On Not Losing Heart: A Response to Savage and Brown's "Toward a New Comparative Musicology"

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GENERALIZED ANXIETY

A CCORDING to one view in evolutionary psychology, cognition and emotion are inseparably linked. As Jay Schulkin (2013, 100) writes in a recent book on the musical mind (invoking a view from Darwin himself), "It is a pernicious if deeply ingrained separation to say that emotions and cognitions are tangibly different." This notion is germane to Patrick Savage and Steven Brown's article "Toward a New Comparative Musicology" (2013)—given that evolutionary theory features strongly within their agenda. And it is also germane to my response; for, as engaged as I am by their intervention, something in it raises my anxiety levels. If thought informs feeling, and feeling thought, what can be the source of this anxiety, and what thoughts in turn might this generate?

It's not that this project lacks rigor, originality, or self-reflexivity. Savage and Brown—in conjunction with their collaborators in associated publications, which I will also reference below—deploy a noteworthy range of approaches and methodologies in their quest to reinstate comparative musicology as an avenue for research. These extend across interdisciplinary turf, and include ideas from bio-evolutionary theory, comparative linguistics, population studies, and statistical analysis. Moreover, here, and in those related writings, they are careful to anticipate objections to their claims and are upfront about vulnerabilities in their approach (Savage and Brown 2013, 182–87; 2014, 149–51). And they are sensitive to historic criticisms of earlier avatars of comparative musicology: to charges of essentialism (what they acknowledge as the "one culture = one music" approach), and to risks of playing into the hands of racialist notions of progressive evolution. Indeed, as a foil to such charges, they remind us that their work on the musical mapping of indigenous groups in Taiwan and beyond may provide evidence beneficial to unrecognized peoples in relation to cultural heritage initiatives (Savage and Brown 2014, 152).

So, notwithstanding these several positives, what is it in Savage and Brown's mission to resurrect an earlier paradigm for the study of the world's music that provokes anxiety? I sense this is partly a response to a tension within their own position. On the one hand, they seem to be arguing for nothing more (or less) than a widening of our discursive ecostructure. As they put it at the close of their article, they hope "that, in the future, the distinctions between comparative musicology, ethnomusicology, historical musicology, and other subdisciplines will merge into a diverse 'musicology' that draws upon a wide variety of theoretical and methodological paradigms, as envisioned by Adler when he first established this field ([1885] 1981)" (Savage and Brown 2013, 187–88). This is relatively uncontentious: given that musicology is these days a broad church, in which many comfortably traffic across disciplinary and sub-disciplinary boundaries (in this respect, the telltale parenthesis and pluralization in the title of Henry Stobart's 2008 collection *The New (Ethno) Musicologies* is salient), there ought to be space to accommodate the kind of

initiatives that Savage and Brown propose. Yet, on the other hand, they seem to be asking for more than recognition of their own epistemic space; one detects a tendency to a stronger, more programmatic claim, which is voiced more hortatively through a subliminal textual rhetoric.

For example, their declaration "the time has come to re-establish the field of comparative musicology" (149, emphasis added; see also Savage et al. 2012, 128) expresses something more like a disciplinary imperative than a personal methodological preference. This sounds like rappel à l'ordre: a call to backtrack to the historical fork in the road where present-day, fieldwork-focused ethnomusicology modeled on cultural-anthropological lines came into being—an exhortation to go back along the abandoned path, governed as it was by taxonomically oriented, scientifically informed methodologies. And Savage and Brown's Comparative Musicology website (see http://www.compmus.org/researchers.php) implies that they have recruited a significant number of fellow travelers on their journey, reinforcing the sense that they envisage a large-scale, programmatic venture (though it's ambiguous whether all the researchers listed there themselves would explicitly identify as comparative musicologists, or whether Savage and Brown list them simply as parties with whom they feel a broader intellectual affinity).

