Categorizing Periodicity

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Starting in on my third decade as a professor, my preoccupations are moving out from the field of ethnomusicology to our impact on students and music education generally. My wish is to assist others in deepening their musicianship and musical experience, across cultures when possible. The problem that inspires my paper for this 51st anniversary conference is that ethnomusicology and world music have come a huge distance in university life, but their glaring otherness from Western music remains both a distorted reflection of world music-making and an emblem of the fact that vested traditions like academic music aren't particularly nimble responding to change. However *equal* world musics are in *our* eyes, Western music remains functionally separate, and taught in different classrooms. Here I am alluding to Brown vs. Board of Education, which is illustrative: that 1954 court decision is a slim one year older than our society, and its history has been contentious. But will we desegregate the music in our music schools? No court will hear our case. We may agree that mitigating world music's otherness is in our best interest and that ethnomusicologists, for all of our gains, still have yet to establish a presence at the heart of things. But where is that exactly?

It may not sound that sexy, but I think that for undergraduate education the heart is in the teaching of music theory: here (as well as in performance study) is where the pianists, orchestral players, singers, composers, and more that comprise our professional constituency are challenged to improve themselves as listeners, creators, and imaginers of musical sound. The music theory curriculum hasn't evolved much in my lifetime, but most reasonable people agree that it should somehow keep pace with the world. We quite obviously no longer live in a world where the common-practice Western canon dominates, even if we concede that some wish it would. My proposition is that ethnomusicologists could be innovating that much-needed updating—not off in our assigned world music corner, but in the heart of the curriculum, alongside and in a hybrid with the Western canon.

The idea of such a world music theory is already out there, but it is an inchoate fantasy. So until now, no systematic integration of world music into musicianship and theory training has been devised. Where some kind of world music theory has been taught, its scaffolding has been ad hoc. The between-the-disciplinary-cracks nature of such an endeavor may explain why that is so, but what can be done to change that? I submit that those of us so predisposed gradually migrate into this area by means of a thoughtful approach to the notion of *musical periodicity*. I would suggest similarly to theorists that they enter ethnomusicology through the same door.

The rubric of periodicity, as I conceive it, provides a structure applicable to a kind of basic cross-cultural, cross-disciplinary research in music theory. Peering through a lens of periodicity I take a comparativist stance, which suggests a reconstructed universal musicology. I think it is in the air that the time for this close, no doubt an inspiring idea, but not what I'm speaking about. For now my concern is pedagogy: the teaching of periodicity, and the kinds of categories that could be developed and

now with some further thoughts on our current dilemmas, offer some of the categories mentioned in my title as a component in finding a way forward, and close with some self-critique. I hesitate to say that what I propose is the right thing, but I think there is need of proposing *something*.

The Context

Music academia throws up obstacles to its denizens. It divides music into separate domains of performance and humanistic inquiry on one axis, and the West and the rest on another. Accepting the split of music theory and practice is distasteful for ethnomusicologists who have learned music in places, usually oral traditions, where things are different. Sometimes it seems a Faustian bargain to have to refashion the fruits of our transformative fieldwork experiences for classroom consumption. But in fact we are Western-trained, have a double consciousness, and thus can admit to the benefits of separating music-making from music-thinking. In any case experience has taught most of us that it is possible to compartmentalize and do both, albeit with an inevitable sense of compromise.

The West-versus-the-rest axis is girded by the music school and conservatory superculture and is as hard to live with as it is hard to budge. Common practice Western art music continues to dominate hugely in universities, and fills 99% of most theory curricula. This is anachronistic though understandable given the fundamentally conservative cultural interests pulling the strings and the self-perpetuating nature of the

way professors are trained. More reasonably, it reflects the elemental fact that students come to learn and play in the Western tradition by nurture and by choice. The cards loom as stacked against ethnomusicologists when we grasp that we are essentially extrinsic to this situation. We are there to provide enrichment, not core knowledge, and that is the bargain we have made for our survival. Even if our agitations for change are received sympathetically, our voices may feel small.

