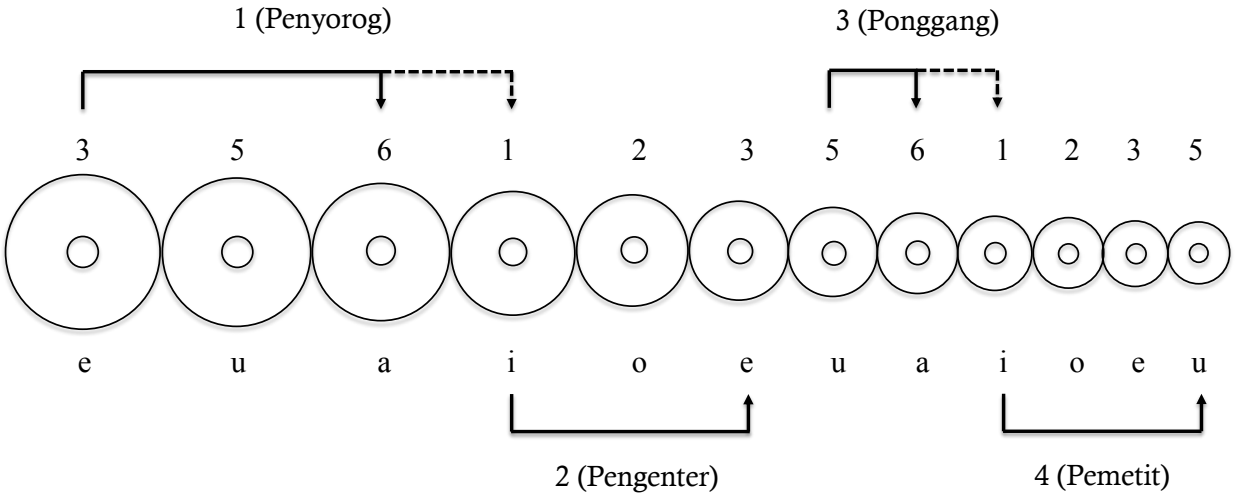

Figure 4. Norot *ranges for the four* reyong *players.The extended arrows on positions 1 and 3 indicate that those players may use* ding *(tone 1) only when their partners don't need it. This generally occurs when the* pokok *tone is* dong *(tone 2).*

Video 2. *Demo of improvised* reyong norot *for Teruna Jaya by musicians of Sanggar Çudamani. Pengosekan, Bali, Indonesia, 2016. Video: Aaron Pettigrew. Used with permission.*

Video 3. *Galak Tika* reyong *players improvise* norot *based on learned models. Cambridge, Massachusetts, 2017. Video: MIT Music and Theater Arts video team. Used with permission.*

things, but it means that the *process we use in making music is very different from what an experienced Javanese musician uses"* (ibid: para. 29, emphasis added). For gong kebyar ensembles outside Indonesia, this "different process" generally involves learning single "versions" of improvising idioms like *reyong norot* as fixed elaboration, with no understanding that these parts are derived from flexible practices.

Though a seemingly logical compromise, this approach can often cause frustration. Teachers accustomed to improvising *reyong norot* frequently find it hard to remember which version they've taught; students needing a refresher may be shown a different part and wind up more confused. What's more, even a fixed *reyong norot* part will likely be a twisting, syncopated, and seemingly abstract melody, difficult to learn and memorize. On each subdivision, depending on their respective ranges, a *reyong* player will choose between the main *norot* tone, a rest, or one of two alternate tones falling three scale tones above or below the main tone (known interchangeably as *kempyung* or *ngempat*). All this before adding any advanced improvising idioms! The permutations of these options create complex, varied, and unpredictable contours, particularly for the third position *ponggang* player who often has control over just two tones. To illustrate, Figure 5 (next page) juxtaposes the basic *gangsa norot* figuration for a melody from the dance piece *Teruna Jaya* with a single improvised realization by *reyong* players from Sanggar Çudamani in Pengosekan village. Video 2 shows the longer improvised *reyong norot* demo from which this transcription was made.