Maybe inadvertently, but to further rhetorical effect, the authors' characterization of their goal as "a new comparative musicology" (used just once in their 2013 article) quickly turns to "the new comparative musicology" (used five times). This use of the definite article carries considerable force of presupposition (see Culler 1981), subliminally—but contentiously—implying something already achieved, that we can take for granted. Moreover the "the" here also implies a singular, perhaps unified, venture—and one which, compounded by the internationalist reach conveyed by the line of academics on its website, is making claims for global import.

Of course there is nothing wrong in principle with intellectual ambition, but these strategies raise a number of issues: (I) what the implicitly grand designs of this approach actually portend for other (ethno)musicological paradigms; more specifically, (2) how the strongly empiricist paradigm Savage and Brown want to promote can be reconciled with existing cultural-anthropological ones (a matter they raise but don't follow through on); (3) whether Savage and Brown's ambitions would actually be practicable on the scale envisaged; and thus (4) whether the significance of the research—at least at its present stage—may in the end be more modest (and no worse for that). Let me now explore these and related matters in more detail.

LOMAX

A critical issue for Savage and Brown, then, is just how they position themselves—contemporaneously in relation to other anthropological approaches to musicology, and historically in relation to earlier comparative musicologies. On the former front, they stress their desire not to set up territorial conflict between themselves and other (sub)disciplines (2013, 187); elsewhere, they articulate this as a wish to break down barriers between the "humanistic and scientific, qualitative and quantitative, theoretical and

empirical," and to achieve integration between ethnomusicological approaches based on thick description of individual songs and comparative approaches like their own, based on the statistical analysis of larger patterns of data across entire populations (Savage et al. 2012, 128).

In one sense this is unexceptionable: as Nettl (1983, 52–64) pointed out a long time ago, there is room for blending comparativist approaches with other modes of ethnomusicology; and as Savage et al. (2012, 128) point out, interdisciplinarity and interepistemic dialogue are facts of life in some areas of present-day anthropology. But the question of just how the different sides of the equation might blend, interact or synthesize (with much hanging on which verb gets chosen) is the nub of the matter. Somewhere between Savage and Brown's scientifically oriented agenda and a thick-descriptive kind of ethnography is perhaps a fertile middleground. But can such radically different epistemologies sit peaceably together? Or can they at least be made to function productively in tandem?

Although the authors invoke Guido Adler both as the historical fountainhead of comparative musicology and as the icon for their own mission, it is perhaps Alan Lomax who represents the most vital touchstone in their work (maybe even a Strong Other, in Bloom's sense), and who might have been paradigmatic of a researcher who blended the "humanistic and scientific." If Adler marked the beginning of the comparative musicological enterprise in the later nineteenth century, Lomax's cantometrics project of the 1950s and 60s arguably represented the last major comparativist venture within musicology. Until now, Savage, Brown, and associates would no doubt agree: one of their main claims to being the new comparativists on the block is underwritten by research on singing styles which involves a re-working of the cantometrics methodology devised by Lomax and Victor Grauer. CantoCore, the brand name Savage et al. (2012) give to their enterprise, is symptomatic of what looks like a return to Lomax's wider agenda—albeit with emblematic differences.

In common with Lomax, Savage et al. work from the premise that the characteristics of song styles represent cultural markers, and that, through comparative analysis, song styles can be correlated with the geographic and global distribution of indigenous populations as well as their language groups. Like Lomax and his team, Savage, Brown, and their collaborators avail themselves of empirical methodologies, such as classification, quantification, statistical analysis, and mapping, as well giving space to biology and evolutionary theory as factors in the historical formation of culture. Hence much of the agenda Savage and Brown recommend in their 2013 article picks up the baton from their forebears, as if taking their cue from Lomax's collaborator, Conrad Arensberg, who wrote: "Anthropology has always been distinguished among the social sciences in its kinship with and origin in natural history and biology. It has rightly insisted on identification of the universals of human behavior and human culture and on the testing of generalizations across the worldwide and evolutionary variations of the human record" (Lomax [1968] 1994, 307).

