

ABSTRACTS

Keynote Addresses

Music Analysis and Ethnomusicology: some reflections on rhythmic theory

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If these are interesting times for the relationship between ethnomusicology and music analysis, then this is particularly true in the area of rhythmic and metrical theory. On the one hand, time seems to be more amenable than many other dimensions of music to cross-cultural comparison; indeed, recent work in the (traditionally Western-art-music focused) discipline of ‘music theory’ develops a set of concepts that appear to be generalizable across a wide array of musical traditions. At the same time, ethnomusicology’s history of theorising rhythm, especially in Africa, has acted as a lightning rod for heated criticism of the discipline. Ethnomusicology’s relationship to rhythmic theory appears to be at the same time full of potential and deeply problematic.

In this paper I will reflect on some of the issues raised by theorising and analysing musical time cross-culturally, both now and in the past. What principles allow us to continue to develop general theories of rhythm and metre, and what – apart from reflecting on the enormous diversity of musical practice and theory around the world – does a historically self-aware ethnomusicology have to offer that project?

Music, Identity Politics, and the Clever Boy from Croydon

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Samuel Coleridge-Taylor (1875-1912)—in Elgar’s equivocal term the ‘clever boy’ from Croydon—was discovered by the Royal College of Music set at an early age, and his *Hiawatha’s Wedding Feast*, completed when the composer was 23, was one of the great commercial successes of its time. (It was also a scandalous example of the exploitative contracts that have remained commonplace in the music business.) It was as a result of his success and ensuing visits to the United States, and in particular his encounter with William Grant Still and reading of the works of W. E. B. Dubois, that Coleridge-Taylor began to problematize his African ethnicity, coming to think of himself as someone whose identity was caught between two cultures. The focus of this case study is the relationship between this purposeful transformation of Coleridge-Taylor’s self-identity and his development as a composer.

Re-Imagining Difference: musical analysis, alterity and the creative process

Laudan Nooshin
(City University, London)

This keynote address will explore various themes and issues arising from my work with Iranian classical musicians, particularly in relation to questions of alterity – how ‘sameness’ and ‘difference’ are understood in relation to musical creativity. For example, what would an approach to creative practice in Iranian classical music that went beyond the arguably unhelpful improvisation/composition dualism look like? Is there a place beyond alterity, or is our understanding of the world inexorably tied to such structural binaries? As well as discussing a case study, I will engage broader questions concerning musicological paradigms, particularly where these have been mobilised as a marker of ‘otherness’, as in the case of (western) musicological discourses of creativity or in Iran where some scholars have drawn on notions of difference to distinguish a local ‘indigenous’ musicology from an externally-imposed (Euro-American) ‘imperialist’ musicology. I examine the implications of such paradigms for the analysis and understanding of musical creativity.

Paper Presentations

“V'imru: Amen”: vocal rhythm in solo and congregational Jewish ritual chant

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Northwestern University, USA

Contemporary Jewish Reform tradition in North America focuses on engaging the congregation to pray as “one” – requiring some regularity in *nusach* (liturgical chant) for congregational responses in prayer (Slobin 2002; Friedmann 2012). In this paper I will examine the ways in which traditionally unmetered nusach becomes rhythmicized in Reform Shabbat services, and the manner in which rhythmicity is created by the Cantor in order to engage, or dis-engage, the congregation. I posit that cantors use certain micro-timing strategies to achieve a sense of “groove” while singing with the congregation, and other participatory discrepancies (Keil 1987) during solo nusach. To examine these strategies of delineation, I investigate instances of responsorial singing in several prayers chanted during a typical Reform Shabbat evening service.

Rhythm in Jewish liturgical music is based primarily on text. The emphasis and syllabic stress of certain texts provides a basis for *hazzanut* (cantorial improvisation) as well as *davening* (bodily synchronization). In my analysis, I draw from fieldwork recordings of prayers by cantors and cantorial soloists in the North American Reform movement. In comparing these, it is evident that cantors use a multitude of vocal strategies to guide the congregation, express the liturgy, and shape synagogue worship.

Meta-analysis of a genre: jiangnan sizhu and its analysts

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SOAS, University of London, UK

Jiangnan sizhu is increasingly seen as representative (both nationally, and transnationally - in its influence on diasporic Chinese orchestras and ethnomusicology department music ensembles) of Chinese folk music in general. A slowly growing body of music-analytical scholarship, within and outside China, continues to buttress an on-going Bhabha-esque “reinscription” and canonization (Lau, 1998) of the genre. In this paper I examine some of the implications of this analytical attention. What do practitioners of the music, on encountering the analysis, make of it? How can analysis help performers or trained audience members? Answers go to the heart of how we are culturally attuned to

certain kinds of musical listening. The intellectual labour of analysis is by no means neutral, but always potentially appropriative and must be seen against other trends within knowledge production (Vukovich, 2010). In a form of musical Heisenberg principle, how does analysis alter the analysed? One obvious side-effect may be the privileging of notation such that what was oral, mnemonic or skeletal becomes written and increasingly complex; the descriptive becomes de facto prescriptive. Recent applications of processing theory (such as Roeder, 2010) provide fascinating insights into the melodic complexity of the genre, but also raise questions concerning transmission in the original settings. How does analysis still struggle to account for the subtleties of collective performance practice in which improvised ornamentation, gentle give-and-take and tacit understanding between the musicians, rather than linear progression, are lauded as the aesthetic ideals. The disciplinary and institutional power differentials within music scholarship itself remain pertinent. The legacy of a dominant focus within historical musicology on sound and content over context remains potent within China, and also explains why Ethnomusicologists have sometimes shied away from some forms of music analysis, or identified other priorities.

Between originality and repetition: displays of ingenuity in North Indian classical music

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Musicians and listeners of North Indian classical music attach great importance to the principle of finding novelty within pre-existing limitations. This idea informs conceptions of *rāg*: by and large, musicians do not talk of *rāg* as a set of restrictive melodic rules, but rather as something within which they can spend a lifetime discovering new elements or “spaces”, without ever coming close to exhausting the potential of even any one *rāg*. My teacher, the vocalist Sunanda Sharma, talks of practising a *rāg* as a process of doing “research” into that *rāg* and discovering its many possibilities. Music critics, meanwhile, frequently comment on musicians’ capacity (or not) to be creative within familiar *rāgs*.

This principle also lies behind discussions of musical transmission. As John Napier (2006) has shown, North Indian classical performers face a peculiar, contradictory set of social pressures according to which they must remain true to the style of their teachers without simply replicating what they have been taught. Napier suggests that they balance these two demands by means of what he calls “subtle variation”, performing compositions they have been taught but in new and individual ways.

In the semi-classical vocal genre *ṭhumrī*, the same idea is in play in the process of *bol banāo*, the defining musical feature of the genre. In passages of *bol banāo*, performers sing one phrase of the lyrics repeatedly, to a variety of musical settings. Their stated aim in crafting such passages is to reveal as many different emotions as possible in the same lyrics.

In this paper, I argue that the principle of finding something new within something familiar is central to the aesthetics of North Indian classical music. I further propose that this central aesthetic principle accounts for fundamental structural and stylistic features of North Indian classical music. Based on the transcription and analysis of recorded performances, I demonstrate that it has particular musical consequences. Specifically, I highlight certain widespread types of improvisatory processes, through which musicians foreground their ingenuity in varying musical material. When they employ such processes, performers display their genius not in the creation of radically new music, but rather in showing novel aspects of something that already exists.

Taking variation (rather than, say, large-scale form) as the starting point for musical analysis in this context has significant advantages. Amongst other things, it helps to account for the large amount of repeated musical material that performers employ when they improvise, without casting such material

as unimaginative or pedestrian. It also reflects the priorities of musicians and music connoisseurs, who place far greater value on ingenuity than on radical novelty when they talk about musical performance.

The Night of the Singing Balconies: Organised Anarchy in East Berlin

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On a chilly November evening this year in the eastern Berlin district of Friedrichshain, several hundred people gathered under thirty-six different balconies to hear friends, family and neighbours sing, play and recite poetry. Almost all the performers were amateur, their material included Puccini, rap and Russian folk song, and audiences cheerfully blocked streets, playgrounds and courtyards to listen, applaud and frequently join in. Although possessing an appearance of spontaneity, the evening was meticulously planned and executed, the result of meetings, coordinated social media campaigns and extensive fly-posting. What was unpredictable was the warmth of audience response and fleetingly-grasped communality that the night engendered, spontaneous singalongs and small streetside parties becoming as much a feature of the proceedings as the performances taking place overhead. Part of a neighbourhood initiative which also includes speed-host cookery evenings along with more standard fare such as babysitting swaps and book clubs, the Night of the Singing Balconies taps into several contemporary Berlinesque themes: the triumph of enthusiasm over professionalism, an encouragingly tolerant audience, the ubiquity of the Berlin balcony and a thriving improvised street culture which is a daily part of Friedrichshain life. My paper, therefore, analyses this very local event as one articulation of the city's wider musical experience. Through interviews, footage and personal recollection, I will explore exactly what sort of temporary community was created on this one night, and how it might fit into a broader theoretical concept of occasional and coincidental urban musical groupings.

Put the fire out – An integrated analysis of rhythm, lyrics and dance moves in Angolan kuduro

Stefanie Alisch
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Kuduro is electronic dance music from Angola that emerged in the early 1990s in the downtown discotheques of the capital Luanda. Around the year 2000 kuduro became the most popular youth culture in Angola and the Angolan diaspora (Alisch, Siegert 2011). DJs produce kuduro's aggressively percussive beats with a tempo around 140 BPM with Fruity Loops software in small home studios. The rapid lyrics are delivered on the verge of shouting and laud the performers' skills and success as well as functioning as social commentary.

Kuduro songs are inextricably linked with dance moves called toques. Usually, a toque bears the same name as the kuduro song it accompanies and strongly references Angolan quotidian culture. In kuduro, a song's success depends largely on the toque's being picked up and danced by a broad audience.

In 2011 female kuduro star Noite Dia (“Night Day”) lands a hit with her song Olha fogareiro - Apaga Fogo (“Look at the BBQ grill - Put the fire out”), sung in duet with male star kudurista Puto Lilas. The accompanying dance move Apaga fogo consists of one foot tapping rapidly as if putting a fire out on the floor while a hand waves between the legs in a fan-like motion as if cooling the crotch. The dance is highly popular in Angola and the Angolan diaspora. Children and adults, women and men

dance it. At the same time, Apaga Fogo is frequently criticized for being too sensual. While Noite Dia insists that the only reference here is a BBQ grill, the dialogic duet hinges on the double entendre of “to put the fire out” meaning “to satisfy desire”. Double entendres (Pinto 1991) that use innocent expressions to convey a censored subtext and wordplay have been described in popular music of the Portuguese language as ludic strategies to create “logical contradictions and revealing paradoxons” (Cecchetto), spaces of floating meaning that can be interpreted by listeners beyond what conventions allow the singers to pronounce.

Anne Danielsen points out the importance of including bodily-performative practices into music analysis in order to clarify the “process of making music meaningful” (Danielsen 2010, 12). In this paper I discuss Apaga Fogo's explicit and implicit lyrical content in the context of a multi-lingual environment as well as antiphony and cyclic structure deployed in the lyrics. I explore how bodily-performative practices mirror, amplify and contradict verbal ambiguities and analyse the “fabric of rhythm” (Danielsen) of layered binary and ternary electronic beats by way of reverse engineering. In this integrated analysis I explore how the interplay of rhythms, lyrics and dance produces complex and contradictory musical meaning.

Analysis of the cognition of performance in playing the Afghan Rubab

John Baily
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By “the cognition of performance” I refer to how the performer mentally represents the task performed, and how that representation is utilized in the process of performance (Baily 1992:148). Learning to perform as a research method in ethnomusicology invites the practitioner to explore these issues, especially spatial thinking and active movements in the spatially structured environment provided by the morphology of an instrument. A special aspect of lutes, plucked and bowed, is the generative interaction between the left and right hands. Analysis of the performance of classical raga based compositions on the Afghan rubab shows the interaction between the two hands in very interesting ways. The present short paper will concentrate on the right hand movement grammar underlying the subtle rhythmic variations that characterise Afghan minimalism.

A seemingly simple set of rules controlling the ways in which down strokes and upstrokes on the three melody strings, and strokes on the high drone string, can be sequenced has been identified, and for the analyst who understands the rules, the grammar can be deliberately utilised in rubab performance. But is this how Afghan rubab players themselves strategise their performances? Video footage of two outstanding musicians, Ustad Rahim Khushnawaz and Hodayun Sakhi, will be presented to illustrate two contrasting approaches to this issue, the intuitive and the analytical.

From local to glocal: musical style and society in Mallorca's bagpiping world.

Cassandre Balosso-Bardin
SOAS, University of London, UK

The interdisciplinarity of ethnomusicology allows us to contextualise musical analysis within an ever-shifting social context. By taking into consideration the temporal aspect of musical change in relation to the society that produces it, we can better understand the symbiotic relationship between musical performance style and culture. Through a case study of Mallorcan music, I will illustrate how the variation of musical styles over the last forty years is representative of the changes in its society.

In the 1970s, recordings and testimonies show that Mallorcan bagpiping styles were locally defined.

For example, musicians from one village played the repertoire with a dotted rhythm, the next village played only crotchets. The revival, initiated by young men from the city, smoothed out these styles as the newcomers consciously decided to “take the best of everything” and create their own way of playing. As these revivalists were the main transmitters of knowledge to the following generation, theirs was the unified style that was adopted and used throughout the island.

Today, style can also indicate a player’s individual musical taste within a global soundscape. The master/student transmission of specific stylistic elements, such as in the sanshin gestures described by Matt Gillan (2012), still exists amongst students who follow the revivalist unified style. Certain musicians, however, have adopted stylistic traits originating beyond their national borders (Ireland, Galicia). Their chosen aesthetics reflect the shift from a local and rural society to the recognition of a 'glocal' musical world, where the local and the global are constantly interwoven.

Bangkakaw: Rhythm of the Highlands of Mindanao

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Bukidnon State University Malaybalay City, Philippines

This paper analyses the rhythm produced by the *bangkakaw* – an instrument composed of a log and striking sticks and common to the Manobo of San Fernando, Bukidnon - along its course when people join the initial group pounding it. Considering that there is no immediately observable pattern when the *bangkakaw* is played, this paper uncovers the basic pattern, and the common pattern that overlays each pattern. It determines whether the basic pattern is stationary and repetitive throughout or the patterns are produced by imitation and succession.

This paper ascertains whether other factors produce a pattern: for example, the foot and arm activities while pounding the log, or the hand, eye and verbal signals that would coordinate the players to begin and end a particular pattern. It also determines the length of time each pattern is played, if it measured by the number of repetitions or by the instinct of the leader. Lastly, this paper reveals the type of meter the *bangkakaw* follows, whether it conforms to meter in western music or is in a pure, free meter.

Innovation and Tradition-Making: Comparative Analysis of Three Song Corpora from the Daly Region, Northwest Australia

Linda Barwick
University of Sydney, Australia

This presentation adopts the framework proposed by Savage and Brown (2013) to investigate three corpora of public dance-song from the Daly region in northwestern Australia, particularly addressing their call for undertaking comparative analyses on a regional level. The corpora in question are *djanba* (Barwick et al., 2010), *Walakandha wangga* (Marett, Barwick & Ford, 2013; Marett 2005) and *Muyil lirrnga* (Barwick, 2006; Ford, 2006). While various features of the corpora have been compared in previous publications (e.g. in Barwick, 2011; Marett, 2005; Marett, Barwick & Ford, 2013; Barwick, forthcoming), this will be the first systematic cross-corpus comparison of musical features.

These corpora are good candidates for a regional comparative analysis, having been composed during the same period (1960s-1980s) within a common ceremonial framework by different ethno-linguistic groups within the region, each corpus being of the optimum sample size advocated by Savage & Brown (30-100 songs) and songs across the three corpora being used for dance and of comparable complexity and duration (1-3 minutes). Furthermore, to aid in investigation of any relevant historical

and cultural factors, we have very good contextual metadata from the composers and their communities to establish the author and timeframe of composition of each song, and multiple recordings of ceremonial events over the past 50 years documenting the sequencing and admixture of individual songs and the corpora within the ceremonies.

The case study also presents some interesting challenges: composition of the relevant songs was undertaken in a climate of conscious innovation in ceremonial relationships between the three groups. Composers strove for group differentiation at the same time as forging a new shared tradition of ceremonial inter-relatedness. Both vertical and horizontal transmission within the region, extra-regional influence, polygenesis and schismogenesis—or ‘variegation’ to use linguist Nick Evans’ term for the ‘conscious fostering of linguistic and cultural diversity’ (Evans, 2010; Hiscock 2013)—have all come into play in generation and development of the currently relatively stable clusters of musical features displayed by the three corpora. The presentation will invite discussion of the extent to which similar patterns of musical change emerge from other regional comparative analyses.

Playing Cuban Piano Tumbao: Navigating Ethnographical and Analytical Perspectives to Inform Performance Practice and Process

Hannah Bates

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During my practice-based research into popular Cuban piano playing, at times I struggled not only to emulate the “Cuban” sound, but also to obtain direct guidance as to how to develop this idiomatic sound. It appeared there were elements in the transmission of performance style that were tacitly understood and reproduced from an emic perspective. This raised the following questions: What constitutes a “Cuban” approach to pianistic groove playing? How can these elements be learned from an etic perspective when they are emically transmitted tacitly?

In my paper I seek to elucidate how these questions can be answered through a combined-research approach where ethnography and musical analysis intersect through data acquired from transcription, audio analysis, formal interviews and participant observation. Giving particular attention to pianistic vocabulary, grammar and articulation, I will demonstrate how a combined research approach was essential to advancement of acquired playing skills and how the convergence of analytical and intuitive playing practices contributes to the development of a model for pianistic groove practice and process.

Structures of Rhythm in Mevlevi Music: A Cyclical Analysis Model

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Sirin Karadeniz

Halic University Conservatory, Istanbul, Turkey

In the present talk we will propose a cyclical model for analysing the interactions among various rhythmic layers in Mevlevi music. Three main layers are considered: (1) the sung text that is based on poetic meters (*aruz*), (2) the rhythmic cycles (*usul*), and (3) the melodic line that is based on the particular modal formulae of the related makam (*seyir*). The model is based on an updated version of the circular representations of the rhythmic cycles in the old treatises. The poetic patterns and melodic prolongations are displayed spirally around these reconstructed circular representations of the rhythmic cycles. These will demonstrate the tripartite relations of *aruz*, *usul* and *seyir* and how such

relationships create a rhythmic activity of its own. The implications of these analyses will conclude the discussion, and future directions for the application of the present model will be outlined.