As abstract musical lines, it's hard for students just to learn and memorize *reyong* melodies like these, much less understand and embody them. But again, I have found that explicitly laying out the fundamentals of the idiom can facilitate that deeper experience. When I begin teaching *norot* to a group for the first time, practicing with isolated pairs of *pokok* tones, the *reyong* joins the *gangsas*. But rather than playing the full *norot* in these exercises, each musician only plays the notes that fall in their range, learning to see and hear how melodic contours are shared across the instrument. When I introduce parallel figuration to the *gangsas*, I ask the *reyong* to begin finding the *sangsih* tones in their ranges too. Eventually I explain that *reyong* players can also rest for a single subdivision or use the alternate *kempyung* three scale tones below *polos* (they can also think of it as two scale tones above). We then do yet more practice with isolated note pairs, players incorporating *kempyung* above and below as well as rests, and me providing further explanations and demos as needed.

Many gamelan instructors require that students interested in more difficult instrument idioms make time outside of class for additional study (Sumarsam 2004:83). I often provide the more intensive instruction necessary for *reyong norot* in sectionals or small break-out groups during rehearsal, and *reyong* players wishing to learn more advanced idioms will ask for private lessons. However, as with *gangsa norot*, I do like to introduce the basics of *reyong norot* to the full ensemble, asking students to experiment on their respective instruments. *Reyong* is commonly the hardest melodic instrument to populate in a gong kebyar ensemble; its two-hand playing technique is unique in the ensemble and, while core melody players can work their way up to *gangsa*, the move to *reyong* is a bigger leap. Group learning gives non-*reyong* players a chance to try out its idioms, making the transition less intimidating for interested students.

Of course, *reyong norot* is difficult, and teaching it with a method aimed at independent discovery is initially time consuming. New *reyong* players generally need several sessions to start thinking comfortably in this way. Some will feel liberated by the approach as they begin to notice recurring patterns; for others, it will remain intimidating. All will likely need more guidance than their co-performers on other instruments, though this is true when using fixed melodies too.

I'll generally demonstrate and break down more specific improvisational possibilities when teaching *norot* in the context of a piece. As Susilo does, I may eventually teach fixed "versions" to students who are struggling, but I'll always explicitly show how the parts are constructed, center the *concept* of improvisation even if the *practice* needs to be a work-in-progress, and offer alternatives as students progress. Through this multi-step, non-traditional approach, many *reyong* players in my ensembles have gained the confidence to increasingly and idiomatically vary their