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But at the same time, they part company from Lomax in a way that suggests their expressed wish to reconcile humanistic and scientific paradigms is honored more in the breach than the observance. For if ever they had a model for such a productive interchange, it would be Lomax: Lomax for whom music (and dance) represented a practice in performance; Lomax for whom people (individuals and communities) were as important as peoples (populations); Lomax for whom the anthropic was at the core of the anthropological; Lomax for whom work in the field was what underpinned work in 'the lab'—as when he wrote:

I felt that without knowing more about the inner emotional lives of singers, the objective data on social aesthetics would be of slight value. Therefore I recorded long life histories of a singing sister in the Baptist Church[,] a rural preacher, a wandering blues singer, and a convict. These Southern folk poets tell in the most vivid and moving way and in a style that approaches that of the great writers, why they sing and what they're singing about. They make clear the nature of the floodtide of emotion that spilled out of the South and spread across the whole world. (Lomax 1950, quoted in Szwed 2010, 246)^I

Those qualitative, humanistic dimensions were also what made Lomax's work problematic. Criticisms (beyond the niceties of the technical execution of his methodologies) focus on the categories he used to describe vocal timbre (nasality, raspiness), and on the putatively questionable way he related sexual relations to song types (Erickson 1976; Maranda 1970). Yet let's remember that Lomax was doing this work in the 1950s when feminist theory and gender and sexuality studies had barely begun to emerge—anywhere, let alone in musicology²—and when Roland Barthes' (1977) landmark essay of 1972, "The Grain of the Voice," was not even a twinkle in its author's eye.

One imperative, post-Lomax, is to go deeper into this complex territory; in the case of Lomax's classification of vocal timbre, the argument might be to extend the range of categories, to describe them better, and to drill deeper into the significance of timbral distinctions for particular cultures. Yet Savage et al. head off along the opposite vector. In the journey from cantometrics to CantoCore, they implement a deliberate limiting condition, choosing to focus "only on characters of song-structure rather than performance-style or instrumentation ... because of our prediction that structural characters should be more reliable. We have reorganized, supplemented, and attempted to more objectively operationalize these characters" (Savage et al. 2012, 90-91; emphasis added). On the one hand, this maneuver enables the authors to modify and extend those aspects of the original methodology most susceptible to measurement and putative objectivity. In effect (and as was also the case for Lomax) this tends to favor those aspects of singing that can be most tractably transcribed into Western staff notation, and analyzed with Western concepts such as "bar," "note," and so on. On the other hand, the trade-off for this type of methodological enrichment is to have eviscerated from the model those singular, qualitative, performative features that are more resistant to measurement but

¹ This passage is also quoted on the Association for Cultural Equity website, at http://research.culturalequity.org/psr-canto.jsp.

² I'm grateful to Goffredo Plastino for this and various other points of information about Lomax.

represent what most immediately distinguishes the singing style of a culture (or cultural practice) and most saliently differentiates it from others.

What is left, then, is an approach that is essentially empirical and metric. This is congruent with certain wider trends in recent musicology, with which—unsurprisingly— Savage and Brown (2013, 149) identify. Speculating a little, I wonder whether the momentum behind these tendencies doesn't in turn reflect a tendency within contemporary cultural consciousness to look to evolutionary theory, genetics, and neuroscience as material, and instrumentalizable, theories of everything. Could this be the climate Savage and Brown are (unconsciously) alluding to with their confident proclamations that "the time has come"? Yet, looking to the darker end of this continuum, this time is also one in which the reduction to what is only observable and measurable (often in a globalizing context) is also integral to less friendly cultures fostered by neoliberalist economics (market surveys, worker performance within business management models, student evaluation questionnaires, etc.). In those cultures too we find a favoring of the abstraction of human activity and experience into data, in the interests of the kinds of knowledge that enhance economic power. This is of course not to say that swerving toward comparative musicology is necessarily serving neoliberalization. But it is to remind ourselves that intellectual formations always take place in a context, and that such contexts are ultimately never apolitical.