Guardians of this framework believe in the premise that Western music, in particular because of the autonomy and individuality of the so-called "musical work"--is incompatible with other traditions, especially in the core realm of its musical structures. Trying to relieve this tension, some music departments have soul-searched for ways to reinvent themselves as inclusive, by allowing more ethnomusicology courses to count toward degree requirements. But the inclusiveness is on the periphery and does not penetrate to the issue of musical structure—much as if biologists wished to categorize and compare species by observing their behavior and environments, but never their anatomies or genetics. This status quo does a disservice to students, who need a different training for the musical realities of our era, one that perhaps ethnomusicologists are more motivated to embrace and provide than others who have been trained to perpetuate things as they are.

Students arrive at our Schools of Music looking to learn their instruments and replicate the received Western tradition. It is no trick to disabuse them of the idea that that's all there is to it, that they need to reach out beyond that cocoon, but in offering them the existing world of ethnomusicology we are in effect saying "you can have a traditional music education or go into world music, but there is no real integration

possible." Such an integration would be a gesture of generosity that pays appropriate respect to Western Art music and our aspiration to see it taught enmeshed and reconciled with world musics, thus gradually relaxing the institutionalized otherness that is our lot now.

So I am trying to focus my gaze at music through a lens that responds to some of these fundamental concerns. My response is tentative, but it takes an approach of intellectual reconciliation and fusion rather than resistance or protest.

Concept and Categories

The meaning of the term periodicity in most areas of knowledge hinges on the idea of recurrence—of historical eras, behaviors, spacetime positions, genetic codes, or mathematical functions. Periodicity is articulated by the recognizable rebeginning of a pattern or event, subject to variation, however defined. Instinctively we understand periodicity as a framework capable of resolving the paradox of time's Janus-faced static and kinetic aspects: with periodicity things change *and* stay the same at once. Contradictions and dualisms resolve at a higher level. As with Heraclitus, the river remains a river, but not the same one.

With the study of periodicity the premise of Western music's incompatibility with other musics can be neutralized by generalizing out from differences in materials and expression to a wider inquiry into the relationship of music and time. Temporal experience is always layered and prismatic, as reflected in both perception and the actual structure of each musical event. The study of periodicity thus prioritizes time,

and its manifestation, rhythm, over pitch. I rationalize this perspective by arguing that hierarchical rhythm establishes musical form, the hearing and conceptualizing of which is the central cognitive goal of music theory and composition training. Pitch and other parameters function at the level of content by comparison, where they become markers of difference, but not incompatibility.

Peridiocity might be taken to signify literal repetition specifically. I prefer a more inclusive definition that does not depend on repetition but rather on the *expectation* of it, and relies instead on the primal notion of contrast. Change or contrast means discontinuity, accent and differentiation, which happens at several levels in music, both consecutively and simultaneously. This opens a capacious umbrella that can shelter all music--pulsed, unpulsed, fast or slow, strict or free. Mindfulness of contrast as a predictor of periodicity harmonizes with an overall view of music as process rather than object, which is surely one of ethnomusicology's most far-reaching contributions. Music theory has taken long steps in this direction too, as in Christopher Hasty's *Meter as Rhythm*, which asserts that contrast and articulation cause us to project patterns forward in time, which may then be fulfilled or not. Thus music's multidimensionality brings out simultaneous kinds and qualities of periodicity, which may be experienced in relation to perceptions of the creator or listener, be they sounding phenomena, intertextualities, metaphors, and so on.

Periodicity thus encompasses virtually everything in music, so to give the concept teeth we must divide up the realm. The three main categories I have so far relied upon are isoperiodicity, or the discrete, strictly repeating framework (such as in Sub-Saharan African music); linearity, in which the sense of recurrence is present but maximally

obscured by change (as in alap or modern Western art music), and sectional periodicity, in which different kinds of periods are strung together diachronically, as in many strophic forms or ritual sequences. One finds these categories constantly combining and overlapping, as in the way melodic variation conjoins successive isoperiods to create linear elements in an Aka pygmy song, or, conversely, how an entire concerto movement can be shown to be an expansion of a brief, tonally circular vernacular melody.