Deep Syncopation in Hindustani Tabla Drumming

Fernando Benadon
American University, USA

This presentation examines fast syncopated rhythms in Hindustani tabla solos by Tari Khan, Zakir Hussain, and others. The term ‘deep syncopation’ is introduced to classify rhythms whose cross-accent falls on metrical grids faster than 100ms, a threshold below which metrical subdivisions begin to lose their perceptual coherence (London 2004). This lower limit is especially robust for fast syncopated music, given the additional processing complexity introduced by out-of-phase (off-beat) accents. While most deep syncopations in tabla drumming are found at faster tempos, they can also occur at slower tempos by way of very fast subdivision values. Most examples will be drawn from *tihais*—thrice-repeated and usually polymetric (thus highly syncopated) cadential patterns that attain rhythmic concordance with the metrical downbeat (*sam*) on the pattern’s final accent (Gottlieb 1993). Since a deeply syncopated onset is more likely to be heard as occurring on the beat rather than off (Keller & Repp 2005), a *tihai* containing deep syncopation maximizes metrical disorientation, thereby heightening the cadence’s tension-resolution effect.

Polyrhythms - A Mathematical Offering

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Georgetown University, USA

Polyrhythms are musical interpretations of sequences of natural numbers generated by dividing a finite interval of the real line into sub-intervals by two or more distinct, relatively prime natural numbers. This paper offers a mathematical approach to a sonic phenomenon encountered in nature and reflected in the music of human cultures. The main result states and proves the ordered pulse-to-pulse distances of any two-dimensional polyrhythm. Other findings include several number theoretic and combinatorial formulas for describing aspects of those rhythms (15 original theorems). All possible rhythms are shown to be sequences of extracts from polyrhythms, and, with musical examples, it is conjectured that the study of polyrhythms may be useful in elucidating some of the complicated interplay between micro and macro scale rhythmic structure. From building polyrhythmic super-structures to stringing segments of polyrhythms to form every conceivable rhythm, this paper also serves to foster an understanding of the significance of different number-theoretic parameters and show how they affect the resulting polyrhythms. This paper contributes a numerical approach that may be used effectively in polyrhythmic composition. I believe that polyrhythms will be used more and more frequently in the future, with applications extending beyond musical realms.

Analysing Transylvanian music by using motion capture

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Techniques based on motion capture can be useful to analyse and transcribe a foreign musical system: Transylvanian music. We invited two professional gypsy musicians (a violinist and a viola player)

from a small Romanian village to the INSERM Laboratory of the University of Burgundy (France). The movements of 38 retroreflective markers placed at various anatomical locations on the body, were measured using an optoelectronic device, Smart (BTS, Milan, Italy). Two musical parameters of the *de meseli* or *de jale* repertoire (“table songs” or “songs of sorrow”) were the objects of study: rhythm and “swing,” defined as the desynchronization between melody and harmonic-rhythmical accompaniment. These parameters are particularly apt to be studied by motion capture because they are directly related to body movements.

Results showed that rhythm is a local variant of the aksak system and is based on two duration units (S=short, L=long), which respect the formula $2/3 < S/L < 3/4$. Performances are characterized by large deviations of the S/L ratio from period to period, which have an expressive function. Deviations are related to a swinging interpretation, consisting of a voluntarily desynchronization between the performers.

A computational approach to representing melodic progression (seyir) for Turkish Makam music

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This study proposes a new computational analysis method and a graphical representation for studying melodic progression, *seyir*, for *makamlar* (plural of *makam*) in the context of Turkish makam music. *Seyir* is considered to be one of the most important dimensions of the makam concept. Most of the historical theoretical texts present the makam concept by describing *seyir* rules. While the concept of *seyir* has short-term and long-term facets, the most explicit information about *seyir* in theory books concerns the long-term dimension. Three main categories are used: ascending, ascending–descending and descending. Until the present, no computational study has presented a detailed analysis of these long-term characteristics.

In this work, we present a new representation developed by gathering time-varying statistics from a group of pieces in a given makam. To obtain the representation, all melodic contours of the pieces are down-sampled to have the same size. On a single graph, the average melodic curve is plotted together with the frequency of occurrence of pitches for the whole collection. This representation shows which pitches are frequently used in which portions of time, thus providing us with an opportunity to observe how melodic contour and pitch emphasis evolve within a single collection.

Re-imagining dyslexia through the sensory and perceptual systems of three xylophone cultures

Robbie Campbell
SOAS, University of London, UK

Informed by my own experiences as a dyslexic musician, this paper aims to both compliment and broaden ongoing research into the relationships between music and Specific Learning Difficulties (SpLDs). Through an ethnomusicological study of three xylophone musicians from different cultures, music is understood as an experience of sensory and perceptual organisation, as well as a

phenomenon of movement. Parallels are then sought with key dyslexia-related cognitive categories such as perceptual organisation and working memory.

By combining Gestalt theory of visual perception with sensory research on cultural variance, xylophone playing is positioned as a multi-sensory experience that critically involves core relationships between visual, auditory and bodily modes. Visualisation of musical structures for mental rehearsal is shown as a common practice technique for musicians, suggesting key associations between musicians, musical instruments and perceptual systems of organisation. Music is further seen as a sensory phenomenon of movement that each individual, genre or culture may organise and adapt in myriad ways, including as an embodied process that naturally reduces strain on working memory.

Musics from different cultures are understood as systems of knowledge, with dyslexia existing as a related cognitive and cultural product. By re-imagining dyslexia as a creative sensory and perceptual phenomenon that co-exists outside of western educational and literacy contexts, attitudes that position dyslexia purely as a deficit syndrome are challenged.

Music idiom, aesthetics and ideology. The case study of Gurbānī dhur-pad

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This paper is part of a wider academic research, and focuses on the analysis of the Sikh Gurūs' repertoire (Gurbānī Sangīt) and its features in relation to other genres of Indian music. Through a comparison with classical (darbārī dhrupad, khyāl) and coeval religious musics, the paper aims to assess Gurbānī as a distinct genre, with peculiar features that fit the Sikh ideology and literary context.

The purpose of this analysis is to identify the autonomous musical consistency of Gurbānī, supported by an ancient corpus of rāgas, tālas and compositions.

The model proposed for the analysis refers to Nattiez's threefold structure based on the musical corpus (data), the metamusical discourse or the native discourses on music (treatises, interviews), and the reconstruction of the indigenous system of thought and repertoire done by the scholar, combining the data and their interpretations (Nattiez, 1987:188).

The making of "National Opera": nationalization of Peking Opera as identity building

Pui Lun Chan
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In 2010, Peking opera was inscribed on UNESCO's Representative List of the Intangible Cultural Heritage. In the corresponding nomination document, a statement claiming Peking opera's significance as an ICH reads: "Peking opera is the most widespread and influential among over 300 opera forms in China. Hence it is also called the 'National opera'." Indeed for almost a century, Peking opera have always been portrayed as a representative of Chinese culture, a national art. I argue that it owes to an ideology of cultural nationalism shared among Chinese intellectuals in the early twentieth century, when the Republic of China needed a panacea to build its national identity. It is noteworthy that the notion of "nationalization" is crucial to Peking opera studies, as it contextualizes the long superior status of Peking opera over other Chinese genres.

In this regard, this paper aims to investigate the whole process of nationalizing Peking opera in the early twentieth century. I will first discuss the above-mentioned ideology of cultural nationalism

raised during the May Fourth Period in the late 1910s. Then I will discuss why Peking opera was chosen, and how the art was recoded so as to contribute to the Chinese nationalist discourse. Moreover, I will discuss how the nationalistic discourse was worked out in real practice. Pushing on Joshua Goldstein's discussion on the 1930 U.S. performing tour by star actor Mei Lan-fang (1894-1961), I argue that his 1922 Hong Kong tour was an earlier example of a realization of the discourse.

The theory of intonation rhythm: to the issue of methodology of analysis of free rhythm

Svetlana Chashchina
Vyatka State University, Russia

The methodology of analysis of so called free rhythm continues to be a critical point in the development of musical rhythmology (both classical music analysis and ethnomusicology). M. In 1996 Clayton had generalized the researches devoted to the phenomenon of free rhythm in Western ethnomusicology, carried out in the second half of the twentieth century, and made a disappointing but fair conclusion of "the lack of suitable analytical techniques" (1996: 331) and "we don't know of any non-Western theories which might be similarly adaptable" (1996: 327). The purpose of this paper is to acquaint western musicological community with the theory of intonation rhythm, developed in Russia in the second half of XIX-XX centuries and practically unknown outside Russia. The paper analyses both the way of formation of theory (in the works by Lvov, Sokalsky, Kharlap) and further prospects of its development. We suppose that this theory can be useful for the analysis of rhythmic systems, purposefully using the irregular durations. We can meet this system in different folklore traditions, in medieval music and in contemporary music, especially developing the improvisational forms.

Beat detection and computer improvisation in traditional music from Madagascar

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There is a cultural dimension in the perception of beats that can be illustrated by simple cases of people outside a given cultural context misunderstanding the position of the beat in a given musical sequence. Thus it seems that positions of the beat are not completely defined in the physical audio signal, and furthermore that despite widespread hypothesis inspired by Lerdhal and Jackendoff's theory, positions of the beat are not computed in a uniform way by universal cognitive mechanisms.

If one wants to go further in the investigation of the cultural dimension of beats, a simple idea is to ask people to tap to the music. This is done both by ethnomusicologists working in Arom's tradition, and by cognitivists making experiments in music perception. But it leads to the question of how to prove that people's tapping does really correspond to the beat? For instance, how to be sure that their tapping is not contrametric? These questions will be discussed and illustrated by examples that we have studied during ethnomusicological fieldwork in Madagascar. Moreover, they are also related to researches conducted in the field of improvisation with the computer. We are working on a musician-machine interaction system that learns in real time from human performers and generates improvisations in the style of these performers. The improvisation kernel is based on sequence modelling and statistical learning. It is derived from earlier works on the OMax software done at IRCAM, but the new issue addressed here is to take into account an underlying metrical structure. Thus the system must be aware of the positions of the beat. We will show examples of music generated by the system in the style of the *zyther marovany* from Madagascar and discuss the

reactions of native people listening to these virtual improvisations, particularly from a rhythmic point of view, in situations where they are asked to play percussion instruments in synchronization with the machine.

Between formality and informality: how far can generative theories of music analysis be applied to Hindustani classical performance?

David Clarke
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As exponents of an essentially improvised practice, vocalists in the North Indian *khyāl* style (as well as their fellow instrumentalists) confront in every performance the challenge of creating their material on the spot. As is well known, they do this within the twin constraints of *rāg* and *tāl*; and we might hypothesise whether those constraints are *generative* – in the way that a linguistic generative grammar allegedly underpins human beings' ability to produce a potentially infinite number of sentences from a finite set of rules.

If this were the case, then it may be worth testing the usefulness of generative models of music analysis to the Hindustani classical repertory. Here I seek to develop some of my earlier applications of Lerdahl and Jackendoff's generative theory of tonal music to North Indian *rāg* performance. While their methodology is paradigmatically oriented towards Western classical music, there is an opportunity here to test out their claim that their principles may have inter-cultural (even if not universal) pertinence.

Yet if their model represents a formal theory, one tension that is likely to transpire in the encounter with the *khyāl* style lies in the latter's resistance to formality – or, more precisely, its place on a continuum between formality and informality. One question that arises is whether we can fully model a classical North Indian *rāg* performance as a recursive tree structure in the way that Lerdahl and Jackendoff do for Western classical music (a question of cognitive capacity and stylistic appropriateness). Another question concerns the role of metre in defining melodic salience. Whereas in Western tonal music a strong interaction between metrical and melodic prolongational principles can be demonstrated, in a *khyāl* performance this may be more equivocal. Nowhere is this more apparent than in the earlier phase of a *ba_a khyāl* (the stage in a raga performance where artists show the depth of their improvising skills). Here metre and melody are much of the time deliberately uncoupled – the vocalist's generation of *rāg*-based melodic material frequently attenuating (though never breaking) the connection with the underlying *tāl*, or rhythmic cycle.

In this presentation, then, I explore some of these issues through analytical case studies of *ba_a khyāl* performances. I seek both to use Lerdahl and Jackendoff's principles to illuminate the musical goings on, and to use the music to test how far, and with what need for modification, their methodology can be applied.

Towards an understanding of the timbre of the Japanese Koto: An advanced computational method for analysis

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Timbre is a core element of traditional performance in Japan even though the term itself is open to interpretation. This paper describes a new multidisciplinary method to investigate the tonal colouring

of the Japanese *koto* (zither) and its performance. In this method, the instrument's sound is simulated in a process that generates the note and its spectrum from first principles (*ab initio*) by creating a 3D model within the computer using the Acoustics module of the Comsol Multiphysics software. The acoustic pressure fluctuations (at 44,100 samples per second to mimic the CD sampling frequency) at ten points around the instrument are analysed to understand variations in the instrument's resonance along the sounding body. These are converted to sound (.wav) files and visual (.avi) files that document the instrument's overall acoustic response. The results can then be linked to qualitative descriptions of technique and aesthetics derived from more standard analytical methods, traditional sources of musicological literature, and performance practice. It is argued that this work lays the foundation for new, highly nuanced modes of description of historical and contemporary soundscapes of musical instruments in Japan and globally.

You could sing your way out of pain: music and resistance at Robben Island Prison

Janie Cole
Music Beyond Borders

Music was a crucial force for resistance in the anti-apartheid struggle in South Africa. Drawing on unpublished archival documents and first-hand interviews with former political prisoners of Robben Island's maximum-security prison, where activists led by Nelson Mandela were imprisoned from the 1960s on, this paper examines the development of musical activities at the notorious apartheid prison and reveals how music provided a mode of critique and a strategy for undermining the white supremacist government, transcending political, linguistic and tribal differences to unite an oppressed people against a common enemy.

Music was key to survival in prison life as both political and personal expression. It created a profound sense of community with the formation of choirs/bands, and organized concerts of old/new repertoires (including Handel's Messiah and a setting of the Sharpeville Massacre) and singing competitions drawing on indigenous performance genres like 'isicathamiya' and 'ingoma' from the black townships. Music was also a tool to survive hard labour, where traditional Zulu migrant workers' songs expressed accounts of racial repression. Lastly, music-making allowed for social interactions between white warders and prisoners, leading to the breakdown of racial prejudices and the initiation of a process of reconciliation.

Few ethnomusicological studies have focused on music during the apartheid era; no detailed research has ever been undertaken into its essential role at Robben Island. This model of cultural expression as advancing social change can serve for the broader study of music used by individuals suffering and protesting the violation of human rights under oppressive regimes.

Music, participation and interaction

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When we engage with music, we do so in culturally-appropriate ways. In recent Western cultures, listening has become privileged as *the* culturally-appropriate mode of engagement, and emotion or aesthetic experience as *the* proper forms of our response to music; these conceptions have been the foci of most scientific research into our engagement with music. Music is thus conceived of and investigated as a medium for presentation or display, reflecting or embodying abstract structures that we experience affectively or aesthetically. But in many world cultures—including our own—music is an interactive, participatory medium that has many different social roles and cultural embeddings, and

participation in music may have consequences that are not limited to the affective or aesthetic domains. I shall suggest that by conceiving of music as a primary human mode of interaction, and by situating this idea within recent research on the human capacity for complex interaction, we can develop novel and effective approaches to exploring and understanding music and its functions in human life.

I shall argue that "music" is most productively construed as a communicative medium that is cognate with, and complementary to, language in the form of speech; the behaviours, sounds and concepts that we can characterise as music and as speech reflect aspects of the human communicative toolkit that are optimised for somewhat different ends. While we can think of speech as a deployment of communicative resources that can be used to change the information about states of affairs in the world shared between members of a culture, from an interactionist perspective music constitutes a deployment of similar communicative resources that can elicit the *sense* that each participant has the same awareness of the world and of each other. This approach can help to clarify relationships between music and language, in the form of speech; it can begin to resolve some of the implications of recent research that has shown aspects of music to have powerful effects on memory and social attitude; and its implication that music as a mode of interaction may possess humanly-generic properties provides us with new perspectives on the investigation of music beyond the bounds of western culture.

“Balochan” : analysis of a desert folksong in two contemporary Rajasthani performance contexts

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With its roots in the Sindh region of modern-day Pakistan, “Balochan” is a traditional folksong that survives in contemporary performance, via the professional hereditary music activities of the Langa and Manganiyar communities of Western Rajasthan. Both groups perform their own distinct versions of the song, using their own unique brand of melodic instrumentation for accompaniment – the bowed lute kamaicha for the Manganiyars, and the Sindhi sarangi for the Langas – yet the lyrics, the rhythmic context, and the underlying melodic framework of the song, all evidence fundamental similarities between the two versions in performance.

This paper will present a comparative analysis of the song “Balochan”, using new audio and video recordings taken from Langa and Manganiyar contemporary fieldwork contexts between October 2013 and March 2014. Particular attention will be paid to the musicians’ concept of raaga, which is perhaps one of the most intriguing aspects of the Langa and Manganiyar collective musical knowledge base: the most advanced musicians from both communities demonstrate some conceptualization of raaga; however, the folk music (lok sangeet) raaga framework differs in crucial but little-understood ways, from the system expounded by shaastra sangeet musicians in the North Indian classical tradition.

Using analytical methods drawn from ethnomusicology, musicology, and cognitive anthropology, this paper will show how the musicians construct their own unique interpretive versions of the song “Balochan” in performance. A comparative linguistic analysis of the lyrics will also highlight dialectical differences between the Jaisalmeri Marwari dialect of the Manganiyars, and the Jodhpuri Marwari dialect of the Langas.

Indian Classical Music: from strict composition to free improvisation

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Every khayal performance of Indian classical music being unique, a comparative approach is necessary to meticulously analyse it. By comparing recordings of the Hindustani violin lessons at the Hubli-Gurukul (India, August 2012-2013) and others from Hindustani raga performances, I chose to study the way Rajam Dynasty musicians transform the structural and structuring elements of a *rāga*. I used several representations, technological and digital support, with other forms of notation to explain the ornamentation and cognitive processes used in a number of improvisations: all of this contributing to a global comprehension of the whole musical piece.

I focused principally on analysing *rāga* Malkauns and Yaman, taught to me by Dr. N. Rajam, and also the performances of several musicians of the Rajam Dynasty (S. Khuntia, Sangeeta Shankar, and Dr Rajam). I created a theoretical model of the various structural and structuring elements in the Gayaki Ang tradition, using several kinds of software (Acousmographe, SonicVisualiser, OpenMusic).

This analysis will reveal the scope of improvisation in Indian classical music, particularly the manner in which the musical elements are constituted, from strict composition to free improvisation.

The “thought-language-hand link”: implications for co-music manual gesture in the instrumental music lesson?

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Among cognitive linguists, there is debate about the origins of speech and the hand gesture that accompanies it. One position about the relationship between these two “unlike semiotic modes” (one static and conventional, the other imagistic and idiosyncratic) is that they are inseparable, forming an imagery-language dialectic that functions as a single expressive unit (Goldin-Meadow 2003, Kendon 2004, McNeill 2005, 2012). In his recent book *How Language Began: Gesture and Speech in Human Evolution* (2012), psycholinguist David McNeill theorizes that speech and gesture co-evolved via an adaptation he calls Mead’s Loop: a “twisting” of mirror neurons that allowed one to experience her or his own gestures as if they were coming from someone else. As posited by McNeill, a “thought-language-hand” link resulted from this adaptation, bringing the imagery and social meaning of one’s own gestures into the same area of the brain that orchestrates speaking and gesturing, creating a “speech-gesture unity” that was naturally selected.