While congruencies between structures of knowledge, relations of society, and relations of economics do not appear among the correlations Savage and Brown are concerned with, they certainly figured high on Lomax's agenda. As he wrote in relation to cantometrics:

the most diagnostic traits of song performance are representations and reinforcements of essential aspects of social structure. Each style, then, necessarily symbolizes a specific way of life and flowers out of, or diffuses into, those areas where it is an appropriate statement of the everyday behavior of the majority of its carriers. (Lomax [1968] 1994, 81)

Or, in the words of Arensberg: "It was wrong to think of the songs as only expressive. They were also very similar in form to the customs and institutions of culture and were not merely mnemonic reference to them" (Lomax [1968] 1994, 304-305).

Jean-Jacques Nattiez is among those sensitive to a "non-evident Marxism" underpinning Lomax's thinking. "To Lomax," Nattiez (1990, 171) writes, "cultural determination [of stylistic structures] plays the same role as economic structures in the Marxist model." While links between Lomax's theories and Marxist dialectical materialism are less than explicit (just as the FBI, in their long-term investigations of Lomax, struggled to find conclusive proof of any communist activity), his more generalized left-wing affinities can be evidenced. Significantly, one place in which Lomax drew parallels between song style and gendered sexual behavior was in the 1955-56 edition of the leftleaning Italian journal *Nuovi Argumenti* (as discussed by Plastino [2008, 55–57]). As Nattiez speculates, Lomax's turn to empiricism may not have been out of purely scientific interest, but for a political purpose. He may have wanted "to get himself some rigorous empirical

tools, supported by computer, to validate an intuition. ... to use the methodological and technological tools supplied to prove and not merely affirm, a relation (i.e., between music and culture) that otherwise might give the impression of being a vague, literary speculation" (Nattiez 1990, 171).

This, then, was arguably the tenor of Lomax's particular mode of integration "between the humanistic and the scientific"—one fuelled by a politics that had an emancipatory motive. In the metrics and technics of the new comparative musicology proposed by Savage and Brown, traces of any such informing polity melt into air (beyond the liberal nod, mentioned earlier, to the possible use of their findings to assist one group among "unrecognized peoples"). A political neutrality that is the correlate of an unalloyed empiricism is problematic: without a political consciousness, how are new comparative musicologists to articulate a position in relation to cultural antagonisms that may be thrown up along the faultlines of comparison?³

GENES AND MAPS

The centerpiece case study in which Savage, Brown, and their associates put their theories about comparative musicology into practice—and which most graphically foregrounds their scientific leanings—is their analysis of song styles of the indigenous peoples of Taiwan. In Savage and Brown (2014) the fruits of this research are presented in relation to questions around the making of musical maps, while in a novel cross-disciplinary collaboration, Brown et al. (2013) seek to draw correlations between song types and linguistic and genetic population groupings on the island; both studies deploy the CantoCore methodology expounded in Savage et al. (2012). It is thus through these studies above any others that key claims Savage and Brown advance in "Towards a New Comparative Musicology" (2013) are exemplified and tested—claims about the power of classification (based on quantitative analysis), about the flows of human history, about the relationship between biological evolution and the cultural evolution of music, and about genetics as a possible linking factor in this last.

As the authors tell us, Taiwan forms an ideal case study because the island has a sizeable number of discretely grouped indigenous peoples; because prior classificatory research had been done on the language groups of those peoples; because prior research had also been done on their genetic markers (mitochondrial DNA); and because several collections of songs performed within those different indigenous groups had been made by assorted ethnomusicologists and placed in the public domain. A subset of these songs was analyzed using both CantoCore and cantometrics techniques, following which Brown et al. (2013) deployed a range of methods of statistical analysis to determine the magnitude of correlations between the resulting classifications of song styles and comparable kinds of genetic and linguistic data.