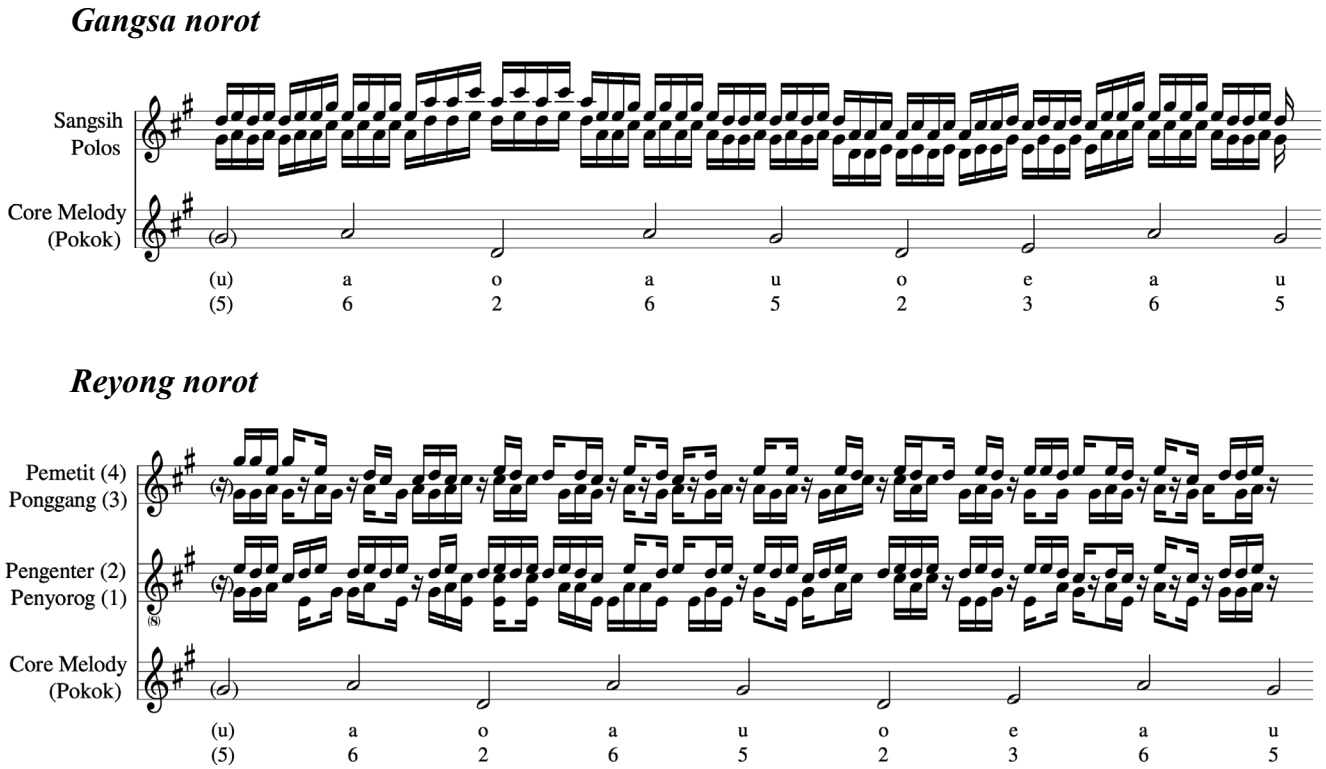

Figure 5. Gangsa norot *vs.* reyong norot *(Teruna Jaya). The* reyong norot *shown here was transcribed from a section of Video 2.*

playing over time. And even those sticking to fixed versions learn to hear their parts in musical context, so if they get lost, they're more often able to find their way again. Video 3 (prev. page) shows the results of this approach: an excerpt of my Galak Tika students improvising *reyong norot* for the gong kebyar piece *Gesuri*, after only one semester of working in its idioms and with two first-time *reyong* players.

Putting It All Together: Teaching a Piece

When teaching a piece to a gong kebyar ensemble outside Indonesia, Balinese and non-Balinese teachers alike most often begin with the eight *gangsa* players, first teaching their melodic elaborations while the other musicians wait. The six core melody instruments are usually added next, two *calung* playing the basic *pokok*, two *penyacah* playing a denser version, two *jegogan* outlining a sparser abstraction. It's usually only at this point that the cycle-marking gongs, more technically simple than the other parts, are introduced to the mix. Most instructors will save the difficult *reyong* and *kendang* (drum) parts, as well as the percussive *ceng-ceng* cymbals and improvising instruments like the lead metallophone *ugal*, for last.