In this paper, drawing on a cross-instrument set of video illustrations from multiple traditions, I suggest that in the context of face-to-face musical transmission we find not only evidence of thought-language-hand synchrony, but that a thought-music-hand unity comes into relief. My larger aims are to 1) locate specialized actions of musical transmission within a more generalized human “utterance system” as elaborated by cognitive linguists, and 2) promote further consideration of what a thought-music-hand link may tell us about teacher actions and the multi-lectic of musical experience.

The concept of ‘Tenunan’ [Weave]: a study of compositional strategies used in “Tenunan II” by Tazul Izan TAJUDDIN (b.1969)

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Tazul Izan TAJUDDIN (b.1969) is one of the most influential Malaysian composers in the present Malaysian contemporary music scene. He has received many prestigious awards including the first prize in both Toru Takemitsu Composition Award 2002 and Lutoslawski Composition Award 2005. Research reveals that his signature musical language incorporates cultural elements, especially Malaysian and Indonesian, within his European-derived medium.

One of Tajuddin's signature techniques is the use of a 'pattern-based' compositional system, which he acknowledges is inspired by Iannis Xenakis (1922-2001) and Morton Feldman (1926-1987) who have created similar systems that draw on patterns of natural phenomena and Persian rugs respectively. Utilising "Tenunan II" (2001) for flute, celeste, piano, percussion and string orchestra as a case study, this paper investigates the ways in which Tajuddin applies the concept of 'tenunan' [weave] as the basis for his pattern to bring together different musical and cultural traditions including Islamic arabesque, batik and gamelan sonority. Score analysis reveals Tajuddin's meticulous strategies that weave together the selected traditions through structure, time, pitch and rhythmic organizations, ornamentation, and instrumentation. It is argued here that Tajuddin's innovative use of the concept of weave mediates multiple cultures to offer new insights into 'pattern-based' compositional systems while simultaneously supporting his chosen role as a broker for cross-cultural contemporary music in Malaysia.

Ethno-World: World Music in Practice? An ethnomusicological study

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In a globalised world at the age of digital communications, traditional musicians are not short of opportunities to encounter diverse musical influences. Nonetheless, while a profusion of studies have investigated the changes brought by global communication via the internet, relatively little has been considered about recent world music-related initiatives outside the digital sphere, such as "Ethno-World", a project instigated by Jeunesses Musicales Internationales. Challenging participants' perceptions of their own music as well as other cultures, "Ethno" gathers young folk musicians from across the globe, mutually teaching their music for a week and then performing as a world music ensemble.

Sharing and understanding foreign traditions is fundamental to the ethos of "Ethno", and it provides a genuine insight into different cultures. Since 1990, it has drawn together several hundred young musicians, in countries as varied as England, Sweden, Croatia, Estonia, Jordan, Uganda, Australia or most recently India, as well as the "Ethno of the Road" variation, performing at festivals across Europe. A large number of participants wish to pursue a career as a professional folk musician in their home country and intend to integrate features of the musics learnt at "Ethno" in their interpretations of their own traditional music and compositions. Thus, as well as making connections between folk music scenes worldwide, "Ethno" also greatly influences repertoires, interpretations, perceptions, and encourages certain types of musical hybridisation. Examining these processes is particularly valuable in understanding and analysing current world music.

This paper, based on interviews with participants and organisers at the events, explores the impact that "Ethno" has had on folk musicians, the broader traditional music scenes and their reception and perception across the world.

All things being equal: the problem of reduction in second practice jazz

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University of Kentucky, USA

Wayne Shorter's compositions of the early 1960s exemplify a repertoire that Keith Waters recently called "second practice jazz." While prior scholars have analysed this music using reductive techniques, this paper aims to refine and systemize this procedure through close examination of methodological issues. In particular, like the second practice of the European tradition, works in this idiom resist monotonal characterization. I hope to show that reliance on rhythmic criteria can produce musically intuitive reductions even when pitch-based context is ambiguous.

The proposed technique joins Steven Strunk's work on bebop with Lerdahl and Jackendoff's *Generative Theory of Tonal Music*. Strunk's "layered approach" relies on time-span analysis to demonstrate how bebop chord progressions are generated, from background to foreground, through particular harmonic operations. Lerdahl and Jackendoff's rule system, published only four years later, formalizes the procedure for time-span analysis based on perceptual principles. Their tree structures are used to visualize hierarchical interpretations of Miles Davis's "So What" and John Coltrane's "Giant Steps," second practice precursors that clarify differing methodological concerns.

Diversity of performance timing in Balkan music

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Many songs and dance pieces from the Balkan Peninsula employ *aksak* meter, in which two categorically different durations, long and short, coexist in the sequence of beats that performers emphasize and listeners move to. Scholars and performers of Balkan music and dance have noted a qualitative flexibility in the relative beat durations of certain *aksak* meters, and the present paper quantifies this observation by analysing a selection of percussion performances, recorded in various contexts, that all share a particular *aksak* beat sequence, long-short-short. Measurement of the average durations between drum strokes indicates that these percussionists use numerous highly consistent timing patterns that differ from one another in the proportional relationships of their beat durations. Following Justin London, I interpret this diversity of performed timing as an indication that the general metric organization of the long-short-short beat sequence corresponds to many different particular meters. Moreover, in analysing details of timing on individual recordings, I speculate that a musician's training and the function of a performance can modulate timing relationships that might otherwise seem, from study of an isolated performance, to be dictated by the relationships of purely sonic features such as rhythms and pitches.

"Reach One, Teach One from My 'Hood to Your 'Hood": towards a global model for HipHop pedagogy

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In recent years, HipHop Pedagogy has progressed from a theory-based discipline into an international community of practising 'HipHop educators', comprised of teachers, development programmes and several academic institutions, in locales as diverse as Europe, the Middle-East, and North and South America. These 'HipHop educators' provide a curriculum in formal subjects such as English, Maths and Science, taught through a culturally significant reality pedagogy based on HipHop. Statistically,

many of these projects have shown significant success in engaging with marginalized or at-risk young people who have previously underachieved in formal educational settings. Resultantly, plans are already underway to establish the UK's first 'HipHop school', which will offer a formal GCSE and AS/A2 curriculum. Given the worldwide spread of practicing 'HipHop educators' and the diversity in linguistic, cultural, political and religious factors associated with their respective locales, I ask: how are programmes of HipHop pedagogy implemented from region to region? How do different sociocultural perceptions of HipHop affect its effectiveness in engaging with young people when compared to other musical-based pedagogies? Can we arrive at a global model for HipHop pedagogy? I will draw upon my own experiences as a London based Iranian HipHop artist and part-time facilitator of a Hip-Hop education programme at a London Pupil Referral Unit to examine the factors involved in the formation of a global model for HipHop pedagogy with reference to Emdin's (2013) work on Neo-Indigenous Cosmopolitanism, and will present findings from original fieldwork carried out in London, UK, Ohio, USA and Tehran, Iran.

Revisiting tune families in shape-note hymns

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In many early American churches—and some churches today—congregational singing consisted of *a cappella* singing using words-only hymnals. Over generations and in the absence of notated music, local church communities developed their own versions of common hymn tunes. These versions form a *tune family*—that is, a collection of tunes, sacred or secular, that are variants of the same melody. Unless we know the original melody, however, it is not always clear which tunes belong in the same family. Moreover, when printed shape-note music was introduced in the early 1800s, tunes were sometimes varied by the conscious act of an arranger or editor.

Students of American shape-note hymns who were active in the mid-twentieth century, such as George Pullen Jackson, Charles Seeger, and Samuel Bayard, have relied on their own intuitions—good though those intuitions were—rather than attempting to find parameters for identifying a tune family. More recently, there have been quantitative measures of melodic similarity developed that seem reasonable in this context and have withstood empirical testing—see, for example, Urbano's geometric model (2013). However, although the concept of tune family cuts across ethnic and geographic boundaries, the category of American shape-note hymn tunes is quite narrow. In this repertoire, we have extra information—the poetic meter of the hymn text—that parses each melody into phrases. The poetic meter also tells us which musical notes correspond to accented syllables in the text, so we can map one tune onto another.

The question of quantifying similarities between hymn tune melodies is especially relevant to large databases of eighteenth- and nineteenth-century hymn tunes such as Temperley's *Hymn Tune Index* (1998) and Pappas' *Southern and Western American Sacred Music and Influential Sources* (2013). At the moment, these are searchable by exact melodic matches, but not by near matches. In this paper, we consider some of the tune families identified by George Pullen Jackson and others, propose quantitative measures of distance between their constituent melodies, and explore the possibility of using these measures to differentiate between members of unrelated tune families.

Music and Society in Cyprus: The Local and the European during the early 20th century

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This paper will be concerned with the study of music in the case of the Republic of Cyprus, pursuing a new approach in the writing of the island's musical history. The Republic of Cyprus is an example

of a place where, during the last century, various representations of cultural heritage emerged, including music culture. The political problem of the island, known as the “Cyprus Question”, affected and continues to affect many aspects of life on the island, including the way local and European music traditions were understood by different groups of people, such as the two main communities as well as the minorities of the island during specific periods.

This presentation pursues the examination of the “social history” (Raynor 1972) of music in Cyprus during the beginning of the twentieth century, demonstrating that “musical practices are usually dependent on social, economic and cultural interactions” (Herbert 2003: 150). It focuses on the relation between the development of the musical culture throughout the Greek Cypriot population and the social and economical circumstances existing on the island during the early British colonial period. It draws on products of the island's first printing press of 1878, as well as records kept at the Public Information Office and the Archive of the Archbishops of Cyprus. Moreover, documents of the State Archive provide further information about the impact British colonialism had on the gradual spread of European music and its consequent influence on local musics.

Ambivalent pitch: characterising Mizo pentatonicism

Joanna Heath
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When the Mizo people in Northeast India first encountered the western hymns of the missionaries in 1894, they were sung with enthusiasm. The subdominant and leading tones were notoriously difficult to pitch, but they attempted to remain as close as possible to the tunes, notated in tonic sol-fa from the beginning of the twentieth-century. After a series of spiritual revivals inspired in part by the 1904 revival in Wales, Christianity rapidly became the dominant religion in the small remote region then known as the Lushai Hills, now the Indian state of Mizoram. By 1919, the introduction of drumming and dancing in church was also accompanied by a melodic shift towards a sound that felt more indigenous. Western diatonic hymn tunes were reduced to a nuanced pentatonicism, and original songs were composed in the same style, which came to be known as lengkhawm zai.

In comparing the western melodies to their sung forms in lengkhawm zai, as well as in studying the original compositions, the idiosyncratic nature of each of the five pitches becomes apparent. The ambivalent nature of the third is particularly interesting, lying between a major and minor third but fluctuating in pitch to the extent that its identity remains ambiguous. This is exacerbated by the tendency of pitches, especially the third, to fall. This paper presents an analysis of the five pitches of lengkhawm zai, using methodology that may in turn be applied in other analytical contexts.

Malandros and Otários: the use of Samba in Tropa de Elite and Tropa de Elite: O Inimigo Agora É Outro

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The use of samba in the films *Tropa de Elite* (*Elite Squad*, 2007) and *Tropa de Elite: O Inimigo Agora É Outro* (*Elite Squad: The Enemy Within*, 2010), focuses on the type of samba sometimes called the samba malandro. The samba malandro (= hoodlum samba) foregrounds the culture of lower-class Brazilians who live in the shantytowns, semi-marginal people who are unemployed, misfits in society: the malandros (hoodlums).

This spivish life, including resistance to work and the refinement of skills to deceive people who become their otários (suckers, fools, the victims of the malandros), is portrayed in both films, and

samba is associated with such features in both films as well. The analyses of selected scenes in *Elite Squad* will explore how samba can portray the character of Fábio as an example of a malandro, Neto as the otário, and how these roles are inverted throughout the story of both films.

As a key musical feature, syncopation in samba will be analysed as a reflection of the smooth talk of the malandro articulating his next moves to find his otário. The aim of this paper is to explore how the theme of the malandros and otários is depicted by samba in these two films (among many other Brazilian films). From the perspective of a different music and global tradition, the analyses show how musical semiotics can help films to depict, interpret, contextualise and evaluate cultural, political and social features of recent Brazilian history.

Leaping Dances in Crete: Tradition in Motion

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Throughout the last decades a new enthusiasm for local music and an increasing trend towards re-discovering old local dances and tunes gained momentum in the island of Crete. In the presented analysis I combine an ethnographic with a comparative approach, driven by audio signal analysis tools, in order to address the question of how far tunes that serve to define local and micro-local identities differ in certain aspects with regard to the sound of performances. For this I investigate three sound aspects of Cretan leaping dance performances: tempo, rhythmic stress patterns, and contained melodic patterns. I accompany the analytical results with information obtained from my interviews with dancing teachers and musicians. My results depict small but significant differences depending on the dance, but also underline the great homogeneity of the repertoire. The results imply that all three aspects contribute to the fine differences between the dance tunes, with a clear emphasis on the melodic phrases. Therefore, this study with its findings and its computational tools paves the way towards the establishment of dictionaries of characteristic melodic phrases of Cretan dance repertoire, as well as of dance tunes with similar morphology.

What do historical notations teach Korean musicologists?

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The strong historical dimension of much Korean musicology is reflected in a myriad of close and detailed analyses of surviving notations from the fifteenth century onwards, duly enabled by a series of more than forty facsimile volumes of old scores, manuals and treatises from the archives of the National Gugak Center (*Han'guk ûmakhak charyo ch'ongsô*; 1981-2006). There is a sense that transcription, translation and annotation – the latter through the description and definition of musical characteristics – is considered to impart an element of objectivity to the musicological exercise, while celebrating, in a suitably Confucian manner, the considerable literary heritage of Korea. Not surprisingly, the results of research by Jonathan Condit (1976; 1979; 1984a; 1984b), and more broadly the research by Laurence Picken and his students and associates on Chinese and other East Asian musics, has been politely received. But, although the work of such scholars is deliberately mirrored in two volumes by the two Korean pioneers of musicological method, Lee Hye-Ku (1909-2008) and Chang Sahun (1916–1991), this is as far as it goes. Korean musicologists focus on different aspects of surviving notations, and see no need to embrace such foreign scholarship. This paper will explore how different interpretations of old notations have come about, using recent arguments about music and dance in state rituals (introduced in Howard 2012) to show how the worlds of historical musicology and contemporary performance practice interact.

Sliding inflections of Qin music, the associated aesthetic concepts and Taoist philosophy

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The qin is plucked long-string instrument with soft sound. Its sliding inflections are widely applied. Sliding qin tones are produced after the initial pluck to extend and continuously modify the pitch. These extensions are faint and soon decay to the extent that their pitch gradually becomes hard to discriminate and ultimately disappears into the faint sound of frictional sibilance. This forms the basis for qin aesthetic conception of soundlessness (wu sheng 無聲).

Qin aesthetic interpretations about sliding tones reveal the influence of Taoist philosophy, for example, the dualism of Yin/Yang and the concept of emptiness (kong 空, or wu 無). Other associated aesthetic interpretations studied in this paper include the following: (1) The characteristic balance between sliding and plucked tone is referred to as the balance of the vague (xu 虛) and the substantial (shi 實). (2) The way that decaying sliding inflections give a sense of an object receding, which in turn evokes the qin aesthetics of ‘distance’; (3) the alternation and the change between discontinuity and continuity arising from the inaudible sliding tones within qin melodies.

By addressing the music phenomena as described above, this paper aims to understand the way in which traditional qin music has been perceived and received by enculturated listeners. This paper analyses selected recordings of qin pieces and explores how sliding inflections are produced, perceived, and conceptualised as Taoist aesthetic meanings. It crosses disciplines of music analysis, traditional qin studies, as well as music perception and cognition.

Tone-tune relationships and indigenous musical theory in Kam Song from Southwestern China: research techniques and approaches

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Implicit knowledge of the musical theory underpinning the unique and rich Kam (in Chinese, Dong) minority singing traditions from southwestern China—including the important Kam “big song” tradition inscribed on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity—is still held by many middle-aged and older Kam villagers. However, such theory has never been comprehensively articulated or formally studied. This paper describes the development and employment of an integrated set of musical research techniques that are both institute-based (digital analysis of recordings; research into related secondary sources) and field-based (drawing on 24 months’ ethnographic fieldwork in Kam villages since 2004) to permit articulation of the primarily pitch-based relation between the Kam language and Kam song melodies (so-called “tone-tune relationships”) that form a central component of indigenous Kam musical theory. Through using these approaches to explore tone-tune relationships within Kam musical theory, this paper thereby aims to expand current techniques and models for researching the musical theory of localized cultural communities—particularly communities for which creative solutions to musical research problems are demanded—and also outline a practical approach for researching musical theory in tonal-language-speaking communities.

When Bima Gets His Rage On: semiotics in aural disorientation in Ladrang Bima Kurdha Pelog Barang

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I experienced the most aurally disorienting moment in a Javanese gamelan ensemble as I sat in for someone on *kempul* at a performance of *Ladrang Bima Kurdha*. A discrepancy between the melodic and structural frameworks resulted in my perceived aural ambiguity.

I analyse musical elements of *Ladrang Bima Kurdha*, each of which create targeted effects on the listeners. First, I use the contour theory to measure the similarities among melodic contours, and to discuss how melodic contours organize pitches into phrasal units. Secondly, I study the vertical aspect—the density of simultaneous voices. The relationship between melodic phrasal units (revealed by contour analysis) and textural periodicity (provided by structural punctuations) exposes a discrepancy that creates this aural ambiguity. My third analytic method, semiotics, addresses what this aural disorientation signifies. *Bima Kurdha* (“Enraged Bima,”) portrays Bima, a hot-tempered giant from the *Mahabharata*. Bima’s rage upsets the harmony of the world, breaking the synchronicity between melodic unit and structural frame. Together with the semantics of the snare drum in the post-colonial context of Java, three musical topoi— asymmetrical phrasal units, discrepancy between the melodic and structural frameworks, and snare drum—are strategically integrated to create a musical picture of the trembling anger of Bima.

Is there a Northumbrian pipe tune style? Analysis from specific to general

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It seems relatively unproblematic to state that the northeast of England has produced a distinctive form of bagpipe, and that this instrument has a distinctive playing style even when playing music originally conceived for other instruments or voices. The Northumbrian smallpipes is physically distinguished from other bagpipes by its closed chanter, which permits the use of detached and staccato notes, and these are generally regarded as essential to idiomatic Northumbrian smallpipe playing. What seems harder to agree on is whether the instrument has a distinctive repertoire with compositional characteristics amenable to analysis. The Northumbrian smallpipes is sometimes described as a bagpipe invented to play fiddle tunes, and even tunes composed specifically for the Northumbrian smallpipes may show features that suggest the influence of other instruments. Yet there is some degree of consensus among pipers as to which tunes are most typical of the instrument and its tradition, and efforts have been made since the mid-nineteenth century to analyse the style of these tunes. This paper reviews these previous theories and asks whether a more precise description of Northumbrian pipe tune style is possible using the analytical methods now available. In doing so, it also seeks a systematic method for progressing from the “specific” analysis of individual tunes to the “general” analysis of a style.