³ More elliptically, this tendency towards a neutral comparativism can be seen to have a counterpart in certain representations of world music and contemporary music in the media—for example BBC Radio 3's nightly *Late Junction* show, which smooths over often radical differences between cultures and histories presumably in the interest of highlighting stylistic or aesthetic affinities. I discuss the problematics of this form of musical consumption and its connection with neoliberalist cultural norms in Clarke 2007.

The investigators did indeed find a statistical correlation between musical stylistic diversity and genetic diversity (and also between language groups and genetic groups, albeit a different correlation). From this they concluded that music may be considered a marker of population movement, which is presumably to say that song styles are not simply transmitted from one place to another, but are coterminous with—and hence indexical of—the movement of peoples. This is one strong claim, whose message would seem to be aimed as much toward those involved in the scientific analysis of populations as toward musicologists (comparative or otherwise). Take note, the authors seem to say: our discipline, music, has something valuable to offer science, and can speak to science on science's own terms.

All this is salutary. But lurking here is also a more speculative and more problematic claim. This is that "music and genes may have been coevolving for a significant time period and that music might possess the capacity to track population changes occurring on the time scale of perhaps thousands of years. ... Music may well contribute to a richer understanding of human evolution" (Brown et al. 2013, 5). This way of putting things implies an intimacy between the cultural and biological that risks reducing the former to the latter—as if musical expression were an aspect of gene expression; as if music were as deeply embedded in evolutionary processes as genes themselves. Perhaps this is overreading the argument, yet Savage and Brown (2012, 176) state:

To the extent that reliable cross-cultural trends can be shown to exist as a result of detailed comparative analyses, two types of explanations—cultural and biological—are typically put forward to account for them. ... When trends exist even after controlling for historical relatedness, a common biological explanation of universality is that the trait is encoded at the genetic level (i.e., it is hardwired into the brain) and that it is a biological feature of our species as a whole, usually due to natural selection processes.

To be sure, Savage and Brown supply a conscionable number of caveats to this claim, just as I would in regard to my own critique of this position. Yes, it would be surprising if music were not in some way bound up with our evolutionary origins, given that our species-being is profoundly socially conditioned. But surely one of evolution's key legacies is to have set human being into a socio-cultural space which is then conditioned in terms—precisely social and cultural ones—that are to a significant extent ontologically independent of evolutionary mores. Even commentators arguing from the perspective of evolutionary biology itself are aware of this dislocation. For example, Schulkin (2013, 14) writes that "song has long been viewed in the context of [adaptive] function, as it still is in birds. However, song also expands with cultural legacies and expression. Most people's enjoyment of Ray Charles or Beethoven serves no specific function. Biology is one thing; overzealous adaptationism is another."

It may well be productive to note a metaphorical resemblance between genes and songs, as well as between the historical processes of song transmission (with seemingly random mutation of details) and biological processes of gene transmission. But vigilance is needed to avoid reifying this similarity as seemingly natural aspects of the same process.

For one thing, Brown et al. are unable to find any conclusive evidence for songs having the same "time depth" as genes. As they admit, "it is impossible at the present time to determine whether the correlation between musics, genes, and languages date back to the initial peopling of Taiwan thousands of years ago or to more recent population movements within the last few centuries" (2013, 4).

What drives Savage and Brown to want to embrace evolutionary and biological theories this strongly? Perhaps if the connections could be conclusively made, this would give their approach the grand theoretical clout they seem to be seeking—as when, in the concluding section of their position statement, they pronounce: "Much could be gained if ethnomusicologists reincorporated cross-cultural comparison, scientific methodology, and contemporary evolutionary theory into their research program and thereby returned to the big-picture questions of comparative musicology that we have described" (Savage and Brown 2012, 187). But perhaps the big picture is a chimera; and perhaps a more salutary evaluation of their Taiwanese research would place it on a respectable middleground between the paradigm-shifting and the locally significant.