Beginning with *gangsa* is a logical choice. It's the ensemble's largest section, and starting here gives those students extra time to solidify their more technically challenging parts while sparser strands are learned. But considering how gong kebyar music is constructed, and prioritizing musical relationships and *meguru kuping*, I prefer a different approach. When introducing new material, I begin by teaching the *pokok* to the full ensemble. No matter their instrument, everyone learns the *calung*'s core melody first. Sometimes we sing it, using numbers for the gamelan's tones; at other times, I have students anticipate each tone with their gaze as they play, visualizing the *pokok*'s trajectory; or I may ask them to close their eyes, focusing their listening and developing a physical awareness of the melody's contour. I will overtly point out the gong strokes as important structural markers in this early phase. And if the melody is long, we may discuss the overall melodic structure in terms of its various phrases, noting their different starting notes, relative melodic motion, and contours. I find that such discussions help students think about and hear these melodies as longer musical ideas, easing memorization and retention. The *jegogan*, who generally play every other *calung* tone, will then be asked to derive their own part, with more advanced players helping as needed, as the rest of the group continues to play the *calung*'s melody. I may teach the denser *penyacah* melody at this time too, but will often work with *gangsa* and *reyong* first, giving the *penyacah* players more time with the basic *pokok*. (If all my core melody players are inexperienced or struggling, I may forgo a different *penyacah* melody altogether, keeping more players on the *calung* part. As a newer addition to the ensemble, the *penyacah* strand is frequently considered optional). I do add the gong structure in this early phase though, often asking students to articulate its vital relationship to the *pokok* through verbal description, physical gestures (like pointing at gongs while singing the *pokok* or head-nodding while playing), and vocalizing

the gong part as they play: important early steps to embodiment in this cyclic practice.

Only when these elements feel solid do I add melodic elaborations like *norot* (along with the *ceng-ceng* cymbals to articulate rhythmic subdivisions). If the elaborating technique is new to the group, after doing the isolated exercises described in the previous sections, we'll work out the first few beats slowly together to ensure that everyone understands the process of translating core melody into melodic elaboration on their instruments. If the group is already familiar with the technique, I'll simply ask *gangsa* and *reyong* players to begin deriving their parts over the cycling core melody, singing the *pokok* as they play and always beginning with the basic *polos* contour before breaking into parallel or interlocking figurations. As individual students become confident in their parts, I may play a few cycles of the complementary part back-to-front on their instrument—or encourage them to do so with a partner—so that they can not only hear but really see and embody the connections between their two strands. Some students will certainly still need individual instruction; but because they understand the idiom, many are able to find their own parts and, even better, to independently help co-performers who are struggling. This is a far cry from the non-Indonesian gamelan MacDonald describes, where musicians wait to be taught their part, not imagining its connection to what others are learning. Rather than the all-too-common scene of the unenculturated *reyong* players looking bored for the first 30 minutes of rehearsal as they wait for the *gangsas*, then scrambling to learn their own difficult parts in a rush, everyone is working toward fluency from the outset. They have the skills to discover their parts on their own.

I use the same approach for other elaborating idioms like *telu* (see Video 4), whose repeating three-note gestures that ascend and descend with the core

Photo 5. Playing reyong *in Gamelan Gita Asmara with guest artist I Dewa Made Suparta and co-performers Jonathan Adams and Meris Goodman (right to left). Vancouver, Canada, 2012. Photo: Diane Smithers. Used with permission.*

melody are also rooted in teachable formulae.[30] More complex or variable styles, however, often require more direct teaching. *Empat*, for instance, could be composed in many different ways for a given core melody and thus cannot be simply derived; I will likely need to show students their *empat* parts for every piece. But I still want them to both hear and understand the musical relationships behind those parts. I want them to know that *empat*—which means "four"—is built using four adjacent scale tones on the *gangsa* or *reyong*. I want them to hear how its contours track the core melody, dancing around its tones with ascending and descending three-note gestures shared between interlocking partners. Finally, I want them to hear that the highest-pitched note functions exclusively as a sort of harmony tone to the lowest, creating syncopated accents within the texture, per Figure 6.