Others have also theorized periodicity and generated typologies. Richard Middleton has done so to illuminate popular music and its cultural meaning, John Rahn for philosophy of music theory, and Lewis Rowell and Simha Arom for specific ethnomusicology topics. Arjun Appadurai took up the issue in his 2000 Seeger lecture. According to Rahn, repetition has the social and psychological dimension of *répetition*—that is, repeated practice, rehearsal, listening or audiation—and, according to Rowell, the notion of musical repetition is embedded in the extended structural hierarchy of time—from the particles of pulsation through to the molecules of music compositions and the organisms of performance event, career, life cycle, and on to the ages of musical, human, and—if you like Pythagoras or the Vedas—cosmic timescale. With this diversity, specific cultural distinctions become variants observed in a larger frame best thought of as the generalized relationship between music and time.

Significantly, for Western Art music consideration of repetition has mainly been avoided, since repetition is a modernist code for stasis and tribalism, whereas constant progress and individuality are so central to the identity of that culture. But of course this is a changeable ideology, and since many Western art composers obsessively

embraced repetition in the past few decades, we can look back and allow as to how periodic structure has been important all along, even when it is nearly annihilated, as in the intensely developmental modernist canon. The study of periodicity, therefore, through its resolution of dualisms, allows for Western music to be considered alongside other music from the point of view of structure.

Pedagogy

I have offered Periodicity twice (soon to be thrice) as an upper-level course that inquires into the anthropology and semiotics of time and theories of musical time, bringing them to bear on analysis and transcription of repertoire from all over the world using various kinds of adapted techniques. Some techniques originate with methods of grouping and rhythm analysis heretofore mainly applied to Western music, since this is the most copious literature available. Others come from ethnomusicology work, and some have ethnotheoretical roots. I team-teach the course with a theorist (twice with John Roeder and once with Steve Larson), and it always draws students from across the scholarly disciplines, composition and performance. I would say that it cross-fertilizes music graduate subdisciplines effectively, since the course itself is a disciplinary hybrid. It puts theory and historical musicology students in the position of having to come to terms with the ontology of so much non-Western music and ditto for ethnomusicologists having to think about rhythmic organization in Messiaen, for example...and not only the notes, but what they evoke and what their temporalities signify. I suppose as much as anything else students find periodicity compelling

because it is a learning environment within which all repertoires can coexist for close analysis, temporarily decoupled from their conventional historical, cultural or geographic categories.

Keep it simple would be my guiding mantra when streamlining all of that for undergraduate teaching. I'd start small, looking at ways different traditions organize local rhythmic units. Our daily bread would be transcription, and composition exercises the wine. I'd explore a variety of melodies and rhythms constructed to be linear and open ended, and those that are designed to turn back on themselves cyclically. Over the course of a year I would juxtapose musical structures with different cultural origins but of corresponding scale, moving to larger and larger forms. The quest would be to identify and distinguish between syntactic forces operating at local, intermediate, and background levels. The focus throughout would be on close listening and clear representation in appropriate notation. The hard part will be to develop a methodology that can happily marry general observations applicable to all music with detailed knowledge of how structures work within individual traditions, without watering anything down too much, and without letting analysis degenerate into just so much talk. We don't want to sacrifice high standards for what students should be expected to hear, and we don't want to lower expectations of whether they will be able to digest theory concepts, turn them into practical expertise, and creatively apply them through class assignments. The expected learning outcome for such a course should be made clear from the outset: it is to distill and assimilate musical techniques and procedures for practical and creative application later: cultural learnings of ethnomusicology for benefit glorious musicians of future.

Questions and Problems

The foregoing is not meant as a literal argument for one music epistemology over another. I am doing this, as I said earlier, to suggest one way to teach world music to musicians so that they can grow as musicians by coming to ownership of world music materials as performers, composers and thinkers. But I must also face head-on a whole range of problems that arise in the shadow of these ideas. None of them negate in the least the situation that inspired the inquiry in the first place, but they are obstacles that will take much work to overcome. Some of these are indeed daunting: for example the fact that such a broad approach as this might mean sacrificing a lot of the detail, close work, and deep-familiarity that are the hallmarks of a good musician's mastery of even a single tradition, because there just isn't enough time to do it all. And what about the fact that virtually no graduate training now is oriented toward producing PhDs likely to be interested in or able to teach periodicity with the level of attention to structural detail that is a hallmark of good music theory. But in my closing remarks I will concentrate on a subtler, more interesting philosophical problem.