The cognition of time in Korean traditional music

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This paper will analyse a Korean composer who is devoted to new music for Korean traditional music, Sngkn Kim (b.1967). The composer had also studied the taegŭm (Korean transverse flute) and

has developed an understanding of the performer's perspectives on music making. The intimate relationship between musicians and music opened his eyes to the contexts within which performances actually takes place.

His composition, 'Taegŭm Quartet 2006' (2006), draws on elements from the traditional piece, 'Sujech'ŏn', dating from the Chosŏn dynasty (1392–1910). The concept of time in the piece, particularly interested him; slow tempos allowed the parallel movement of instrumental clusters which had formed through subtle changes of timbre and pitch. I will compare the Taegum Quartet 2006, with 'Sujech'ŏn' as a historical source and with Isang Yun's compositions. Isang Yun (1917–1995), was the most famous Korean composer of the post-war generation. Yun, who studied Western art music and settled in Germany, gained an international reputation as a composer who created an Asian 'tone'.

'Taegŭm Quartet 2006' uses the philosophical foundation of 'Sujech'ŏn,' as it connects melodic components with the overall structure of the entire piece. The Haupttön (main tones) technique of Isang Yun can also be applied on the larger scale. However, Yun's perception on the vertical movement of harmonic structures is based on the European avant-garde and this challenges horizontal movements of individual tones. Sngkn Kim is critical of Yun's ideas on the movement of tones, which he felt were detached from the traditional sounds that form their essence. To Kim, then, the most important factor is a proper understanding of the original context. Korean traditional music must rely on individuals who are willing to accept the tradition as a whole by learning it first-hand, not as fragmented components that assist with some other ideology.

Harmony in Bulgarian Music: village style accompaniment from the 1920s to the 1990s

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The music of Bulgaria is an excellent example of a complex musical tradition that combines Middle Eastern makams, pentatonic scales, diatonic modes, microtonal structures, and major/minor collections. This presentation analyses trend-setting pieces from the repertoire and traces the formation of a unique harmonic system found in Bulgarian village music. The Bulgarian harmonic system developed gradually, starting from integrating primary triads, through vertical displacements and chord substitutions, to borrowing progressions from modern jazz.

At the beginning of the 20th century, Bulgarian musicians began adding chordal progressions to preexisting village style repertoires. Recordings from the 1940s-1950s illustrate harmonic preferences for primary triads. During the 1960s-1970s, tambura players further expanded village style harmony by adapting chord progressions from arranged ensemble folk music. In the 1980s Bulgarian wedding style had a strong influence on village style accompaniments. The two styles from this period are difficult to separate, since most tambura players also played guitars in wedding bands. Recordings from the 1990s illustrate far more advanced harmonic vocabularies in comparison to recordings from the previous decades. The tambura players in the 1990s had higher musical education and expertise in a variety of musical styles such as the wedding style, rock, and jazz.

'Lineages of Knowledge': Apprenticeship among the Mande Hunters of Mali

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In Mali, West Africa, hunters form secret societies which hold regular ceremonies that can be either public events, or private and sacred ones. Musical performance is central to all hunters' events and is

often recorded and released as cassettes but also transmitted through specialised hunters' radio shows. In song, a hunters' master musician, accompanied by his apprentices, calls hunters to dance. He challenges powerful hunters to step out of the audience and demands from them his share of the hunt. In doing so, he moves around the performance site, dancing and singing the praises of hunter-heroes. Based on eighteen months apprenticeship under a master hunters' musician, this paper considers aspects of music cognition among hunters, and examines the relationship, interaction and impact of hunters' 'lineages of knowledge' on this specific musical tradition, in order to answer a critical question: can intersubjectivity, experiential fieldwork and ethnographic narrative help cultivate new modes of musical description in order to grasp and comprehend cultural and social dispositions such as music making among the Mande hunters? Furthermore, are such approaches capable of navigating the vast multicultural soundscape of the twenty-first century?

Linear Polymeter: the notion of compound metrical directionality in African and neo-African musical traditions

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This paper suggests a fundamental redefinition of the notion of polymeter based on an expanded interpretation of metrical ambiguity at the level of a musical phrase (e.g. a melodic or percussive *ostinatos*), and posits the existence of a paradigmatic multi-metrical dynamism already present among the subdivisions of the individual isochronic beat structure, whereby properties of both binary and ternary directionalities are merged in rapid cyclical succession – effectively creating a new, compound quality of motive energy.

A structural integration of these two metrical directionalities forms the core of a number of African and African-derived musics including various Afro-Brazilian genres like Samba and Maracatu, African Dagomba, Wolof or Gnawan traditions, and Son and Rumba as well as Colombian Currulao music from the Caribbean region, while its musical characteristics have tended to elude descriptive notational representation.

It will be argued that enculturated performers do not conceive of this type of micro-timing as a deviation by some quantitative factor from a normative yet hidden quantized regularity, but engage its expressive potential within a cognitively-driven process of deliberately controlling qualitative aspects of the music's overall metrical salience.

This proposed, performatively-informed notion of polymeter attempts to interpret this highly fluid subdivisional matrix in terms of what might be more aptly called "temporal morphing," whereby individual attacks function in and can be interpreted from either metrical perspective. Such emergent polymetricity is hence not to be confused with that of a polyrhythmic yet nevertheless mono-metric texture based on one underlying isochronic subdivision of typically 3 or 4 units.

Self-exoticisation and identity negotiation in mainstream Hebrew music

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The strength of the klezmer revival movement over the past forty years has left non-Yiddish Jewish mainstream music in an unprecedented position, beyond the realms of conventional Jewish music. Aided by technological advances in digital music sharing, Sephardi, Mizrahi, Ladino and Israeli artists have successfully created a style demarcated against Yiddishland's musical output, and in so doing have forged an unlikely stylistic alliance in what might be termed the 'New Hebrew' style. Characterised by use of Ivrit, maqam, and instrumentation (oud, percussion) and rhythmic devices

(tabla, darabuka) of Arabic origin, the style undoubtedly draws strongly upon Israel's cultural heritage. Use of non-Jewish Semitic devices is a new departure for these musics, and is replicated in the image creation and projection of the Hebrew artists in question. Proponents of this genre are thus forging and exporting a new, exoticised Jewish identity.

Rather than speaking of mainstream Hebrew music in ethnic, national or geographical subcategories, a more appropriate and meaningful method is proposed, based upon examination of both musical and extra-musical characteristics of individual artists. Through diverse case studies, I examine the lyric topic, lyric language(s), instrumentation, rhythmic patterns, tonality/scale use, image projection and target audience of Hebrew musicians. By tracking pairs of characteristics diagrammatically, using graph formats, the discrepancy between ethnic/national/geographic origin versus musical/extra-musical characteristics, self- and other-perceived identity becomes evident.

Prachan: music, competition, and conceptual fighting in Thai culture

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Prachan is a form of music competition unique to Thai music society which has played a critical role in the evolution of Thai Classical music. Although traditionally, there is no judgement by the juries and no declaration of the winner, it is a very intensive competition, requiring a spontaneous response to the music played by the opponent. The phenomenon of Prachan has not yet been researched in detail, though it is representative of the intellectual knowledge of Thai music. Prachan arguably offers rich new insights into music competition in relation to the conflict between music schools and the fundamental concepts of Thai culture. Focusing on Prachan-Piipaata-Saepa competition at Wat-Prapilane and Wat-Sripawat in Bangkok in October and November 2012, I aim to investigate the Prachan in terms of musical knowledge through the conceptual response in music competition in order to reveal the concept, strategy, and the response of the audiences as well as the wider surroundings of the music competition. Based on my interviews with musicians and music scholars as well as participant observation in Prachan events, I argue that in the absence of the declaration of a winner and ranking of the musicians' performances, the participants of the competition attempt to overcome others, by creating a narrative themselves, by strategically choosing certain musical pieces to perform and elicit a response from their rival musical schools, as those pieces are loaded with symbolic cultural meaning shared by the musicians and audiences.

A new tool for the analysis of lute melodies

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The Karakalpak bards of Central Asia have developed a rich repertory of melodies for the two-stringed lute (*duwtar*). To effect an in-depth analysis of these musical pieces the ethnomusicologist Frédéric Léotar joined with the electronic engineer Martin Hermant, in an interdisciplinary project. As a first step this consisted of developing microphones capable of recording each lute-string independently (separated from each other by only a centimeter). The prototype was used in the field where the Master G'ayrat O'temuratov (Baqsi) was recorded in some sixty *duwtar* pieces. Each melody was captured in two files (melody and drone) to be analysed separately. This paper, based on the first results of a larger study, will show some of the creative processes characteristic of a Central Asian culture at once original and little known. It will highlight the thematic evolution at the heart of these musical examples, showing the rapport of one musical motif to another, based on recurring processes. This presentation will be accompanied by audio-visual examples.

Toward a naive analysis: transcribing Western art music

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This paper approaches Western art music in an intentionally naive way. Ignoring the notated prescriptive score, I instead transcribe a specific recorded performance as I hear it, in the process creating my own descriptive representation (Seeger, 1958). In this sense I am approaching it no differently than any other music from around the world. The method is subjective and perception-oriented—but with the tools of music theory and analysis.

The recording I examine is György Kurtág's "The Day Has Fallen", from *Poslaniya pokoynoy R.V. Trusovoy* (Messages of the Late R.V. Trousova), Op. 17 (1976–80). The recording is treated as an immutable sound entity, not as a mutable composition that varies between performances. Transcribing the recording, I include only what is audible to me (which has been shaped by my own experience), discarding the details of the score that are lost in listening. This is music in its truest and most vivid form: as heard.

Specifically, the analysis casts light on the ways that time is regulated in the recording. I demonstrate why I hear substantial stretches of 4/4 meter. An articulated pulse layer defines the tempo; accents affect my perception of downbeat placement, measure, meter, grouping structure, and form.

E-launedda, a device for the analysis of music and gesture in launeddas music

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Launeddas is the name of a triple clarinet, the most important instrument in Sardinian traditional music. Since when, in May 2007, the engineer Francesco Capuzzi invented an electronic version of this instrument (called *electroneddas*) several players have been fascinated and have tried to play it. The first time we saw the *electroneddas*, we understood that, with some modifications, it could be useful for analysis purposes. With the help of engineers Capuzzi and Guido Coraddu (that realized the *e-launedda* software) we created a device able to capture the finger movements, to visualize it through graphic representations and to investigate the relation between musical structures and gestures. Research was carried out together with two *launeddas* players: not only they gave their contribution by playing the *electroneddas*, but they discussed with the authors some of the points of interest which emerged from the analysis.

In the first part of our paper we will describe how the *E-launedda* device works, showing how this technology can be adapted to other wind instruments.

In the second part we will show the main outcomes of our research: how finger movements depend both on ergonomic and musical needs and the function of gestural pattern in the *launeddas* music. In the third part we will discuss how joining instrumental analysis and statistics and ethnography could be effective in ethnomusicological research.

The Sale that Sings: considering melody, rhythm, and meter in American Auctioneering

Nikki Malley
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The American auctioneer is an improvising musician whose practice both directs and is shaped by bidder activity in participatory performance. Ethnography and musical analysis reveal linguistic and musical formulae employed by auctioneers and the relationship between a semi-structured model of practice, stylization, and improvisation. Although most auctioneers do not self-identify as musicians, the musical strategies through which they enact a ritual of economic exchange can be understood through musical analysis. The monotone chant, or “hum”, acts as a home base above and below which auxiliary pitches offer melodic variety in a “fulcrum” relationship to the hum. An auctioneer’s individual style is evident in opening, inner, and closing melodic-linguistic formulae and in distortion, where auctioneers elide, truncate, or inflect words to speed and smooth out declamation. Rhythmic practice is comprised of flexible (“referential”) metric treatment rarely observed in improvised musics wherein a primary meter alternates with expansions or contractions of the meter. Disruptions of familiar musical patterns focus bidder attention on the chant rather than the realities of the economic act in progress, placing attendees in a musical space in which the unrelenting urgency of the chant precludes reflection on their buying decisions.

Rule-based meter induction in the syllabic (heirmologikon) style of modern Greek church chant

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Greek church chant employs simple and complex meters according to Greek chant theorists, who moreover emphasize the consistent placement of stressed syllables on strong beats. However, meter is rarely notated in the printed sources. In the syllabic (*heirmologikon*) style, syllables mostly correspond to notes delivered at a steady quarter-note pulse; irregular word-stress patterns lead to irregularly spaced strong pulses, hence to rapid and unpredictable changes of meter. This study aims to algorithmically uncover the chant’s underlying meter based on word stress and formulaic structure. A vocabulary of recurring melodic formulas is identified, on which statistics are compiled for the typical locations of word stress. ‘Ictic’ notes are defined as the formula’s notes with the propensity to attract word stress. Two levels of ictic strength are identified, giving rise to a preliminary two-level metric grid, which is further refined by two metric well-formedness constraints: disallowing (i) successive accented beats and (ii) a stretch of more than two unaccented beats. These constraints modify the original grid by shifting mid-level accents or generating extra ones. The result is a well-formed musical meter consistent with theoretical descriptions, which allows the systematic, rule-based study of the tune-to-text grammar internalized by native carriers of this tradition.

Materialities of musical analysis

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Western musical analysis has been dominated by metaphors of the tactile object through which the temporal unfolding of music is represented as a stable, inert and tangible thing. Attributing metaphorical objectness to phenomena that are not things is consistent with a Cartesian-Newtonian

understanding of the world as populated by objects that are ontologically discrete and separate from the human mind. New Materialism reimagines objects as active, agential products of networked matter and mind. From this perspective sound is not a thing to be objectified for analysis, but a series of dynamic relationships between a musician, an instrument, a listener, etc. In this presentation I discuss the Balinese *tri-angga* music-analytical metaphor to demonstrate that the reification of sound into analytical object is found in ethno-theoretical traditions globally, many of which pre-date or have evolved independent of the Cartesian tradition. I argue that the abstract objects of musical analysis often straddle Cartesian and New-Materialist theories. They are spoken of as if imbued with the stability and unity of Cartesian things. Yet, like the objects theorized by the New Materialism, they are the co-products of mind and sonic phenomena, actively calling listeners into dialogue and guiding their listening experiences in particular ways.

Memorizing the repertoire and the musical gesture with the same learning process

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This paper aims to study the relationships between the musician's body movements, the musical instrument, and the repertoire in the *bwiti* cult among the Fang of Gabon. Study of the musical instrument includes its morphology and material, the playing technique and its repertoire and also the analysis of the body movement of the musician. The musical structures are not memorized and performed only as audio patterns but also as body movement sequences. I take into account the musical-practice learning of the two fundamental musical instruments in the *bwiti* cult, the harp and the musical bow, in order to reach the cognitive processes of the composition of a piece and its performance.

I will show that the composition of the musical pieces is closely linked to the learning process of each instrumental playing technique. For each repertoire (harp and musical bow), I will show that the same principle underlying the composition of the musical pieces allows the musician to learn all the pieces in a given repertoire in the same way, including the musical gesture. From the ethnographic perspective, this principle underlying the musical pieces confirms the symbolic meanings of the harp and the musical bow in the *bwiti* cult.

The Sound of Stretched Time: the modulation of phrase, pattern, and attention in Central Javanese gamelan music

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Discussions of form and rhythm in Central Javanese gamelan music, or *karawitan*, have largely focused on technical explanations of its colotomic structures, or on those structures' symbolic and epistemological significance. In this paper I take a more phenomenological approach in examining *karawitan*'s distinctively expansive temporal character. Like London (2004) I acknowledge psychological perspectives on temporal perception, but in contrast to his focus on metrical variety within acknowledged limits, I propose that *karawitan* enables players and listeners to exceed those limits. With a "rigid binariness" (Becker 1979) manifest on all levels, *karawitan* is pervasively metric and hypermetric. (Hyper-)meter is articulated explicitly by patterns of gongs and gong chimes, but far from imposing periodicity on an otherwise undifferentiated musical flow, they reinforce a musical fabric that is deeply isoperiodic (Tenzer 2006). I examine how multiple layers of melodic and metric patterning structure anticipation of

arrival points. Equally important is the transformation of the temporal scale of those patterns through changes in tempo and density relationships, a “flexing” of “the frame” (Sutton and Vetter 2006) that blurs the boundary between meter and hypermeter. By stretching music in time, and expanding one’s cognitive capacities, it is almost as if time itself is stretched.

Analysing clave feel within melodic-rhythmic ‘mambo’ improvisation

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‘Clave feel’ is often cited as one of the main elements of Cuban and salsa improvisation yet very little to date has been done to demonstrate this concept analytically whether using notation- or purely text-based analysis. The mambo-style solos of flautist José Fajardo are analysed here in order to demonstrate this clave concept using annotated transcriptions of recorded solos to demonstrate the relationship between the two-bar timeline of clave and melodic-rhythmic improvisation characteristic of Cuban and Latin popular styles. Conventional techniques from the classical instrumental repertoire are aligned with an understanding of Cuban clave organisation in order to analyse cross-rhythms, clave accentuation, call and response sequences and percussive motivic development. An African aesthetic as expounded by Henry Louis Gates’ Signifyin’ theory and Samuel Floyd’s Call-Response concept is similarly explored, and these theoretical approaches are combined with more traditional analytical methods. As a practitioner of the Cuban flute style, ethnomusicological methods also inform the analyses of transcribed solo improvisations. Thus through these interdisciplinary methods the clave sensibility of one of Cuba’s most renowned soloists is described in detail using analytical techniques from a variety of musical contexts.

Revealing the changing faces of Korea’s East Coast shaman ritual music: analysing personal style in an improvised musical tradition

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The ritual music traditionally played by troupes of hereditary shamans in Korea’s East Coast region is well known in Korea for its unusually complex and varied rhythms – surely amongst the most intricate rhythms in the whole of the Far East. This ritual music is also notable for the high degree of creative freedom afforded to musicians during performance; there may well be no other domain of traditional Korean music making in which improvisation remains so prevalent and such a central, defining feature of the musical experience. A number of researchers have transcribed and analysed excerpts from East Coast ritual performance before and, drawing from the ritualists’ own testimonies about their practices, have helped to elucidate the internal metric structures of ritual rhythmic cycles and to identify patterns that are typically fitted within these structures during performance. However, certain facets of this rich musical tradition remain almost entirely undocumented and little understood:

Personal style. Ritualists often stress the importance of establishing one’s own musical world (*guhwal*) – this being a vital means to distinguish oneself from the competition. They spend much time amongst themselves discussing the attributes of one another’s playing, as well as the attributes of their rivals’ and predecessors’ playing.

Improvisation. Ritualists invariably emphasise the therapeutic value of improvisation: it enables them to respond sensitively to the clients’ needs and desires on a moment by moment basis, while generating a vibrant atmosphere in which the next moment remains hard to predict.

Stylistic change. Senior ritual musicians invariably claim that the ritual musical style has changed dramatically since their youth and younger ritualists agree; on hearing the oldest surviving recordings of the style, they claim that it is sometimes hard to identify even which rhythmic cycle is being played.

This paper discusses the methods and findings of a recent music analysis project, conducted together with Sunghee Park between May 2013 and June 2014 and funded by the Academy of Korean Studies, which has aimed to shed light on these aspects of the tradition. The paper focuses on the latter phase of the project, after the initial extensive musical transcription of audio-visual recordings (from archives, the ritualists' own collections, and personal fieldwork). In particular, it details the various comparative, collaborative, and experimental music-analytical methods that have been applied in the researchers' quest to identify exactly what makes each ritualist unique, suggesting approaches that both respond to and reflect the ritualists' own preoccupations with musical individualism, improvisation, and stylistic transformation.