30. See Tenzer 2000:220–231 and Vitale 1990 for details on this and other elaborating and interlocking idioms.

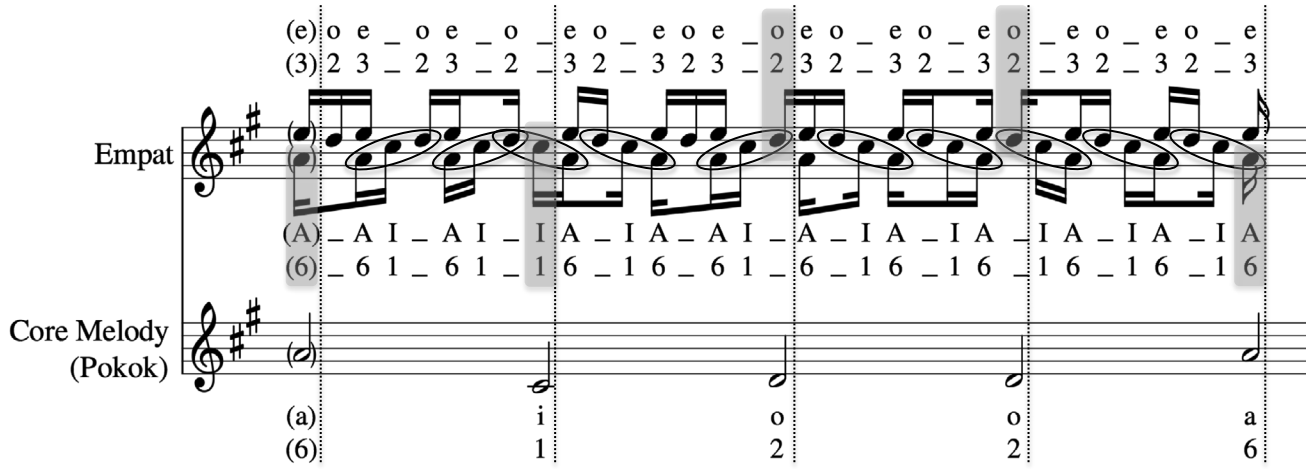

Figure 6. Interlocking empat *figuration*

Video 4. *Galak Tika* gangsa *players perform a* kotekan telu *melody from Liar Samas, which they derived from the* pokok *themselves. Cambridge, Massachusetts, 2017. Video: MIT Music and Theater Arts video team. Used with permission.*

Even if they can't derive their own parts, given explicit descriptions and demonstrations, students can still understand and hear these musical characteristics. So when learning a piece that uses interlocking *empat*, once everyone has learned the core melody, I teach the *polos* first. Before teaching the *sangsih*, I explain its relationship to the *polos* and have the students watch while I play *sangsih* with just one *polos* player, both on the same instrument. And I watch the lightbulbs come on as they actually *see* how the parts connect. I might also have them sing the *pokok* as they watch and listen, helping them hear that connection between *empat* and core melody even if they can't derive it themselves. Now, because they know what to listen for, and what their parts should sound like in combination with others, they can actually begin noticing when they make mistakes: a sure sign that they understand what they're meant to be playing even if their hands don't have it yet. And maybe, slowly, they can begin trying to fix those mistakes in collaboration with their partners, as experienced Balinese musicians do. At the very least, if they get lost in performance, they have more strategies to find their way again.

With each piece we learn, I want my students to understand and embody as much as possible the way their parts are composed. This is certainly more time-consuming up front than simply showing them the notes—or the notation—and might mean I teach one fewer piece over the course of a semester. But it gives my students agency in their own learning experience, and an ability—like the Balinese musicians I've worked with—to learn actively, to look around themselves and find out where they need to go without always waiting for a teacher to come help them. The music has now *masuk*, entered them.

Of course, as Susilo observes, gamelan music is much more than just its notes. It's about group interconnectedness, manifested in subtle waves of tempo and dynamics or perfectly executed structural shifts cued by drummers and dancers. It's about communal feeling, *rasa*, in music-making. And while *rasa* is something that cannot be taught, giving students the tools to hear and understand their parts *as relationships* encourages group sensitivity and cohesion. When drummers and dancers incorporate those sometimes-unpredictable shifts that bring gamelan music to life, students are already primed to listen actively and take cues from others, feeling the music as collective creation.