Without doubt, the authors present valuable and suggestive inroads into research methodologies as regards statistical modeling and musical mapping. But, wisely, their claims are only tentatively made (indeed the list of limitations volunteered by Savage and Brown (2014, 149–51) is quite unstinting), and in truth these apply to a limited subset of the music of a single island. Specifically, their material comprises traditional polyphonic songs, selected in preference to non-polyphonic, "non-traditional" and children's songs (Brown et al. 2013, 2), as well as, presumably, various hybrid possibilities (as outlined in Savage and Brown 2014, 136–37). If diversity of song types within this carefully selected category correlates with diversity of gene types, might a more prosaic interpretation of this be that populations have maintained some cohesion (over a long time period) and taken their songs with them (over a less easy-to-specify time period)? And might the research question that should then be inferred from this be less a scientizing one about a putative affinity between music and genes, and more a cultural one about how it is that a population, identifiable by its genes, has historically maintained particular song traditions?

In other words, and as Savage and Brown (2013, 158) themselves point out, this is a matter of regional significance—a localized research project, occupying a particular niche (that nonetheless might also look out onto a bigger vista). It's where Savage and Brown seek global significance that skepticism sets in. Take, for instance, maps. In another recapitulation of Lomax, the authors make the major claim that "[f]rom a comprehensive set of a regional projects, it should be possible to generate a musical map of the world" (Savage and Brown 2013, 158). But a map of what kinds of music(king), and what kind of world, exactly? And a map of when?

Difficulties would be compounded, we might assume, as soon as one extends one's mapping to music not just as sung by indigenous peoples, but as variously enjoyed by all categories of a population. It has occurred to me, for example, that an ethnographic musical map of my own city and region, Newcastle upon Tyne in the North East of England, would be a worthwhile venture—not least in order to represent the cultural

diversity of this region, and not least in order to hold up a mirror of its own cultural complexity to itself (see Clarke and Hodgson 2012). But what kind of musicking should we map here? Should it be based on musical production (composition, performance), or consumption (concert going, private listening)? Should we consider the public sphere (larger, widely advertised events) or the (semi-)private (domestic get-togethers and community gatherings)? To do this even in a circumscribed locality—say, Newcastle's West End, where most of the city's minority ethnic groups live—would be a major ethnographic task (as instanced by Suzanne Hall's [2009] ethnographic mapping of a single London street, the subject of an entire doctoral thesis).

And then there is the question of the temporality of maps (which is at best only elliptically addressed by Savage, Brown, et al.). Traditions evolve, styles mutate, patterns of consumption change (presumably all faster than do genes). So my projected local map would be just one snapshot on a much larger diachronic continuum that would tell of a city's ever mutating experience of postindustrialization and inward and outward migration under contemporary geopolitics. Maps are historical through and through—and this is a point that risks being lost when history is supplanted by apparently cognate concepts such as "cultural evolution."

Further, how could multiple maps of this or other kinds be coordinated, even if they could be made in the first place? Perhaps Savage and Brown in this respect are not being ambitious enough in their vision. Perhaps this would take something like the application of "big data" approaches—using, say, smartphone technology, in which entire populations globally logged their musicking within an agreed timeframe (with the experiment repeated say at five-year intervals over an indefinite period, so that trends could truly be logged). Alternatively, one would need to mitigate the potentially spiraling complexity of this picture by limiting either the mode of musicking or the geographic range studied.

The practical logistics of such a venture, then, suggest that the knowledge generated from such projected mappings is less likely to be a grand synthesis, and more likely a series of connected fragments. If this is the fate of all grand theoretical aspirations in the arts and humanities, this is not a cue to wax postmodernist (for we badly need some new big ideas in our parlous contemporary polity). Rather this would be to embrace the idea that knowledge of the human may necessarily come in fragments and glimpses; it would be to recognize that the relation of the particular to the general is a dialectical one characterized by tension and resistance rather than the ready assimilability of the former into the latter.

