



A Musical Mind in an Information Theory World: Refining Concepts of Repetition and Progression Through Comparative Musical Analysis

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Using comparative musical analysis, framed in the principles of information theory (discussed by Meyer, 1994), this presentation will explore and refine concepts of repetition – or cyclicity, and progression – or change, in music. Until recently, many scholars have viewed these as mutually exclusive organizing principles, with each music culture consigned to one camp. Now, a dialogue has opened, placing these two extremes on a continuum. This paper will join that dialogue, contributing new perspectives to those advanced by Monson (1999), Rahn (1993), Pressing (1993), and McGraw (2008), by discussing how diverse musics, each in their own culturally idiomatic ways, take freely and simultaneously from different points on that continuum. To this end, I will compare instances of both repetition and progression in the Balinese gamelan piece *Oleg Tumulilingan*, and the first movement of Beethoven's Piano Sonata No. 1 in f-minor, as well as touching on some aspects of cyclicity and progression in southern Ewe dance-drumming traditions. In each, I will examine repetition and change at several scales: motifs, meter and hypermeter, harmonic and melodic progressions, formal structures, and repetition and change spanning multiple performances. While each example concurrently uses repetition and progression at all levels, each chooses different musical elements through which to explore it. Small-scale repetitions may be Balinese iso-rhythms or Western classical melodic sequences with repetition masked through motivic exploration; medium-scale repetitions may be Balinese colotomic patterns or the recurring phenomenal accents of Western meter and hypermeter, or they may be a cycling pattern of Balinese structural melodic contours or Western Classical harmonies and harmonic functions; large-scale formal repetitions may be defined by harmonic, melodic, or rhythmic parameters; large-scale change may be achieved through tempo and dynamic shifts, tonal center shifts, improvisation, or even dance. In exploring the use of both cyclicity and progression in these three contrasting genres, I am proposing the idea that each musical system seeks balance between the two extremes, and that – through the lens of information theory – this desire for balance can create musical patterns of repetition and change that may be compared across cultures. Thus, I aim to suggest that, while certain embedded cultural attitudes may have led to the perception of repetition and change as polarities, an analytical method stressing more nuanced descriptions of temporality as something layered and multidirectional may enable useful comparative insights.

Works cited:

McGraw, Andrew Clay. 2008. "Different Temporalities: The Time of Balinese Gamelan." *Yearbook for Traditional Music*. 40: 136-162.

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Pressing, Jeff. 1993. "Relations Between Musical and Scientific Properties of Time." *Contemporary Music Review*. 7/2: 105-122.

Rahn, John. 1993. "Repetition." *Contemporary Music Review*. 7: 49-57.

Leslie Tilley is a PhD candidate in the ethnomusicology program at the University of British Columbia. Her Master's thesis, completed in 2003, was an in-depth musical analysis of reyong norot improvisation for the Balinese gamelan gong kebyar. She is now studying and analysing Balinese drum patterns, particularly the paired improvisation of arja drumming, and how it relates to other classical genres of drumming, including pelegongan and pegambuhan. She also plays regularly in two Vancouver gamelan ensembles, has performed in several gamelan and new music collaborations in both Canada and Bali, and is the "world music" professor for degree program students at Vancouver Community College.