Concluding Thoughts

Teaching gamelan ensembles outside Indonesia demands myriad decisions on pedagogical approach. And each choice brings with it more questions. The pedagogical alterations I've described here aim to help unenculturated students hear, feel, understand, and embody gamelan gong kebyar music. But by making these changes, am I truly enabling the Balinese learning experience Sudirana describes? Or am I simply, as Hess (2013) cautions, further imposing a Western epistemological framework onto a Balinese practice? As Sudirana observes, "the attitude in Bali is like more playing than talking. Because you wanna copy, you wanna hear, you wanna feel it. So if you just talk, then when will you do that?" (interview 2017). But here I hearken back to Ziporyn's incisive question: "Who are these 'the Balinese' of whom you speak?" Because while such techniques may not be traditional, many Balinese musicians are indeed innovating in these ways. I remember the day my friend Komin (I Gusti Nyoman Darta) told me he had taught himself to play *kendang* left-handed in order to consciously observe his own learning process and thus articulate to his non-Balinese students what he knew but couldn't express about drum technique. Though their particular musical enculturation means my Balinese teachers and friends don't need to talk about musical concepts as I do, their ability to compose new works in traditional idioms, to recognize and correct mistakes, and to teach these practices, left-handed or otherwise, reveals their knowledge of these musical structures and relationships. And as Susilo argues, the way a gamelan musician thinks about the music matters: "you couldn't hear these different thoughts in the mind of the players during a concert," he says, "except when they get out of synch. It's at that time when you hear the result of the wrong thoughts. Learning a culture, in this case a music culture, is not just learning how the natives physically do it, but also how they think about it" (Susilo et.al. 2004:58). A non-traditional approach, such as the one I've outlined in this article, can help our students get there.

Yet even if we accept the ethical complications of the methods I've described, there are practical shortcomings. Though already a compromise between systems, these techniques may still alienate students who struggle with (or even actively resist) rote learning. And the expectation of independently deriving parts in an unfamiliar musical system may always be overwhelming for some. What's more, the steeper learning curve at the front end of the process may outweigh any longer-term benefits in ensembles with high student turnover and semesterly concert expectations. For some students, these techniques may never lead to the insights, or the feeling, I'm aiming

for. But for others, the experience is transformative. Several weeks into my first semester teaching gamelan, a UBC student told me: "I really love the way we're learning now. I used to feel like I was trying to ride a horse, but I just couldn't stay on. So I'm hanging onto the reins and being dragged behind the horse, trying not to let go. Now I feel like I'm actually on the horse." Years later in Cambridge, a post-concert email from a relatively new Galak Tika member read: "I am very thankful for everything you taught us. I finally feel like I understand what is happening when we play." And after an intense session learning a melody with the elaboration style *telu* for the first time, a student who'd been playing gamelan for several years when I began teaching the group approached me with an enormous grin. "That was the coolest thing we've ever done!," he exclaimed. "Yeah, *telu* is a really satisfying kind of *kotekan*," I responded. "No," he clarified, "I mean finally *hearing* how I *fit*!" Video 4 (previous page) shows an excerpt of this *telu* melody in concert.

For these students, being given enculturated tools through non-traditional means does result in something closer to Sudirana's Balinese learning experience. They're suddenly approaching *meguru kuping* and even reaching toward *meguru rasa*: listening to each other in order to learn, and developing group awareness and feeling. Paradoxically, providing students with an analytical lens in fact allows them to get out of their heads, to listen more broadly, to necessarily interact with their partners, ensemble leaders, and dancers, to *feel* their musical strands in relation to their co-performers', to experience the music collectively. This, to me, suggests an exciting meeting ground of ideas, insights, and perspectives for gamelan learning. As Ziporyn argues, "if you're really going to try to do something that's about the encounter, then you have to not shy away from the things that make the encounter complex" (interview 2017). And as we move forward in playful exploration of our pedagogies, I hope we can collectively work through these complexities to new approaches and understandings for gamelan teaching and learning. ◗

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