The Other Leading Note: findings from a comparative analysis of the flat supertonic.

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Cross-cultural and cross-genre studies can bring different harmonic practices, metaphorical associations and ideologies to the foreground, highlighting expanded significations across cultures. This paper concerns the findings of research focused on a specific musical feature, the flat second pitch degree ($\flat 2$), as it appears in various contexts.

I analyse examples from Indian, Ottoman and Arabian influenced music, and Western genres including metal and film music. I juxtapose an exploration of difference in connotations of the $\flat 2$ across cultures with an understanding of commonalities in its use and significance, through the disciplines of (ethno)musicology and cognitive psychology.

Findings include that the $\flat 2$ has a significant functional role in these tonal musics, having as strong a 'yearning vector' as the major seventh 'leading note'. There are nuanced and complex connotations relating to its closeness to the tonic, with metaphors of verticality underpinning many interpretations of the falling $\flat 2 - 1$ cadence. The Western listener frequently hears the $\flat 2$ marked as Other or signifying 'anxiety'. Such connotations are exploited in film's subliminal soundtracks and reinvented in metal as positive and transgressive, to support a concept of the Other Within. In traditions such as Oriental metal and Bollywood, hybrid connotations support articulations of powerful, modern identities. Cognitive understandings surrounding the $\flat 2$, connected with unfamiliarity, concepts of dissonance and metaphors of falling, bring a particular richness to the use of this note in different genres, which often has cultural specificity. The $\flat 2$ as a focus provides a well-defined site for disciplinary debates on cultural boundary lines.

"Catching It": perception, emotions and expectancies in Amhara sung poetry

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In the Amhara Highlands of Northern Ethiopia, most musical performances consist of sung poetry displaying complex interactions between text and music. Listeners aim at "catching it", i.e. at disentangling the poem as they progressively make sense of the ellipses and (often personal) allusions hidden along the non-measured and highly ornamented melodic contours. And they seldom stay

silent, as they exhibit throughout their suspenseful waiting a wide range of codified reactions and strong emotional responses.

What insight can we have into this experience of listening? This paper argues for the combination of in-depth musical analysis, ethnography, and a cognitive perspective in the understanding of perception and emotional arousal.

After introducing the main genres of Amhara sung poetry and their contexts of performance, I will present a method of transcription that accounts for the interaction of their verbal and musical elements and demonstrate that the melodic contours are built upon cues and motifs deriving from emotional speech intonation patterns and in a complex relationship with the metrical structure. We will then see what an examination of listeners' reactions – especially to early emotional cues – reveal of the implicit knowledge and expectancies that guide their perception. I will argue that these reactions support the hypothesis that genres of sung poetry act as cognitive schemas, recently highlighted as “expectational sets” (Huron 2006). This will lead to my concluding remarks on the role of ethnography in bringing together analytical and cognitive approaches to study of listening.

Breathing life to iron: audio recordings and the (re)making of the jew's harp virtuoso

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In 1988, Leonard Fox's 'The Jew's Harp: A Comprehensive Anthology' was published with a dedication "to the memory of Karl Eulenstein, last and greatest virtuoso of the Jew's harp." However, Fox's book came at a time when a new generation of jew's harp virtuosi was, in fact, on the rise. Two decades later, twenty-two contestants from around the world competed for the title of 'World Jew's Harp Virtuoso' at the 6th International Jew's Harp Congress in Yakutsk, Russia. But from whence has the international revival of this historically overlooked musical instrument come? And how exactly does a jew's harp enthusiast become a virtuoso in the absence of formal teachers, written repertoire, and mainstream accessibility? Using ethnographic case studies from contemporary jew's harp revival movements in Europe, I examine the extent to which audio recordings are playing a role in the formation of a new generation of jew's harp virtuosi. How are recordings being used as source material for jew's harp players, and what are the drawbacks of this method of transmission for an aural tradition? Where do these recordings live, and how do they circulate in the public sphere? This paper uses ongoing fieldwork to explore how different paradigms of accessibility and ownership are impacting the musicians, researchers, and festival programmers of jew's harp revival communities.

Authenticity and innovation: analysing Tunisian 'ūd improvisation

Salvatore Morra (Independent Scholar)

With the rise of commercial mass media in the twentieth century, mainstream Egyptian music came to be regarded as the dominant style of Arab music, informing musical innovations throughout the Arab world. Within this context began a general development of traditional improvised instrumental forms such as *istikhbār/taqsīm* (solo instrumental preludes), particularly in relation to the *'ūd* (lute) — the quintessential Arab urban musical instrument. This study focuses on the *istikhbār* using as primary sources recordings of Tunisian artists held by the national sound archive of the Centre of Arab & Mediterranean Music in Sidi Bou Said. The research aims to understand to what extent analysis can explain how particular social and cultural identities may be evoked, articulated, and represented in music in genres of instrument-specific improvisation. In this paper, I illustrate, through music transcriptions, how analysis of improvisations on the traditional indigenous *'ūd'arbī*, and a comparative analysis of its style and the *'ūd sharqī* modern models serve to explore the manner in

which the Tunisian *‘ūd‘arbī* – as a distinct material object – transforms traditional stylistic elements. I suggest that close analytical attention to improvisation in Tunisian *‘ubū‘* (modes) broaden our understanding of the Arab mode system (*maqām*).

A grammatical isomorphism between Western tonal and North Indian classical music

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If a comparative study of Western and non-Western musical structure reveals cross-idiomatic similarities, these might originate from a shared cognitive capacity for music. Indeed, this seems true for the human cognitive capacity for language, which manifests itself through grammatical universals seen across the world’s languages, as ‘Chomsky-an’ generative linguists have long demonstrated. But how might one explore this musically, given that non-Western idioms often lack the kinds of grammatical structure ascribed to Western music, such as the I-V-I harmonic, or the three descending *Urlinie* archetypes ascribed to it by Schenkerian theorists? This paper proposes a specific interpretation of Schenkerian theory to tackle the above problem. By focusing on more abstract aspects of tonality, such as its binary-branching, hierarchical structure (rather than its specific, triadic manifestation in Western tonality), and by building on Schenker’s idea that tonal-harmonic grammar can be understood in linear terms, the paper shows how even non-triadic North Indian *raga* phrases reveal the prolongational structure traditionally ascribed to Western tonality – therefore suggesting a striking grammatical isomorphism between these two idioms. This, in turn, suggests that certain cognitive capacities for music, like the ability to generate hierarchical phrases, might be shared across idioms, and might possibly be universal.

Never Losing One’s Way: structure, pacing and proportion in North Indian Ālāp

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This paper investigates structure and pacing in North Indian classical performance through empirical measurement of key points in *rāga* exposition, and through examination of real time as proportion in performance. The basic research question is as follows: “to what extent may a consistent sense of proportion be observed in the larger units of a North Indian performance?” I address this question by studying the timings of particular moments in vocal *ālāp*, especially the climactic sounding of the upper tonic and the clear introduction of rhythmic foregrounding and intensification. Data are compared across performances by single performers, from performer to performer, and across the genres of *dhrupad* and *khayāl*. Initial results suggest that though there is substantial variety in the measured proportions from performer to performer, some performers maintain a remarkable degree of consistency. In other cases, there may be consistency in one proportion only, but it is very rare that no consistency is to be found. I consider that this sense of proportion and temporal balance is patiently developed through imitation of a teacher, juxtaposed with critical writing that suggests that this is one of the hardest aspects of North Indian performance for an “outsider” to master.

“Ónú-Òkwà (Song Bird) – tone, time and structure

Emmanuel Ndubuisi Nnamani
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Is there any theoretically formulated concept of form in African music? Are non-solo performances mainly conceived in form of simple call-and-response procedures? How do African musicians, composers and performers articulate and present the various levels of performative structures and the meanings they generate and/or create during music-making? How are these facets of musical creativity rationalized within the larger societal, cultural, social and psycho-philosophical standpoints? Answers to these questions can be located in the theoretical study of African music beyond mere Anthro-sociological gaze. Using Égwù Àmàlà (paddle music) of Ogbaru (riverline) Igbo people in Nigeria as a reference point, this paper problematizes the discourse of form (structural, stylistic and performative) in African music. Égwù Àmàlà was originally performed by women for the worship of the river goddess (mammy water) but this context has long declined due to intra-cultural translocation of the music. This paper examines the theoretical permutations evidence in the unique performance structure of this music. Its cyclical models are conceived as the quintessence of performance ideal strictly articulated by the performers. These models are fused in unique metrical configurations based on irregular temporal dispositions. The psycho-philosophical implications of these structural processes are shown to be part and parcel of the fundamental factors of creativity in Égwù Àmàlà. These fundamentals result from structural-theoretic considerations that inform musical creativity in African societies beyond the notion of complexity of rhythm. The internal structuring discussed here highlights the need for a re-focused, more theoretical engagement in African music discourses.

A dynamic analysis of the Somali gabay luuq

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This paper will consider the *luuq* in Somali, a vocal melodic line which traditionally carries the words of a poem and which varies according to poetic genre and, to an extent, between individual performers. Concentrating on the *luuq* of the prestigious, long-line *gabay* form of poetry (even though in this form the *luuq* is much less used these days than it was), I shall present a musical analysis of it and shall consider it in light of developing ideas in which music is considered within an analogue of Dynamic Syntax. This is a framework for natural language that provides a model of how a hearer builds an interpretation from the information provided by the lexical items (the words) and the context (both the immediate linguistic context and the general context). Through the analysis of the *gabay luuq*, I shall consider whether we can talk of analogues of linguistic lexical items in this particular type of music, and if so, what these are and how they might be characterized.

Maltese prejjem: An Arabic musical process concealed in a European tradition

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Modern Maltese language and culture stems largely from its Arab occupation between the ninth and eleventh centuries. However, frequent Ottoman corsair raids during the following centuries of European occupation left a deep-seated hostility toward 'The Turk' in folk history. Yet musical links between these cultures have been contested for decades. Scholars (and singers) of the Maltese vocal tradition of *ghana* have often commented on its superficial affinities with Arabic music, but the guitar tradition has not received any attention to date.

Analysing the deep musical structures and cognitive processes of improvisation in *prejjem* has revealed unexpected links. The Maltese guitar tradition, *prejjem*, is based on a body of stock melodic material that a guitarist will utilise as building blocks in his performances. These

core melodies are improvised upon in specific ways through contraction, expansion, ornamentation, and centonisation, with a focus on maintaining the essence of these core motifs.

Drawing primarily on musical analyses of recordings and ethnographic enquiry among practitioners, and secondarily on my own performance insights as participant-observer, I would suggest that this system is comparable to the improvisation processes of the Persian *radif* and of the Arabic *maqamat*. That an improvisation process common to Arabic classical traditions is at the heart of *prejjem* poses a number of wider contentious issues to a resolutely 'European' Maltese society, revealing latent ambivalent affinities.

Refining the tradition: traditional male singing groups in modern Korea

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This paper focuses on *sŏnsori sant'aryŏng* (lit. standing mountain songs), a traditional song and dance genre in Korea originally performed by male groups. In particular, it explores how the genre has been refined over the course of the 20th Century.

Since its designation as an IICP (Important Intangible Cultural Property) in 1968, *sŏnsori sant'aryŏng* performances have been standardised to the specifications of concert halls: generally, a leader sings 'call' parts and plays simple patterns on an hourglass drum (*changgu*) strapped diagonally across his body, while other performers stand around him, playing small hand drums (*sogo*), singing the 'response' parts and dancing.

Although the origins of the groups remain unclear, there is strong evidence to suggest that they materialised when the travelling entertainment troupes, *sadangp'ae*, settled for good in the capital. However, most *sant'aryŏng* singers of today, including the former and present IICP holders Yi Ch'angbae (1916-1984) and Hwang Yongju (b.1937), deny any relationship between the two performing groups. It is not surprising that modern day *sant'aryŏng* performers would choose to distance their art from low status groups such as the *sadangp'ae*, especially given the latter's associations with prostitution. To ensure sufficient distance from the *sadangp'ae*, both histories and musical forms have been significantly revised by singers.

By analysing musical patterns, texts, and performances, and examining historical sources and interviews, this paper seeks to ascertain how 20th Century *sant'aryŏng* singers have molded their tradition in line with changing tastes.

A kinetic approach to music analysis: coarticulation in South Indian rāga performance

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This paper presents an analysis of Karnatak violin *rāga ālāpana* (unmetered improvisation) through an exploration of the physical movement with which it is performed. Drawing on theoretical approaches that expound the relationship between music and motion, a joint kinetic-sonic analysis is created here as a means of examining musical structure. A particular aim of the study is to assess whether coarticulation, which can be defined as the tendency for the performance of a unit to be influenced by that which precedes or follows it, can be seen in Karnatak music.

The material investigated is a video recording of *ālāpana* in *todi rāga* performed by the violinist T.K.V. Ramanujacharlu in Tamil Nadu, South India. A section of the recording is transcribed into staff notation and visualized using pitch contour graphs created in Praat sound analysis software. The hand movements required to produce the musical phrases are described from observation of the video alongside graphs showing motion-tracking data. Interviews with musicians, participant observation, and the author's experience as a student of Karnatak violin provide the foundation for interpretation of the data. Results show that coarticulation can be seen in the performance of *svaras* (notes) and *gamakas* (ornaments) in Karnatak music.

What and where is metrical accent? Prolegomena to a comparative study

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Musical meter is a set of expectations, a cognitive model. It is learned implicitly from the patterning of events in a musical texture: when note onsets tend to cluster at certain regularly-recurring time intervals, the mind comes to expect things to happen at those moments. As a result, when a tone is heard at any such moment, it seems to acquire a feeling of weight or strength. The larger the cloud of events consistently heard at any given point in a time cycle, the heavier and stronger the impression it leaves—an effect we call *metrical accent*.

Researchers have studied this phenomenon in European art music by counting the note onsets in some group of compositions. The results usually show a close correspondence between the number of onsets at each metric position and the relative strength musicians attribute to that position.

Does this hold for other musical traditions as well? I sketch the beginnings of an answer by tabulating note onsets in a large set of compositions for the Central Javanese *gamelan* ensemble. The results do not so much answer the question as complicate it. They also invite us to reflect on the semantics and cross-cultural applicability of terms like 'meter,' and to frame criteria we can use to determine if 'meter' can be said to exist in a given tradition.

Hearing the Mbira dzaVaNdau

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The mbira dzaVaNdau is unlike any of the other lamellophones commonly played in Zimbabwe. While obviously related, its cycles are more varied, its rhythmic tension and ambiguity less predictable, and it is almost exclusively a solo, secular instrument. By examining the sound of the mbira dzaVaNdau and the varied pieces played on it, I explore how the holistic presentation of rhythm, melody, and harmony, as developed in the subtle and ambiguous exploration of pitch, timbre, and texture bring us closer to fully understanding how such music is organized and becomes powerful. Through a sustained comparison with the mbira dzavadzimu, I address the unique characteristics of mbira dzaVaNdau performance. In attending to such pieces as Chifembera, Baba Enda Joni, Ndaremba Kusewa Gudo, and Madanga, I examine how the layering of patterns, as defined by the fingers that play them, the register of the patterns themselves, and overt rhythmic tension contribute to brief, dense, and repetitive performances that undergird improvisational play and vocal expression through song. Unlike the repertoire of the mbira dzavadzimu, the mbira dzaVaNdau's music utilizes a variety of cycle lengths, beat patterns, and harmonic sequences. The elementary pulse is less commonly audible, the beat is rarely reinforced by the hoshu, and cycles played, due to their variability, are less predictable. Freed from the responsibility of ceremonial performance, the Ndau mbira can contribute to musical games, social commentary, poignant expressions of personal anguish,

or stories of joy and whimsy. Mbira dzaVaNdau performance embodies expressivity in brevity and clarity through density.

Analysing South-African style indigenous modernity as seen from post-millennial theoretical perspectives.

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Indigenous modernity in South Africa black music militates vehemently against the tribalism of both the colonial as well as apartheid periods of her divided history. Past representations of our indigenous musical arts into cultural, seem to be eclipsed by cross-cultural sharing, on a grand scale. Manifestations of the latter can be found in multi-faceted collaborations and creativity. New analytical and theoretical perspectives in ethnomusicology are needed to replace old ones which unwittingly aid and abet notions of cultural homogeneity, tribalism and indeed, apartheid.

This paper investigates case studies of indigenous modernity in South African music, using post-millennial perspectives, such as those of Tom Turino (2007) and my own. An argument is presented in favour of the notion that indigenous modernity requires new ethnomusicological theoretical perspectives in keeping with changing times and artistic practices.

“Beyond semantics”’: continuities and discontinuities in Maskandi Song and Izibongo

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Most scholarship on maskandi music has analysed the content and social commentary of lyrics, or the structure of guitar styles. This paper puts semantics on hold and focuses instead on the distinctive melodic features of maskandi vocalization that, in the final analysis, reduce neither to ‘words’ nor ‘music,’ but to a range of intermediate forms. Maskandi music provides a useful case study for comparing pitch patterning in song and speech because of the range of expression. Vocalizations accompanied on guitar are usually delivered in three main modalities: as speech, as song, or as declamatory utterance (*izibongo* or praises). Each of these modes varies in intensity, pacing, gesture, and prosodic structure. A comparative analysis of patterned changes in the fundamental frequency contours of these modes shows there is a balance of linguistic and musical determinants. Praat is used to model and measure the melodic profile of these three modes, and to demonstrate the role of linguistic prosodic elements of speech tone and intonation in shaping them. The songs analysed were recorded during fieldwork in KwaZulu-Natal, South Africa, during 2011-2013.

Marginal musical spaces at St Aldates, Oxford

Mark Porter

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St Aldates is a large, Charismatic, Anglican church in the centre of Oxford. The music of the church’s regular Sunday services stands within the tradition of Contemporary Worship Music and the church’s musical leaders cultivate an intentional sense of consistency both in style and in repertoire. Within this environment, individuals are often expected to set aside existing musical tastes and attachments, adopting an attitude of worship regardless of their relationship to the musical environment which they

find themselves in. Away from the Sunday services there are a number of more-marginal musical spaces in which a wider range of musical forms find expression. Each of these spaces embodies a musical dynamic distinct in some way from the mainstream life of the congregation and embodying a different relationship between individuals' diverse musical attachments and the communal musical life of the church. In this paper I will describe two such environments: 'Sing, O Barren Woman' and 'Word on the Street'. I will examine the musical dynamics present within them and their relationship to the broader musical life of the church. These environments potentially serve both to challenge and to reinforce prevailing musical models within the church, according musical style varieties of significance which it is unable to obtain within corporate worship, but at the same time limiting the scope of such attributions through the way in which the differing musical spaces are framed.