DIFFERENT COMPARATIVISMS

Lest it should be thought that my critique here is conducted from a standpoint that is closed to comparativism, let me briefly illustrate a couple of ways in which I have found (and am finding) comparative approaches personally useful. These are taken from my own inquiries into Hindustani classical music, a field in which I've been active as an amateur practitioner (of the *khyāl* vocal style) for some time, though only more recently as an academic researcher. I do not present these approaches as particularly paradigmatic (indeed they are still at a relatively nascent stage), but they may at least suggest some other

takes on how comparativism can be deployed. I should add that these approaches have arisen independently of those of Brown et al.—an example perhaps of intellectual polygenesis.

My article "Different Resistances: A Comparative View of Indian and Western Classical Music in the Modern Era" (Clarke 2013) arose out of an invitation to contribute to a symposium on "resistant materials" in music. My position as the sole commentator from a non-Western musical standpoint in this symposium threw me de facto into a comparativist position, contemplating a mental juxtaposition of resistance as an aestheticpolitical factor that has historically played out in different ways across Western and Indian cultures. My initial, skeptical thought was that aesthetic resistance (whose operation is manifested as traces within the immanent materials of music) looks more like a Western classic-modernist notion: literally and figuratively foreign to Indian classical music. For in the Indian *quru–śiṣya* tradition, resistance is—on the face of it—futile: what your guru says, goes; traditions of practice (e.g. rāqa formation) are there to be respected, not resisted or subverted. And yet, the paradox soon became apparent that in this ostensibly conservative practice, with a history in feudal relationships (Qureshi 2002), resistance has indeed played a role, historically, aesthetically and politically—but in different ways from its Western classical counterparts. As Janaki Bakhle (2005) argues, Indian classical music was embraced in colonialist India as a crucial aspect of Indian cultural identity in the struggle for independence from Britain. Hence, as compared with the historical dialectic of Western European modernism, which played out within music and the arts as a critique of past aesthetic formations ("making it new," as Ezra Pound put it), classical musical practices in India reinforced their links to their precolonial musical past as part of a different modernization process, aspiring to a different, politically independent future. The comparativist message here is that only when modernity is seen as a global phenomenon deeply implicated in colonialism (that is, only when different modernities are compared), can we see individual modernisms in their proper perspective.

In another aspect of my research on Hindustani classical music, a comparative angle opens up with regard to the analysis of rāga performance. This emerges in part from the essentially improvised nature of this practice, and hence from improvisation itself as a practice common to many cultures. How might one explore the phenomenology of improvisation—i.e., what is it like to be a performer in the moment of generating material? And could it be that, notwithstanding the stylistic differences across cultures, there may be some common territory? Related to this, it seems that one potentially deep-structural connection between melodic formation in Hindustani classical and many Western musics is the notion of prolongation. That is, common to these cultures (and no doubt many others besides) are formations of melody that are intelligible principally as configurations of structurally salient (i.e., in some sense prolonged) tones embellished by less salient, less structurally significant ones. And this presupposes melodic structures that—across cultures—share the notion of recursively interrelated levels of structural significance. This is of course not to say that, for example, Schenkerian theory (the quintessence of Western prolongational analysis) can be applied wholesale to a Hindustani *rāga* performance. Yet, analyses by scholars such as Richard Widdess (2011) have shown that sensitive, non-

dogmatic adaptations of prolongational concepts can be insightfully applied to performances of Hindustani music.

To similar ends, I have been experimenting with and evaluating applications of Fred Lerdahl and Ray Jackendoff's (1983) *Generative Theory of Tonal Music* to Hindustani classical music (Clarke 2011). The generative principles behind their methodology ought to be appropriate, since one assumption about improvisation, especially within the Indian *rāga* system, is that unique musical utterances are generated from different realizations of the same set of constraints or deep structures. And there is a further resonance in the present context, since Lerdahl and Jackendoff (1983, 278 ff.) hypothesized that their theory may well have relevance to music beyond the Western canon, and that it points to universal (or relatively universal) principles—a matter germane to Savage and Brown, for whom universals represent a key pursuit of their new comparative musicology.