Here is one thing I can say for the best music theorists I know: they are profoundly committed to pushing their listening and hearing sensitivities as far as they can go, and then representing that in their work and teaching in a soul-searchingly honest and rigorous way. Needless to say they are deep believers in the autonomous value of musical sound. I have tracked this over the years and observed the following gradual evolution in their perspectives: in the recent past a musical work was analyzed in

relation to some schema—be it sonata form, a twelve-tone matrix, so-called "normative" rhythmic and metric groupings, or standard linear-harmonic progressions—usually to show how a specific work departed from or was in tension with the schema. But the schema was a fixed point of orientation, to be sure. What one hears more and more now (in the influential work of Chris Hasty, John Roeder, and others) is an uneasiness with the schema themselves, as if they are convenient fictions constructed by observers in hindsight that inappropriately constrain music and our experience of it. Indeed scholarly inquiry at large has become deeply suspicious of overarching categories—that the English language is a bounded and definable entity, for example, or that Hinduism is anything more than a cluster of interrelated practices given a facile identity by orientalist scholars, and so on. According to this reconstructed view, each instance of music unfolds on its own constantly developing terms, and we benefit from listening accordingly: this is a vital music theory of process, becoming, and constant, active listener participation.

Thus a standard construct such as the balanced four or eight bar unit is seen not as normative, but merely a compositional option, with no sense of transgression or strangeness when it is not taken. It is not a question of denying what may be the statistical prevalence of symmetrical phrases in certain musics of the classic and romantic eras, it is a matter of acknowledging how flexible phrases are in medieval, renaissance, baroque and 20th century repertoires, how many crucial deviations there in fact are in the classic and romantic eras, how each piece poses its own musical problems and resolves them uniquely, and how we profit more as listeners by jettisoning our dependence on schema and opening ourselves to each piece as a

distinctive experience.

This sounds fantastically empowering and rich, but it raises deep questions for any kind of world music theory. Can that strategy be applied to a culturally sensitive analysis of all music? Are the schema important or not? If they are dispensable constructs for Western Music, should they be so for non-Western repertoires too? Can analyses of Aka singing, Javanese gamelan, Hani Chinese oral narratives reflect such a processual approach? In terms of the gamelan, for example, this sounds as if we'd need to greatly downplay in our listening imaginations the cultural givens of gong cycles and the like in order to experience the structure itself as a developing process that emerges uniquely for each composition and performance. Although that surely sounds wonderful, I am somehow unable to come to terms with listening to gamelan that way. In gamelan the schema *are* important, or at least I have never questioned their importance, and I wonder what it means that that notion is difficult to dislodge.

In light of this I am gradually coming to understand the art of listening as a balancing act between privileging a communal, cultural model (ie schema-dependence) or a model nurturing the listener's private experience (the processual and schema-free). I believe that teaching musicians to emerge as individuals inevitably requires them to be true to their own experiences of music, and thus to at least be given the space in their educations to hear it their own way, and with all kinds of music. But I can't decide if allowing that does violence to some musics (and their cultures) that I love. This issue and others will, I hope, resolve with time and teaching experience.

For me teaching periodicity is a pedagogical activism that aims at first to bolster ethnomusicology's strength but ultimately to transcend our disciplinary identity. We have taught many students and carved out a place but the existence of that place is selfperpetuating and testimony to our separateness. I think it is potentially valuable for us
to teach periodicity as a way to dissolve the intellectual—and especially institutionaledges between the ethnomusicology curriculum as it stands, and the theory and
musicianship curriculum that remains the mainstream of North American music
education. The glass ceiling we have now remains in place until people alive to the
whole world of music are the ones with primary responsibility for shaping young
musicians as musicians. Ethnomusicologists need not ignore or carp about the
supposed narrowness of the music theory curriculum we have but rather should
embrace and transform it—becoming music theorists and deep listeners ourselves in
the process, and allowing theorists to become us.