*Sounding Memories: musical practices as narrative
in the expulsion of the Germans from the Bohemian lands*

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In 1945/46, after the surrender of Germany in World War II, approximately twelve million German civilians living in Central and Eastern Europe were expelled mostly to Germany in what R.M. Douglas termed the "largest forced population transfer ... in human history." Even though these events occurred over sixty years ago, the memories of these expellees suggest the ongoing immediacy of their experiences. For this phenomenological-historical ethnography, I collected over eighty life stories specifically from Sudeten Germans (ethnic Germans expelled from the Bohemian lands). Through the lenses of musical practice and musical repertoire, I investigate how these Sudeten Germans used and still use music as a tool for both remembrance and adaptation in their new environments. I seek to understand music's significances for social and political integration in the Sudeten-Germans' "new sounding homeland" in West Germany. Taken one at a time, these recollections disclose the various ways in which musical practices retrieve memories of their Bohemian homelands and are able to mitigate both the loss of those homelands and the distressing effects of expulsion. Woven together, these recollections reveal how music offers emotional solace and facilitates the building of a new sense of belonging in the face of geographic displacement and material dispossession. A comparison of these recollections to memories of Sudeten Germans expelled to the former East Germany and to memories of Germans, who were forced to stay in Czechoslovakia, highlights how the reframing and silencing of musical practices affected processes of social identity reconstruction until the 1989 Velvet Revolution.

Vocal production in the world's music cultures

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How can vocal production be described and compared cross-culturally? Singing teachers often use idiosyncratic terminology: only recently has more objective language of physiology been introduced, pioneered by Jo Estill. Medical professionals use rating systems such as GRBAS to assess vocal quality, though these are primarily used to uncover voice disorders. A coherent and comprehensive model of vocal production has yet to be developed. Even within a single culture, such as Western music, there is little agreement among professionals about basic terminology.

Publications in English that analyse vocal production in other cultures are rare. A seminal ethnomusicological study on cross-cultural comparison of singing was undertaken by Alan Lomax and his Cantometrics team. Among other characteristics, vocal production was studied using perceptual descriptors, but the rating procedure did not take the subjectivity of perceptual descriptors sufficiently into account.

We shall present a study with 13 participants—otolaryngologists, speech language therapists, singing teachers—who performed physiological analysis of 19 singing fragments from 11 cultures, using our preliminary ontology of vocal production. The aim of our study is to verify the viability of the physiological approach to modeling vocal production.

Pairs of interval classes in Southeast Asian tunings

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Construed non-numerically (Rahn 2011, 2012, 2013), the following normal-Forte-order formulations accurately model southeast Asian fixed-frequency tunings: *sléndro* 11111..., the ‘usual’ pentatonic 22323..., Thai pentatonic 11212, 5-tone *pélog* 11313; Thai ‘equiheptatonic’ 1111111..., *diatonis*/diatonic 1222122, and 7-tone *pélog* 1112112.

In well-documented instances, two or more of these tunings appear in single pieces that have been realized in one or more cultural settings. In order to convey the consequences of such ‘translations’ from one tuning to another, seemingly distinct tuning, one can observe that since each tuning is ‘well-formed’ (Carey and Clampitt 1989), each maximizes the number of interval-pairs within particular generic-specific interval-classes. In ideal, mathematical terms, if d is the number of steps in a register, the number of such interval-pairs is $d(d+1)/2$ in ‘degenerate’ *sléndro* and Thai equiheptatonic, and $d(d+1)(d+2)/3$ in the remaining, ‘non-degenerate’ tunings.

The formulation outlined above identifies salient structural relationships between realizations of single instrumental pieces in otherwise contrasting tunings and between passages comprising ‘exchange tones’ (*métabole*) within individual pieces. Also clarified are aspects of inter-cultural cognition, *tarling*, *miring*, and ‘vocal tones.’ As well, the formulation’s scope is conjecturally expanded to include traditional tunings of Japan and Okinawa.

Form and counterpoint in a duet genre from Tanjung Bunga (Indonesia, Flores, Western Lamaholot)

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This paper draws on recent fieldwork (2010-12) among Lamaholot-speakers at the eastern tip of Flores (Indonesia). Anomalously, in a regional landscape of gong-and-drum ensembles and large choruses, these people, most of them farmers, sing only in duets. Various polyphonic techniques may

be combined in the same tune including parallel movement, counterpoint, ostinati, and moving drones. One of the main features is the high frequency of seconds in the harmonic construction. Different practices of two-part singing are to be found all over the region, such that singers living in villages 10 km apart cannot sing together, although the singing context is similar. Is it because they do not share the same kind of polyphony? My research compares the musical form of a dozen genres, performed in different ways in the two neighboring villages where I did my fieldwork. In this paper, I look at one musical genre only, that has neither the same name nor the same context in the two villages, but probably has the same kind of form and counterpoint.

Full moon musicking: sounding out the concept of emergence

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In his concluding argument of “Theorizing musical meaning,” Nicholas Cook writes that musical meaning is emergent (Cook 2007). He claims that meaning cannot be analytically derived from the score only, nor from an allegedly autonomous music, and neither is the musicologist a mere observer, as he makes clear, but a partaker in a certain process in the course of which meaning, as he says, emerges. Yet, even though the term encompasses the very process music analysis is interested in, it remains surprisingly vague. In my paper I will question this notion of emergence and explore the implications and consequences this term might have for the analysis of music. With reference to Mark Bedau (1997, 2008) I contend that his notion of “weak emergence” provides a different way of conceptualising causation in music, presenting an alternative to linear causation, which has been discarded as reductionist in the course of post-structuralist critiques. By thinking the concept in and through the musical enactment of the autumnal equinox in a Theravada Buddhist village of southern Yunnan I will analyse the full moon musicking as a weakly emergent phenomenon.

Bringing the music out, bringing the listener in: analysing the role of the male chorus role in Javanese gamelan

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This presentation will focus on one group of musicians within the larger ensemble of a Javanese gamelan: the male chorus section (gérong). This small group of men have a number of roles to perform: singing, clapping, and stylised calls. Such roles are normally considered as separate phenomena and have discrete technical names. Only the metrical, unison vocals are explicitly linked to the group, and are referred to as gérongan, or ‘that which is done by the gérong’.

In this paper I treat all of these musical responsibilities as part of a unified role, united by the fact that they are all performed by the same group of men. Through a close investigation of each of the individual elements I build an argument for all of the functions performed by the gérong have similar significance in different musical areas, making particular features of what is happening in the wider group more apparent and more explicit. In doing this I reveal the profoundly social ramifications of the musical processes analysed and make the case for the gérong as a link between the ensemble and the audience, elucidating the musicians’ interactions for those listening and making the audience’s ways of understanding the music manifest within the performance.

Large-scale formative processes in ostinato music

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Michael Tenzer
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A significant portion of the world's music is made through constant or varied ostinato. Scholars often focus on ostinato's "groove" or repetitive kinetic qualities, particularly when polyrhythmic layers interweave. Others classify ostinatos according to how musical "parameters" articulate their rhythm. But one also finds directed processes, deriving from features of the ostinato itself, that span multiple iterations of it while still preserving its identity.

Musical direction and continuity arise in two basic ways: through the creation of streams of pulse, and through processes of grouping in which discrete events appear to connect into segments with beginnings and endings. By analysing how pulse and grouping arise within and across successive iterations of ostinato, we show how the nature of the ostinato affords processes that shape time on a larger scale.

We describe ostinatos from several traditions in which connection of successive iterations is forged by groups or pulses that cross over the cycle's temporal boundaries. Sometimes anacrusis gives rise to grouping structures set off from the ostinato's metrical timespan. At other times a group or pulse bridges the ostinato's temporal boundary in such a way as to mask the re-articulation of its beginning point, linking cycles into groups of two or more.

Recursion in Indian music: towards a grammar of ālāp

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In linguistics and cognitive sciences the term 'recursion' denotes the embedding of one syntactic structure within another, especially within another of the same type. It has been argued that recursion in this sense is a near-universal and species-specific feature of human languages (Hauser, Chomsky and Fitch 2002), and that recursive forms of thought and expression characterise human culture, psychology and interaction more generally (Corballis 2011; Levinson 2013). The occurrence of recursion in different varieties of music would advance the claims that recursion is a general human cognitive capacity, and that music and language share some cognitive processing resources (Patel 2008).

Recursion in music has been studied mainly with respect to Western music (Lerdahl & Jackendoff 1983, Rohrmeier 2011). This paper explores the idea that a recursive model underlies the development of a *rāga* in *ālāp* (improvised *rāga*-prelude; Jairazbhoy 1961, Powers 1980, Widdess 1981, 2010). We analyse a typical recording of *ālāp* improvisation and ask how far its recursive structure could be expressed in terms of formal grammar.

The emotional voice – nonverbal communication from a cognitive-psychological perspective

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The voice is a rich source of emotional information. The linguistic content of our speech can convey affective meanings, but we also use our voices to communicate emotional information in nonverbal ways. I will outline three ways in which the voice is used to communicate emotions nonverbally: speech prosody, sound symbolism, nonverbal vocalisations. Prosody is the intonation overlaid on speech - we can say the same words in an angry or happy way. But are these cues the same for speakers of different languages? Sound symbolism is the affective meaning associated to certain sounds: for example, a 'k' tends to be perceived as sounding harder than a 'b'. Finally I will discuss evidence addressing the universality of nonverbal vocalisations of emotions, sounds like sighs, grunts, and screams. In conclusion, I will argue that the cognitive approach can be a useful tool for understanding the multitude of ways in which our voices are used to communicate emotions beyond words.

Hearing cycle in Korean court ensemble music

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This paper considers examples of traditional Korean court music from an analytical perspective, focusing particularly on the rhythmic cycles—*jangdan*—that are a crucial, form-defining feature of the repertoire. The *jangdan* differ from the kind of cycles that are most familiar to Western listeners because, within *jangdan*, the “beat” durations are not uniform. This results from the fact that the *jangdan* cycles realize rhythms at very slow tempi, and are measured relative to a rate of breathing rather than against an underlying isochronous pulse.

In an effort to better hear the unique properties of these rhythmic cycles, I consider existing descriptions of *jangdan* that come from within the Korean court music tradition, analyse recordings of selected compositions, and then reconcile the findings from these two contrasting viewpoints to develop a more nuanced listening strategy. My “insider” perspective is informed by the English-language scholarship on Korean music; to develop my “outsider” perspective I use computer software to collect accurate measurements of inter-onset intervals between attacks in the melodic and percussive instruments, looking for consistency in rhythmic pattern and/or durational proportion across multiple recordings of the same compositions.

Is music an adaptation or a technology? Ethnomusicological perspectives from an analysis of Chinese shuochang

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This paper examines two opposing perspectives on the debate about whether music is a biological adaptation or a technology. Those who espouse the first perspective claim that recent explorations into the intrinsic musical nature of human communication suggest an adaptive function for ‘communicative musicality,’ and the main proponent of the second perspective argues that music is not an adaptation; instead, it is biologically significant as a transformative technology. Based on my analyses of northern Chinese *shuochang* (‘speaking-singing’), I support the notion that musilanguage—an evolutionary antecedent of communicative musicality—is an adaptive trait, and

consider *shuochang* a modern example that displays some of the characteristics of musilanguage, reflecting a difference between semanticity and musical play as the two ends of the musilinguistic spectrum. At the same time, I suggest that *shuochang* has been deeply influenced by written orthographies, making it an example of a transformative technology. In order to demonstrate how *shuochang* both reveals ancient musilinguistic features and reflects the technological influences of visual orthographies, this paper examines two fundamentally different processes for musically rendering Chinese word tone.

Reshaping the paradigm: pitch contour and melodic variation principles in an Aka polyphonic song

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The music of the Aka people of Central Africa does not operate under any sense of absolute pitch or fixed interval size. This has led Susanne Fūrniß to surmise that “a graphic representation [of melody]...may be closer to the vernacular conception than transcription in staff notation” (2006, 169). Nevertheless, melodic contour plays no direct role in Fūrniß’s paradigmatic organization of variants for the vocal parts in her analysis of the Aka divination song *dikobo damu da sombe*.

This paper explores an alternative paradigmatic organization of this material using Robert Morris’s (1993) *Contour-Reduction Algorithm* (CRA) as the primary criterion for comparison. Based on the Gestalt principle of boundary salience, the CRA deduces both a basic shape and a variable number of intermediary levels for a contour by marking peaks and valleys as structurally significant, and removing “passing tones” and repetitions in successive stages until no further reduction is possible. Under this rubric, the syntactical ordering of variants employed by the Aka in performance often corresponds more closely to Simha Arom’s characterization of both Aka musical practice and social structure as “a simultaneous dialectic between rigor and freedom” (1983, 30; trans. Kisliuk 1998, 3).

Spectral sets, classes and transformations in Tuvan, Mongolian, and Tibetan throat-singing

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Unlike many global music traditions that privilege pitch and rhythmic relationships as the formative variables of musical production, Tuvan throat-singing (*Khoomei*) places great emphasis on tone-color and textural design. Tuvan performers engage sophisticated vocal techniques to generate a fundamental tone accompanied by one to three additional harmonics. The succession of diverse spectral textures provides a rich tapestry of changing harmonic colors and spectral contrasts characteristic of Tuvan *Khoomei*.

In *New Images of Musical Sound* (1984) Robert Cogan pioneered the analysis of musical spectra by adapting the analytical strategies of linguist Roman Jakobson who first employed sonic oppositions or ‘features’ to characterize the sound structure of language. Collectively, the set of all available oppositions define a feature space; instantiations of specific oppositions result in feature complexes. This paper employs Cogan’s approach as a springboard to develop additional analytical tools useful for describing and comparing the spectral design of Tuvan *Khoomei*.

The analytical method can be summarized as follows: (1) Segment the timbral surface into a succession of discrete spectral events; (2) Characterize the spectral design of each event using Cogan's thirteen binary oppositions; (3) Define the succession of events as transformations within a discrete feature space; (4) Map the number, position, and relative energy of each harmonic within each segment as descriptive of its corresponding spectral class; (5) Characterize the succession of spectral features and classes as transformational pathways descriptive of spectral morphology. Analytical examples will include representative samples from three styles of Tuvan throat-singing: *Khomei*, *Kargiraa*, and *Sygit*.

Imagining and imaging the sacred world of the deer singers (Northwest Mexico)

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This paper focuses on the ceremonial music of an indigenous community in northwestern Mexico (Yoreme). It is based on ethnographic research, backed with preliminary results of a recent neuroimaging study of musicians' brain activities while listening to ceremonial music and imagining their sacred world (data acquisition through NIRS and EEG).

Beyond the surface of the observable in the ritual lies a world of perception and cognition that is less accessible to our analysis. It is the past world of the Yoreme people as hunters and gatherers — a world that continues to inform their ceremonial life, worldview, and musical practice. In ritual song and dance, the deer singers, the musicians and the dancers claim to merge with the world around them: they transform into the animals with whom they co-inhabit the “enchanted world.” Because of a consensual view of what makes up their sacred reality, based on a shared visualization of the landscapes in the mountain, the performers also share their affections and thoughts from where the songs emerge. Although the majority of Yoreme people no longer depend on hunting and gathering for sustenance, this intuitive space of knowledge remains alive in their rituals. It is a kind of sensitivity and responsiveness that has developed in a historically specific environment continues to inform musicians, their compositional process is based on their visions and sentient knowledge.

Thoughts on music as a creative process: revisiting Nettl's Continuum of Improvised Music

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Improvisation, glossed as the creation of music in the act of performance, has been an enduring area of interest for musicologists of various sorts since at least the 1970s. This broad field of study has produced a wealth of detailed, analytical scholarship in a range of world musical cultures. Bruno Nettl's 1974 article, “Thoughts on Musical Improvisation,” remains foundational for much of this work, in no small measure because it offers an elegant, intuitively satisfying general theory through which to study musical improvisation as a kind of creative act in any musical tradition where it may be found. His article was importantly one of the first to characterize improvisation and composition as points on a single continuum rather than in a relationship of opposition. Forty years later, I argue in this paper, Nettl's theory needs to be revisited. Mindful of the value of his work, but also of critiques of it such as Laudan Nooshin's in “Improvisation as Other,” I believe the two-dimensional model of the continuum needs further elaboration. Drawing on examples from post-bop jazz and Baroque music I propose in its place a three-dimensional model in which a wide range of creative processes can be understood in relation to one another—some of which are commonly glossed as composition, some as improvisation, and some as interpretation, but others not as any of these.

Atomic analysis and Andean aesthetics: dialoguing with ethnomusicology?

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This collaborative paper serves to introduce the work and approaches of the Italian musician brothers, Raffaele and Felice Clemente, who for over 30 years, as *Trencito de los Andes* ('Little Train of the Andes'), made numerous recordings of Andean music. Building on this experience, the brothers have recently adopted a more self-consciously analytical attitude and new name: *Il Laboratorio delle Uova Quadre* ('Laboratory of the Square Eggs'), inspired by the 1949 Donald duck story 'Lost in the Andes'.

The brothers' new methods include the precise reproduction, using multitrack recording techniques, of performances from ethnographic recordings. The creation of these 'hyperrealist portraits' of the original recordings is facilitated by the use of multi-dimensional musical transcriptions of microscopic detail; so-called *partituras micrónicas* ('micronic scores'). These enable the identification of the tiny idiosyncrasies including characteristic 'mistakes' of particular performers – their musical DNA – and open up a wealth of creative musical resources for the brothers and, it is suggested, for ethnomusicologists.

The outcomes of such atomic-level analysis - in the form of commercial audio recordings, which in essence are identical to original ethnographic recordings but of higher audio quality – alongside their focus on sound objects, rather than ethnography, may seem problematic from an ethnomusicological perspective. Nonetheless, it is suggested that the brothers' approaches and intensity of engagement with sound and aesthetics offer great potential to develop and enrich a hitherto neglected area of ethnomusicology.

Affect, improvisation, and interaction in diasporic West African performance practice: an interdisciplinary perspective

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Diasporic West African drum/dance performances unfold via relationships between interpenetrating binaries: participatory dialogue and individual expression, circumscriptions of possibilities and contingencies of protensive domains, cycle and linear flow, memory and projection, isochronous meter and asymmetrical timeline. This is a complex, polysemous dialogue: drummers, singers, and dancers enact a flux of call/response patterns where responses continuously transform into new calls, inviting next responses. A successful performance navigates the circumscription of fundamental performative roles and the openness of those roles to personal interpretation. All of this suggests an *affective* orientation: the performance unfolding through dynamic intensifications of affective bodies as they come into contact with one another.

Using a *guaguancó* performance from Matanzas, Cuba, as my ground, I begin by framing the fundamental characteristics of the drum dialogue and describe some context-specific contingencies: the performative conditions that suggest certain calls and ranges of imminent responses that engage layers of intentional memory, enacting the music's projective flow. I then develop a gestural repertoire for dance, encompassing dynamic motions of feet, hips, arms, and more, in order to consider the characteristic calls and range of responses at the dancer's disposal. I close by examining mimetic, isomorphic (and significant non-isomorphic), and metaphoric relations between music and dance gestures.