While my own researches are still at a relatively early stage, I would suggest that *khyāl* performances are tractable to at least some of the principles of Lerdahl and Jackendoff's model, and hence that some aspects of the practice have commonalities with Western melodic and phrase-syntactic models. But one likely difference is that, beyond a certain point, the kind of binaristic tree diagrams favored—indeed required—by Lerdahl and Jackendoff cannot be applied with the same degree of recursivity as they can to Western classical structures. For while Western melodic phraseology seems congenial to approaches based on reticulated, divisive branching structures, Indian classical music seems to be more strongly based on cyclic, additive principles. Here, then, the initial premise of similarity may well lead us back to difference, and at a profound level.

The precise details of these findings are for a future publication, and are still emerging from research in progress. But my sense is that they are likely both to vindicate and challenge a comparative approach, and that this ambivalent outcome is entirely appropriate. To my mind, comparativism, going beyond empiricism and metrics, implies dialectics: not a measuring of similarity based on a subtraction of difference; not a fetishizing of difference so as to become blind to commonality; but a recognition that difference and similarity entirely suppose one another, with now one and now the other in the ascendant, in a tension—a turbulence even—that allows neither term to become assimilated to the other, and that motivates an inquiry that is dynamic and open ended (cf. Clarke 2013, 176–77).

IN CONCLUSION

Unlike Savage and Brown (2013, 149), then, I wouldn't see a return to forms of comparative musicology whose roots lie in the nineteenth century as in itself necessarily heralding "a bright future" that will transform ethnomusicology, or even musicology more widely. But I certainly would want to agree that comparativism can usefully have a place in our thinking. Indeed anthropological encounters between cultures—wherein people on either side have to take stock of the other's position—necessarily (and potentially valuably) involve often searching acts of comparison. My own predilections here are perhaps more attuned to ethnomusicologists who are interested in the particularities of a

culture and the actual experience of encounter in the field. By contrast, Savage, Brown, et al. advocate different epistemological values with a different ethos, based on the abstraction of music and people into data. To characterize that ethos as a recapitulation of Lomax, only without the heart, might be an unfair caricature. For the various statistical representations and correlations emerging from their research may well be sublimating a lot of passion, and Savage and Brown's own day-to-day dealings with musicians and musicking may be no less affective than anyone else's (it's just that they exclude this from their research). And, in fairness, the empirical and the metric have as much potential as any other paradigm to work to humanistic ends—"measurement began our might," as Yeats put it. But the question is whether in anthropology, of all disciplines, the heart doesn't have a crucial role to play, whether it can ever be left out.

Of course, I'm using the term "heart" rhetorically—not as a call to naïve sentimentalism, but as a cipher for all the contingent, particular, sometimes seemingly irrational, emotive, feeling-centered elements of human engagement that elude metrics, but demand interpretation and perhaps compel ethics. Equally, it would be erroneous to dismiss the complementary role of the head in fieldwork-centered anthropology—the need for a measure of detachment and self-reflexivity, for vigilance with regard to one's own motives. I suspect that the aporia in Savage and Brown's position—which on the one hand presents "the new comparative musicology" as in some way exemplary, and on the other wants to stake a claim for it as only one aspect of a bigger musicological umbrellais symptomatic of their sensitivities around what their approach leaves out. Their call for a synthesis or integration of anthropological models would seem to be an unconscious recognition of the need to factor back in the matters of the heart—for an approach in which empiricism and hermeneutics conjoin. But one question here would be whether Savage and Brown envisage sub-contracting that element of the intellectual labor to other kinds of (ethno)musicologists (which would be one form of interdisciplinary relationship), or whether this movement towards synthesis might involve a personal journey—an inner interdisciplinarity. Another question is whether these different models can be integrated even in principle, or whether they represent values and ideologies whose fundamental premises are less than compatible—a matter no doubt requiring further research. It is arguably only when these questions around the relationship between these different sides of the disciplinary equation are broached in earnest that we will know whether we are indeed experiencing an epistemic sea change within musicology. For now, more modestly, Savage and Brown have at least issued an invitation to have the conversation, and we should be grateful to them for that.

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