Guembri motives in Gnawa Music: the nuance of repetition

Maisie Sum

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A Gnawa music performance consists of varying one or two motivic structures defined by a cyclic concept of time. It comprises three main sections: an instrumental prelude that introduces the motives, vocal invocation, and a final instrumental section. The term ‘icon’ refers to a motive that corresponds to the supernatural entity being invoked and which identifies him (or her) to Gnawa adepts. The icon supports the choral refrain during vocal invocation and the increasing intensity of possession dance when the vocals end. The *oum*, a motive named by Gnawa musicians, primarily supports call-and-response phrases and functions much like an ostinato. Motives are rarely exactly repeated and are subject to frequent rhythmic and melodic manipulations. This paper investigates variations in the instrumental section during performance, and generates a typology of variations and sequencing rules. The inquiry is based primarily on transcriptions of field recordings that focus on the *guembri*, an instrument crucial to Gnawa rituals. Scholars of similar trancing cultures have also noted the centrality of instrumental melody and rhythm for attracting spirits. This music-centered approach extends current research on Gnawa rituals and the music of the sub-Saharan diaspora in North Africa.

Tēr-mallāri: analysing a musical form in a Śaiva temple ritual context

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The Tēr-mallāri is a south Indian musical form played by shawm and drum players of the *periya mēṭam* orchestra during daily rituals of Śaiva temples, notably when Śiva is taken from the main shrine to the bedchamber. While musicians, priests and devotees mostly consider the Tēr-mallāri as a simple tune (relatively fixed), observations made *in situ* show that this ‘small tune’ is rather a complex and flexible form built on procedures using pre-composition, variation and improvisation. Through the analysis of Tēr-mallāri performances recorded in the same temple (Chidambaram, Tamilnadu) and within the same ritual, this paper proposes to explore the relation between music and ritual, in terms of structure, time and space, as well as the constraints (musical, environmental, religious, etc.) that may influence musicians’ decisions and actions. This multifaceted approach should at least allow us to answer the following questions: how far can performance be analysed in terms of pre-existing models and/or embodied knowledge? How far must non-musical factors be taken into consideration? On a theoretical level, this paper will interrogate the possibilities of using situated cognition concepts in musical analysis in order to apprehend improvisation or related practices from a wider perspective.

Music from the margins: (re)marking Gorkha identity in Darjeeling music festivals at India’s borderlands

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Darjeeling, located in sub-Himalayan India, is well known for tea and tourism. However, despite Darjeeling’s repute, Gorkhas, the majority ethnic group of Darjeeling, suffer marginalization and misrepresentation, both economic and cultural. Economic because the tourist and tea industries, controlled by corporate powerhouses of India, employ Gorkhas as low-paid manual labor, and cultural because living in India’s borderlands and speaking Nepali, a language also spoken across the border in Nepal, Gorkhas are misconstrued in India as “foreigners.” As part of the 107-year-old Gorkha

movement for greater representation, elaborate month-long music festivals have become instrumental in highlighting the Gorkha cause since 2008.

Focusing on the music festival held during October-November, my paper discusses the content of music performance and the contexts evoked to underline Gorkha identity on various levels—historic, cultural, inter-cultural, and territorial. In addition, I posit that the performance of Gorkha identity showcases discursive moves concurrently with claiming to be direct and unified. Taking this into account, I suggest the (re)marking of Gorkha identity not only entails the interrogation of identity, but also the question of “identification,” which Stuart Hall theorizes as a “process” of articulating identity, not essentialist, but strategic, positional, and constructed within the play of power and ideology.

Tango, salsa and the performance of class and passion in Singapore

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Latin American music and dance has historically occupied an amorphous zone in Singapore, situated in the imagined space of an unclassifiable cultural Other not quite part of mainstream Anglo-American pop and dance music widely mediated across the island-state, nor deemed 'exotic' or 'traditional' enough to be fully integrated into world music or folk scenes consumed in Southeast Asia. A closer look will show up disparities of imagination between communities of practice and non-practitioners, with outsiders (mainly non-dancers) objectifying Latin dance and music as an expatriate-led scene providing platforms for the performance of passion and, to an extent, sexuality. In actual fact, not one - but several overlapping communities of 'insiders' exist. They resist as well as fulfil such essentialised projections of Latin dance in their social maintenance of identities as Latin fans, as well as in their competing music and dance activities. This study compares the genres of salsa and tango in Singapore, focusing on how imaginations of Latin music and dance are embedded within deeper confrontations of stereotypes about social and sexual mores in Asia. Early investigations have also revealed a class aspect to the making of separate tango and salsa scenes. Tango, with its higher barriers of entry, is largely patronised by professionals and highly-educated white collar workers who demonstrate their commitment to performances of sophisticated sensuality through recreating an imagined 'authentic' Argentine ideal. Salsa, on the other hand, enjoys a broader-based audience: various groups from itinerant tourists to state matchmaking agencies and grass roots community clubs leverage on its symbolic and physical access to passion and intimacy for different agenda.

Leekspin's erotic journey from Helsinki to Tokyo: music appropriation in the Digital Age

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In this paper, I conduct cyber ethnographies in order to uncover the various instantiations of the Finnish folk song, Ievan Polkka, and the diverse and often contradictory meanings the song has come to signify to different people. In the first section of the paper, I highlight the semiotic framework I use to analyse Leekspin's diverse instantiations and receptions. I then apply this framework as I trace the tune from its 19th century origins to its present forms. The tune first gained international renown in 2006, when it was paired with a Japanese anime visual becoming the Internet meme, Leekspin. Next, it 'traveled' across North America, Europe, and East Asia, being understood and reinterpreted in myriad ways, ranging from children's breakfast cereal advertisements in Britain to erotic fetish videos in Japan.

In the second half of the paper, I extrapolate and propose that aversions to conducting virtual ethnographies are unfounded, and that although the Internet is an excellent chance to reanalyse all ethnographic methods, especially pertaining to the perpetually problematic issues of re-presentation and identity. Finally, I refute the anxious narratives often found in the literature on global music and the fear of a cultural grey-out. Instead I endorse a celebratory narrative of music and technology. I argue that it is a mistake to conflate deterritorialization with homogeneity. Although Internet users still represent a minority of the global population, technologies are democratizing not only music consumption, but also music production.

“The Lanang Drum is the Bus Driver” : how ethnography informs analysis in a study of Balinese Kendang Arja

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The paired drumming (*kendang*) traditions of Bali are known for their intricate interlocking patterns. Drum-strokes on the higher *kendang lanang* intertwine seamlessly with patterns of like strokes on the lower *kendang wadon* to create complex composite patterns. Almost invariably, these patterns are exactly composed. Yet, in the cyclic *kendang* playing of the Balinese dance-drama *arja*, both drummers improvise. How these simultaneously improvising drummers are able to weave their patterns seemingly effortlessly around one another, often at very high speeds, is an analytical question that has only begun to be investigated (e.g. Hood, 2002). There is no formal Balinese music theory surrounding *arja* performance, yet the consistent ability of master drummers to successfully interlock with their partners in the course of improvised performance implies a set of guidelines being followed – whether consciously or not. And though most master drummers do not speak of these “rules” in any codified manner, months of fieldwork among them has revealed a musical and structural logic behind their improvisations. In this paper, I will examine the ways in which my casual conversations, lessons, and performances with several master drummers informed and gave focus to my analyses of *kendang arja* patterns.

Modes, improvisation and the search for an éthnik-jazz aesthetic in Greece

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So-called éthnik-jazz served as one of the most influential aesthetic movements among professional musicians in Athens in the 1990s and 2000s. Primarily drawing on modal genres of the Eastern Mediterranean and Euro-American jazz harmony, exponents of the scene produced a vast number of albums and experimented with different compositional forms and ensemble configurations. Groups such as Mode Plagal, Human Touch and Iasis, as well as solo artists including Haig Yazdjian and Vassilis Rakopoulos pushed the boundaries of the genre and formed canons that, despite their programmatic inclusivity, were accompanied by fierce debates on taste and ‘appropriateness’. Based on extended ethnography and incorporating music analysis of some paradigmatic extracts, this paper will discuss some of the main aesthetic arguments that tantalised the éthnik-jazz scene. By looking at the use of modality and improvisation in recordings and live performances, it will examine how claims to ‘authenticity’ were sonically articulated to an audience of specialists in various traditions and idioms. Moreover, drawing on private interviews with musicians, I will investigate the way in which aesthetic ideologies became transfused from the musical to the verbal domain, connecting to wider debates of cosmopolitanism and ethnicity.

“We are Pentecostal; we are Evangelical; we are an AIC”: musical indices of group identity and belonging in an African Immigrant Church.

Rebecca Uberoi
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Christ Apostolic Church (CAC) is one of a number of Nigerian Pentecostal churches to have been established in Ireland over the last two decades. Through the music performed in their weekly worship services, members of CAC in Dublin articulate their belonging to both a pan-ethnic (Yoruba) community and a global religious (Pentecostal/Evangelical) community.

Music and dance at CAC help to evoke the memory of ‘home’ and thereby create a space where members feel they belong (Stokes 1994:3). The performance of Yoruba Christian music and ritual, with which all members are familiar and can participate, enables individuals to realise their connectedness within community (Turino 2008:2). This communal bonding provides a welcome respite from the difficulties experienced in a strange country, and in this sense music fulfils a therapeutic function within the immigrant community (Bailey & Collyer 2006:177).

Music is also used by CAC members to articulate their belonging to a global Pentecostal community. This affiliation reflects the origins of CAC whilst also locating the movement and its members within current worldwide Christian mission. Residence in a foreign country can be understood by CAC members in the context of ‘reverse mission’, where they become the saviours of a country in spiritual decay (Ugba 2009:200). Performing their membership of this global community can help CAC members to find a sense of purpose within the host culture.

Musical traces of the Holy Spirit: identifying linear progression within cyclic form in an African-American folk spiritual

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Wesley United Methodist Church’s rendition of “It’s Late in the Evening” possesses a great deal of vitality although it arises from a limited palette of musical materials operating within cyclic form. Is it possible to locate this life within the music itself?

Transcription of sonic materials as well as the articulated physical actions of the participants supports the notion of linear development by highlighting elements of anacrusis, expansion/contraction of time, metrical irregularity, and non-isochronous meter. This linear development suggests the presence of other complex, even metaphysical processes. The song leader harnesses the energy of the congregation and exerts musical pressures on the environment, thereby introducing more energy into the system and effecting environmental changes of state analogous to changes of states of matter. A progression from what is solid, heavy and static, to that which is lighter, less dense, more dynamic, kinetic, and even apparently less subject to the force of gravity, appears in the bodies of the participants and in the music. The melodic and rhythmic variations that appear—shifting from lyrical singing to an increasingly punctuated, angular vocalism, increased syncopation, higher tessitura—as well as a progressively complex physical entrainment allude to this change of energetic state.

Counterdisciplines in Electroacoustic Improvisation

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Postmodernist deconstructions of authorship and neoliberal instrumentalizations of creativity have converged in recent decades to reconfigure the literacies and pedagogies of Euro-American art music. A widespread shift is now underway towards idioms grounded in aural phenomenology, social aesthetics, and experimental audio engineering, all of which are seen as destabilizing traditional disciplinary knowledge. In this paper my central concern is with an emerging genre known as Electroacoustic Improvisation or EAI. My aim is to explore the new aesthetic and epistemological systems developing around this predominantly unnotated and autodidactic form of music making. From the perspective of practice theory, I ask what analytical and canonical doxa electroacoustic improvisers cultivate, and how they use these frameworks to structure production and listening. By way of illustration I examine two contrasting sites of EAI practice encountered during ethnographic fieldwork in the Canadian city of Montreal between 2011 and 2013: a laptop orchestra in an undergraduate music classroom; and a concert series organized by a network of nonacademic sound artists. I describe how these groups worked to construct an appropriate electroacoustic sensorium by saturating everyday life with reciprocal mentoring, listening and performing practices. I also describe how discourses of aural health and free improvisation functioned as tools of responsabilisation, enrolling individual musicians in the maintenance of aesthetic norms. By figuring EAI epistemology as counterdisciplinary, I highlight the degree to which it is defined by self-conscious reversal in the face of the perceived decline of modernist authority in the academic electroacoustic scene.

Origins of music, social learning and niche construction

Luis Villanueva
UNAM

Many of the evolutionary theories of music are anchored in evolutionary adaptationist models (Darwin 1871, Andersson 1994, Miller, 2000). The problems with them are, on the one hand, that they support the idea that natural selection is the only mechanism that can explain all the evolutionary processes (Gould & Lewontin: 1979, Maynard Smith 1978), and, on the other, the assumption that the environment act on a passive organism which is fitted to an existing ecological niche (Lewontin: 2001; Ricardson:2007).

This paper shows that, if we take seriously the proposals of social learning (Sterelny) and the theory of niche construction (Laland, O'Brien, Feldman, Stotz), we can solve such critics and, at the same time, we can argue that no-adaptive constraints (development, artifacts production, establishment of social norms, coordination and collective action, creation of institutions, etc.), may have played an important role in the origins of music. Thus, we will argue that, at the beginning, humans were not only affected by their environment, but their musical activity may have contributed significantly in the construction and modification of it, which in turn, influenced decisively in the cognitive evolution of our specie.

Mapping musical style and migration networks

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As female participation in the workforce across the cosmopolitan urban centers of North America, Europe and the Middle East skyrockets, domestic work is increasingly outsourced to labor migrants from Ethiopia, whose female population travels to Europe and the Gulf to work for remittances to send back to food-insecure Ethiopia. This paper examines Ethiopian music as a coded language through which migrant musicians navigate the complex web of religious, ethnic, national and embodied identities in their new surroundings. I present findings based on participant-observation of Ethiopian live music in Harlem, Washington, D.C., Tel Aviv and Abu Dhabi, and demonstrate that the

musical style of labor migrants can be an effective method for navigating their perspective on citizenship and labor. Because there is an Ethiopian social taboo against criticism of hosts, making traditional ethnographic methods like interviews a poor indicator of the Ethiopian migrant population's perspective, this paper explores the ways that folk dance, hip hop, and R&B code critiques of the host culture. By considering performance techniques such as choice of language for lyrics, and the incorporation of Ethiopian or local dance style into music videos, I argue that scholars can map transnational migration networks effectively through interpreting transformations in musical style. The result is an ethnographically informed snapshot of a transnational labor force's perspectives on marginality and citizenship.

Pop goes the work-concept: ethnography and the analysis of art music recordings

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In recent years, popular music scholars have forcefully suggested that a popular music "work" cannot be understood independent of its existence in the recording medium without potentially colonizing popular music traditions (Western and otherwise) with the values of 19th century European Romanticism. However, while music scholars now generally accept the importance of recordings for the analysis of popular music practices, the hegemony of what Lydia Goehr has called the "work-concept" has survived intact in the realm of art music.

This paper challenges the persistent privilege of the classical "work" by taking the art music recording as the site of analysis. Drawing on my own ethnographic experiences in Britain's classical music recording studios, as well as analytical devices developed by Allan Moore and Albin Zak, I argue that an art music composition cannot be understood independent of its existence in recorded sound. Focusing on two specific case studies, an opera and a symphony, I suggest that ethnographic analysis can reveal features of the musical work unavailable to traditional analysis, including a decenteredness resulting from modern editing practices. I further argue that properties of the recording, such as ambience, must not be seen as peripheral, but rather as an integral part of the musical experience. By refocusing analysis of art music on the recording, I believe that scholars can better understand the epistemologies of classical musickers, and further, that we can perceive the activity of classical music as a distributed form of creativity, inclusive of musicians and recordists.

Pattern and antipattern discovery in Ethiopian Bagana songs

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Played by the Amhara of the Central and Northern highlands of Ethiopia, the large lyre bagana belongs to the spiritual sphere of Christian Amhara music (zema). Very powerful, it casts away evil spirits and establishes a contact between players/listeners and God, the Virgin Mary and the Saints. The observation of the learning process used by the most revered player, Alemu Aga, has shown that the starting phase of this process is based on the practice of short motives, comprising mostly two notes.

In this study, data mining, following the approach of Conklin (2013), was applied in order to find melodic patterns (sequence of features of notes) and antipatterns (patterns that are absent or surprisingly rare within the analysis set) in a corpus of 35 bagana songs recorded and analysed by Weisser between 2002 and 2005. It showed that bagana songs comprise mostly conjunct melodic movements and presentations of the ambitus of the instrument (highest-lowest pitch). On the contrary,

fifths are extremely rare, even though bagana is tuned according to pentatonic scales.

It also demonstrates that virtuoso players such as Alemu Aga use several patterns/antipatterns as exercises, indeed corresponding to those discovered as significantly frequent/rare through analysis of the corpus. This reveals that a detailed understanding about the repertoire is used to devise the most adequate exercises possible for the trainees.

We're all cosmopolitan now? The effects of technology in rural West Africa

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Since the notion of 'cosmopolitanism' was first described this concept has received considerable attention. Recent years have also seen this explored through music, and many subdivisions of cosmopolitanism, including vernacular, discrepant, hybrid and subaltern, have been described or proposed. Substantial research has applied the concept to music in Africa, notably focusing on nationalism and popular music in Zimbabwe (Turino 2000) and syncretic jazz in Accra (Feld 2005). It may be that cosmopolitanism now has so many layers, orientations and omissions (see, for example, Perman, Sungara in Zimbabwe. *Ethnomusicology Forum* 21.3 2012) that the model has been stretched to breaking point. The variety of ideas and exemplars offer a complex mix and the central concept may have become so essentialised as to lose its significance. This presentation will use a case study of the people of a traditionally agrarian society in rural northern Ghana but where the Internet and mobile data are now making an impact, to examine the case for the possible retirement of 'cosmopolitanism' as a meaningful description, or the addition of 'post-cosmopolitan' to 'post-colonial', 'post-modern' and similar descriptors.

Brazilian Capoeirista and Thai Sarama: ritual and form in the musical accompaniment of two seemingly disparate martial arts

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This paper examines the somewhat surprising common ground that exists in the music and musical rituals found within the cultures of two geographically and stylistically disparate martial arts: Thai boxing (*Muay Thai*), and Brazilian *capoeira*. Though there are differences in instrumentation, meter, and mode, both *capoeira* and *Muay Thai* utilize music as part of formalized rituals before and during physical competition as part of their 'martial' practices. In Thailand, competitive matches are traditionally accompanied by their own form, *Sarama*, as part of the *Ram* or *Phleng Muay* (a pre-fight ritual), which includes a musical soundtrack in direct response to the fight. The ritualistic nature of the *Sarama* performance shares some striking musical features with *capoeira*, despite having no obvious shared ancestry (the first commercial gym to offer Muay Thai outside Thailand was opened in Brazil in the late 1970s). The connection suggests that a number of holistic conclusions can be drawn regarding the role of music and ritual as an accompaniment to otherwise dissimilar combative sports.

Cognitive, affective and embodied responses to syncopation: a cross-cultural comparison of West African and North American non-musicians

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There is an ongoing discussion about the difference in rhythm and metre perception between African and European music traditions. Some have claimed that African rhythms are not only structurally more complex, but meter perception in African listeners is also more sophisticated. However, such claims have been criticised as culturally essentialising and exoticising. Our empirical study addressed cognitive, affective and embodied responses to syncopated rhythms in two cultural groups of non-musicians: Ghana and North America. It was found that stability ratings of simple syncopations did not differ significantly between groups, indicating that the metric frameworks of the two groups were comparable. However, ratings of desire to move and feelings of pleasure in response to syncopated grooves were different. Participants from Ghana rated the grooves as more movement- and pleasure-eliciting overall. Furthermore, while there was an inverted U-shaped relationship between degree of syncopation and ratings in the North American participants, this inverted U-shape was less pronounced for Ghanaians, who rated both low and medium degrees of syncopation as equally pleasurable and corporeally entraining. Thus, meter perception may be no different in West African and North American non-musicians, but culture affects the influence of complexity on affective and embodied responses to musical rhythm.

With ears wide open: analysing the Jerusalem soundscape

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In recent years, an ‘auditory turn’ in anthropology and ethnomusicology has turned the attention of many scholars and artists to the sounds around us. Studying sound has deeply enriched our understanding of the social contexts in which music is made, and sound art has probed the boundaries between musical and everyday hearing. Nevertheless, with a few notable exceptions, relatively little close analytical attention has been paid to the texture of individual sound events. In this paper, via examples drawn from several years of research in Jerusalem’s Old City, from sound-battles among monks to the accidental ‘counterpoint’ of a cantor and muezzin, I explore possible avenues of interface between sound studies and musical analysis. When is ‘musical listening’ invoked by city dwellers? What are the units of analysis – when are sound events considered to separate or merge? How do the acoustic and experiential qualities of the soundscape interrelate? What insights might we derive (or not) by unpicking the juxtaposition of sound events?

Melody in the duet-singing of Fataluku-speakers (East Timor)

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This paper is constructed as a parallel to Dana Rappoport's. It concerns *vaihoho*, another duet tradition from island Southeast Asia, this one from Fataluku-speakers at the far eastern end of Timor, in what is now the independent republic of Timor-Leste. Here again there are frequent simultaneous seconds and great local variation, such that people from different villages typically cannot sing together, even in what is nominally the same song. There are also crucial differences between the two duet traditions. Unlike the practice in Flores, where different songs or genres exhibit different types of polyphony, a single polyphonic idiom is common to all *vaihoho*. Moreover, *vaihoho* are not tied to agricultural rites, and the genre involves a complicated system of text deformation that is not found among the Lamaholot-speakers. This paper will examine a number of *vaihoho* melodies as sung in different villages, to see the range of difference in local treatments of "the same" material.

Duet-singing is anomalous in both Flores and Timor: most ethnolinguistic groups in both islands sing in large choruses. It is possible that the practice came with migrants from Timor to Flores, since some Lamaholot-speakers believe their ancestors originated in the Fataluku-speaking region of Timor. That would explain the anomaly in Flores, but not in Timor—unless the Fataluku-speakers themselves migrated from somewhere else (New Guinea?) and brought duet-singing with them. These historical relations are imponderable at present. What is striking is that the two duet traditions, related or not, are in the large view so similar, and so markedly in contrast to the predominant choral traditions, and yet are so divergent when examined in detail.

A music from minarets in the Ottoman Empire: "Temcid"

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In the Ottoman Empire, there were many religious forms of music, mainly because of society's relationship with religion. One of them was "ezan" which calls Muslims to pray in mosques five times a day. "Ezan" is a form of composed lyrics, which is called out by "muezzin" from a high minaret of the mosque. But ezan was not the only form of music which was performed on minarets. There was one more form, namely "Temcid", which is more melodic and unique, that was not performed by just one person, but by many people from the public.

"Temcid", is an Arabic word, originated from the word "mecd", which means glorification. This word refers to glorification of God and poems written in praise of God are called Temcid in Turkish literature. In the same way, being composed of these poems, "Temcid" was developed as a form in Turkish religious music.

On Monday and Friday nights, along with every night in the sacred three months and especially in the month of Ramadan, every night after Taraweeh (a particular prayer of Ramadan) and on the time of Sahur (Ramadan meal in the night), Temcid was performed from the minarets of Ottoman mosques by young and eager people from public.

This paper will bring clarity to the question of how "Temcid" was implemented in the past. This will be through the recordings from the past and some testimonies by people who had witnessed the era when "Temcid" was practically being performed. Then I will mention the psychological reflections of the music performed with the participation of the community.

Special Panels

Meter in Malian Music: Theoretical, Analytical, and Perceptual Perspectives

Non-isochronous meters in theory and cross-cultural practice

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This paper explores a typology of meters based on the extent to which they involve isochronous vs. non-isochronous (NI) elements. NI meters involve two or more *beat classes* and/or two or more *subdivision classes* (SDs), though in practice the number of beat or subdivision classes tends to be just two. NI beat classes tend to be defined quantitatively (duplet vs. triplet) while NI SDs involve categorically distinct durations (Short vs. Long).

In addition to formal considerations, perceptual constraints affect NI meters differently than I meters: e.g., at rapid tempos long SDs may be divided while short SDs may not, giving rise to hierarchic structures that are only partially recursive. Many NI meters exhibit SDs with a 58:42 (Long-Short) durational ratio, a common solution to a general problem (i.e., performing a rhythm that is neither a duplet nor a triplet).

The range of metric possibilities encompassed by I and NI meters also leads to a broader theoretical conclusion: a comprehensive theory of meter may have to be a “kluge” of subcomponents, as different combinations of I and NI elements, at different levels and tempos, give rise to different rhythmic possibilities, musical behaviors, and modes of understanding.

Perception of metric timing patterns in Malian Jembe-music

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Max-Planck-Institute for Empirical Aesthetics, Germany

Chronometric analyses of a piece of Malian jembe-music (Manjanin) by Polak (2010) suggest that its characteristic feel rests upon non-isochronous subdivisions of the beat, employing three durationally distinct sub-divisional pulses (short-medium-long). London (2010) questioned the reality of more than two different pulse categories in beat subdivision on psychological and theoretical grounds.

We tested both assumptions by presenting timing-manipulated versions of Manjanin phrases to 24 professional Malian musicians and dancers in a forced-choice design of pairwise comparisons. Results show that, perceptually, there are only two pulse categories, a long and a short, and a short-long-long

pattern (SLL) is constitutive of the Manjanin-feel. Metric timing patterns, then, appear perceptually less fine-grained than the performance data suggested.

These results have implications for analytical studies of world music. While at first glance, the approach taken by Polak (computer-aided surface analyses) provides some reliable insights, our psychological study revealed invariances in Manjanin pattern production which are perceptually irrelevant. We advise, thus, against a straight interpretation of object properties and advocate the inclusion of music psychology into the armory of AAWM.

Swinging together: towards a comparative concept of swing-based meters in African(-American) musics

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Non-isochronous subdivision of isochronous beats—addressed here as “swing”—is characteristic of the rhythmic “feel” and often marks the stylistic identity of pieces of music. Swing-based musics are associated with joint action settings that foster collective entrainment in dancing, marching, or working together.

In jazz research, an uneven “long-short” (LS) division of the beat has attracted careful consideration, either as an expressive variation of a duple subdivision or as based on an underlying triplet, though neither of these is truly accurate or adequate. From more recent studies of various swing types in other musics, a typology of patterns is about to emerge, including ternary LSS and SLL, and quaternary LLSS and SLL, among others.

The paper surveys the occurrence and types of uneven subdivision in drum ensemble musics of five ethnic groups from West Africa, where swing-based meter appears to be a core element of rhythmic style in some regions, but not in others. The paper also casts some comparative glances at other parts of the world, such as the Maghreb and Brazil. Finally, I demonstrate the advantage of a comparatively-informed concept of swing-based meter in revisiting an analysis of a piece of popular music from Cuba.

Society for Music Analysis (SMA) panel: Traversing Disciplinary and Geographic Continuums

‘Mixed Metres’ in Theory and Practice

Mark Gotham

University of Cambridge

Almost all known music relies on an hierarchical organisation of its temporal disposition, yet this ‘metrical’ parameter remains poorly understood theoretically, and minimally used in analysis of even those repertoires in which it is unequivocally important. Better theoretical engagement with metre therefore stands both to illuminate important aspects common to all musical experience, and to provide new approaches to under-studied repertoires in which it is an important structural parameter.

Repertoires making extensive use of complex (‘mixed’ beat, or ‘nonisochronous’) metrical structures are a case in point. The most promising work here is to be found in the ethnographic literature on

Balkan music (Brăiloiu 1951/84, Cler 1994, Arom 2004), while recent advances in core Western music theory have tended to focus on combinations of isochronous metres in ‘dissonant’ configurations (Krebs 1999, Cohn 2001, Murphy 2009), neglecting Western music based on complex metres. This presentation contributes to bridging that gap, by providing a systematic basis for the analysis of the diverse repertoires employing these metres. Many short examples serve both to clarify the theoretical apparatus discussed and to suggest further analytical applications.

The first principles consist of setting out the range of possible metrical structures which can be created from a common pulse by grouping elements in either 2s or 3s at each structural level. This paper then introduces a variety of relevant metrical relationships, defines them (mathematically where appropriate), and assesses their validity in relation to both psychological and musical considerations. In the course of discussing these relations, the theoretical need for a common sub-tactus pulse is assessed.

Schenkerian analysis and the transcultural harmony of Hungarian verbunkos

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Schenkerian analysts have made incursions into unlikely repertoires ever since articles appearing in the first two volumes of *The Music Forum* (1967 and 1970, ed. Salzer and Mitchell) extended the theory’s reach to the twentieth century, and as far back as the twelfth. Dedicated studies in chromaticism, post-tonality, jazz and popular music in the next two decades further extended the theory’s reach. With each new territorial gain, more aspects of the original tonal theory were duly sacrificed, and the ‘background’ aspect of the theory—its most salient aspect—was the most notable casualty. Popular musics presented a particular problem. A theory primed to demonstrate tonal directionality and structural depth seemed to be at odds with music that did not rely on sophisticated counterpoint and was tonally circular or static rather than teleological. And yet analysts such as Forte, Gilbert and Everett—to cite a few names—found the challenge of applying it to such repertoires irresistible, whether due to the theory’s explicative power, because (in the eyes of the analyst) the analytical act valorised repertoires traditionally side-lined by musicologists and tonal theorists, and/or for the sheer pleasure or moral-intellectual imperative to revise and expand the scope of a music theory that was notorious for its cultural biases. Such efforts were open to sustained criticism, precisely because they were deemed overwrought and insensitive to the specific qualities of the music in question (Moore, 1993; Gallardo, 2000).

Risking similar disapprobation, I would like to suggest a further use for Schenkerian analytical techniques: the examination of repertoires on the peripheries Euroclassical harmony, in the contact zone where concert music, amateur sheet music and Gypsy-band music interrelate. I will do so through my own research experience with the Hungarian *verbunkos* tradition in both its oral and written manifestations, in a range of examples dating from the 1820s to the 1960s. Specifically, I will demonstrate how modified Schenkerian techniques, stripped of *Ursatz* (background structure) preconceptions, can help reveal both teleological and non-teleological qualities of these diverse but related repertoires, the liquid (non-) cadential meaning of 6/4 chords, and the challenge of polychordal sonorities. Some examples we will listen to twice, first as if they were written in a normative Western harmony, then as seen through the particular harmonic practices of Gypsy bands in Hungary. Such a method of cross-cultural multiple listening questions the received discursive boundaries that have traditionally divided the several types of oral and written *verbunkos* repertoires into different disciplines and modes of analysis. Instead, ‘transcultural listening’ offers a way of grasping the much-neglected harmonic aspect of the *verbunkos* phenomenon more fully. The further applicability of these principles to other harmonic repertoires and analytical techniques is an open question that invites further input from the audience.

Applying the Generative Theory of Tonal Music to World Music idioms: An analytical approach to the polyphonic singing of Epirus

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Based on the premise that a considerable part of Lerdahl & Jackendoff's Generative Theory of Tonal Music (1983) rules are *universal* — meaning that the principles of music perception and cognition are the same for all experienced listeners regardless of the musical idiom in which they are experienced — the application of GTTM to musical idioms other than the Western classical one appears to be feasible. Of course, such an undertaking requires the formulation of *idiom-specific* well-formedness and preference rules, and the description of the idiom's special *tonal hierarchy*. These tasks may be accomplished through the analytical study of music specimens representing a certain idiom, and the description of its features in relation to the GTTM's components. This endeavour is further encouraged by the GTTM's flexibility as a reductional analysis methodology, stemming from the substitution of the schenkerian *fundamental structure* (Ursatz) with the tonally unspecialized and cognitively based *normative structure*, thus enabling its extensive use beyond its initial analytical range. Another enhancement to the theory towards this direction is the parallel theory of Tonal Pitch Space (Lerdahl, 2001), which aids the creation of tonal hierarchies and provides stability preference rules for the time-span-reduction and prolongational analysis.

The chosen analytical object—the polyphonic singing of Epirus, a region of northern Greece—is an intrinsically polyphonic Balkan folk idiom based on anhemitonic pentatonic modes and performed by 2-voice to 4-voice groups, with each voice having a specific musical and narrative role. The reductional GTTM methodology applied reveals the idiom's harmonic background, phrasing/grouping norms and cadential formulas. It also discloses and explains its tonal hierarchy through a categorization of the produced modal sonorities by employing pitch-class set theory, TPS theory and the concept of intrinsic/sensory vs. cultural stability of events. The analysis is based on staff notation transcriptions found in archives or made by the author.

Connected musical and literary analysis: re-sounding the vocal traditions of the colonial Indian Ocean.

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How can we analyse sound once it has dissipated? How can we re-sound texts that were once sung or recited melodically, when the textual shell is all that remains? While literary scholars may hold in their hands the object of their study, music is gone forever once the last note has died away, leaving behind, at best, textual shades that require an Orpheus to breathe back into them an echo of their sonic vitality. This maxim becomes all the more true when attempting to access performances predating recording technologies, in traditions where musical notation has had comparatively little employment. The ERC Musical Transitions project aims in part to recover precisely such moments in India and the Malay world at a time when local traditions encountered European colonialism. Focussing on vocal traditions, in this panel we examine the intersecting worlds of Indian, Malay, and colonial music-making on both sides of the Bay of Bengal: demonstrating a wider spread of musical notation in the Indian context than has previously been appreciated; interrogating the processes through which music was analysed, canonised, and consumed; and bringing literary analysis to bear on the sonic traces that remain, often in unexpected places, in the textual archive. Fundamentally, we contend that making

sense of the music of the eighteenth- and nineteenth-century Indian Ocean requires the connection and enmeshing of tools of musical analysis with those of literary analysis; and that the connected musical histories that thus emerge make sense of far more than sound alone.

The music in the text: North Indian song collections in the early-modern Indian Ocean

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North Indian classical music is considered predominantly an oral tradition, with song compositions jealously preserved and passed down within the gharānā system in exclusive chains of oral/aural transmission that act to protect gharānadār musical property from mass dissemination. In reality, more than a century of sound recording has enabled widespread access to a considerable repertoire of gharānadār compositions, making the recent sound-world of Hindustani music substantively available for musical analysis. In sharp contrast, the assumption of orality and secrecy and the lack of detailed musical notations have stymied attempts to analyse the repertoire of the period before the advent of record sound. In this paper, however, I will show that the assumption of orality is substantially belied by the surprising eighteenth-century rise of large written collections of the song repertoire we now recognise as canonical to Hindustani music. These song collections were taken from live performance practice and circulated widely not only within the tradition's courtly heartlands in Delhi and Lucknow, but from Bharuch to Calcutta, Kathmandu to Hyderabad, and beyond India itself to the Malay courts of Aceh and Banten. Embedded in these songs' textual forms are all sorts of clues to how they were performed musically, as well as to their social, religious and political contexts. In this paper I will combine techniques of musical and literary analysis to reimagine how some of these songs might have sounded, but also to shed light on the circulation history of North Indian music in the early-modern Indian Ocean.

Beguiling voices: rediscovering the sound of nineteenth-century Malay literature

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It is hard to come by specific details on the historic musical practices of the Malays, a cultural group inhabiting the Straits of Malacca who had no tradition of musical notation or written theorization. Malay written texts have been a subject of scholarship since the colonial era, mined for information on history and politics. This paper re-examines these texts as sources on sound, refocuses attention on Malay manuscripts as sounding objects themselves, and highlights the power of the voice in this tradition. Malay literary texts are in fact very useful sources on Malay epistemologies of sound, recording music's reception rather than its production, the aesthetics of sound and its effect on the listener. The voice is particularly important in this regard, and texts reveal the powers of Malay voices to move the heart, to persuade and beguile. Such descriptions are highly self-referential, as traditionally chronicles and ballads were recited from manuscripts to an eager gathering of listeners rather than read silently and alone. This paper also examines the influences of external forces on this tradition in the late nineteenth century. Increasingly close contact with Islamic centres in this era makes it pertinent to question the attitude of devout local scholars to sounding practices. Whilst Malay elites were increasingly exposed to European music, European colonisation perhaps affected this tradition most profoundly through the introduction of lithography and printing. This paper offers a reconsideration of the commonly-held idea that the beguiling Malay voices were 'silenced' by the introduction of this technology.

“Hide and Sikh”, and other awful puns: European amateur dramatics and music making across the Bay of Bengal

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In 1892, Lieutenant Charles Fox Martin sailed from Madras to Penang to take up a position with the Perak Sikh Police Force in Taiping. His arrival was eagerly anticipated in the local English newspapers: not so much on account of his military prowess, but rather for his reputation as a humourist, columnist and theatrical impresario.

Better known in those times and places by his nom de plume, “Ballyhooly Junior”, Martin’s comedic undertakings on both sides of the Bay of Bengal open a window onto the entertainments that Europeans in the colonies both consumed and produced. Drawing upon and linked to the musical and theatrical traditions and innovations of Victorian London, these were nevertheless distinctly localised forms, adapted to the experiences and world-views of the local expatriate communities. While the music itself remains difficult to trace or hear, we can catch snatches in sources as varied as newspaper reviews, playbills and lyric books of the period.

Moreover, this paper will consider the position of these European plays, operas and concerts in the context of other, local forms of entertainment – Parsi theatre, wayang, etc – and the wider patterns of consumption and cultural interaction in these colonial cities. Mining the printed archive may thus be a way to imagine and re-sound the diverse yet also limited cultural cosmopolitanism of the late 19th century Imperial station.

Proliferating books and pruning culture: the analysis of Hindustani music in colonial Bengal

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Over the course of the nineteenth century musical scholarship represented a major component of North Indian print culture. In Calcutta Bengali intellectuals drew on a variety of historical and contemporary knowledge systems, from Indo-Persian treatises to European works on anatomy, to reframe Hindustani music. New musicological works combined analysis with innovations in notation and vast collections of song lyrics in order to approach Indian performance cultures systematically, but also to construct a new epistemic arena. This arena presented itself as comprehensive in its grasp of sub-continental ‘high’ culture, but also defined a regional conversation, with Bengali voices commenting on and critiquing other Bengali works. The final outcome of this process was a Bengali canonicity in the analysis and transmission of music that pervaded and shaped the wider field of Indian arts. By considering these musical publications in terms of South Asian book history this paper will discuss the print industry’s relationship to musicology, and how the proliferation of genres both formalised a new intelligentsia, and re-formulated the content of Hindustani music, with particular respect to vocal traditions. Despite the innovations of the century and the significance of contemporary technologies to the proliferation of these works, the reconstruction of this industry gestures to the continuation of a longer, indigenous engagement with musical appreciation and analysis, and a more nuanced sense of colonial modernity.