Changing Conceptualizations of Rhythm in Sri Lankan Up-Country Percussion Music: From Rhythmic Contours to Metric Cycles

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IT stands to reason that the ways musicians conceive of and categorize musical rhythms can directly influence the way they perform them, and that these ways of thinking about rhythm can be culturally conditioned and driven by social pressures. The "up-country" drumming tradition of central Sri Lanka serves as a vivid example of how the spread and transformation of rhythm concepts has been enabled by particular social histories, and of how these changing concepts of rhythm have influenced the ways in which the music has been performed. In this article, I explore the historical trajectories of how rhythm has been understood in the Sri Lankan up-country tradition, comparing traditional conceptualizations with twentieth-century academic theories, and situating these ways of thinking within broader South Asian contexts. I adopt a cross-cultural, long-term approach to this exploration so that readers can assess for themselves the extent to which the encounter between South Asian performing arts and colonial modernity can be seen to represent rupture and/or continuity. Using Sri Lankan up-country percussion music as a case study, I demonstrate how traditional criteria for categorizing rhythms, such as the number of emphasized beats in a repeating rhythmic contour, allowed for rhythm cycles of different metric lengths to be considered culturally equivalent by performers. I also show how, after these metrically flexible rhythm categories were rationalized according to measurable time-units by twentieth-century musicologists, metrically different rhythmic frameworks that shared a common number of emphasized beats were no longer considered interchangeable. By focusing on structural concepts of rhythm, rather than on the surface rhythms of sung melodies or drumming, I uncover a trend across South Asia whereby flexible rhythmic concepts move toward more rigidly defined categories.

THE UP-COUNTRY PERFORMANCE TRADITION

The up-country performance tradition (*uḍaraṭa sampradāya*) owes its roots to the *kohoṁbā kaṁkāriya* village ritual, which was enacted by Sinhala-speaking hereditary male practitioners in the central mountainous regions of Sri Lanka.[1] The origin myth embedded in the ritual liturgy states that the ritual was first performed in the fifth century BCE; however, the language and literary devices used in the *kohoṁbā kaṁkāriya* suggest that it more likely originated in the fifteenth century, and evolved toward its canonical form in the seventeenth century (Seneviratne 1978, 204–14). In addition to the function of propitiating local gods, post-harvest rituals such as the *kohoṁbā kaṁkāriya* may have served as "modalities that enabled Sinhalaness as well as Buddhistness to become embodied" (Roberts 2004, 29); that is, they

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1. The central mountainous region, known as the "up country," includes the present-day districts of Kandy, Matale, Kegalle, and Kurunegala. For a critical history of the up-country ritual tradition, see Reed (2010).

brought about a sense of ethnolinguistic and religious historical consciousness among their participants. Memorization of sung ritual texts,[2] which were transmitted through oral tradition, was enabled by the use of standard poetic meters (Roberts 2004, 23), and their communicative power and ritual efficacy was enhanced by dancing and drumming.

The up-country dance compositions known as *vannam*—which are more commonly associated with the tradition than the ritual repertoire—are attributed to the eighteenth-century kingdom of Kandy (Reed 2010, 87), which remained independent from European colonial rule until 1815 (De Silva 2005, 300). Sinhala *vannam* texts were originally composed purely for singing, and some of these compositions were named according to their poetic meters, which were derived from Tamil styles of versification (Kulatillake [1982] 2013, 73). Dancers subsequently incorporated the dance movements, drum phrases, and structural elements of the *kohoṁbā kaṃkāriya* into public performances of *vannam* (Jayaweera 2004, 2).

In terms of instruments, although sculptural and written evidence attests to the use of drums and small cymbals in the twelfth century (Kulatillake [1974] 2012, 122, 207), there is no way of knowing the extent to which medieval music may have resembled that of today's folk rituals. However, scholars do know that the cymbal rhythms played in twentieth-century up-country performances were originally played on a small hand-held gong (*taliya*) using a mallet, at least in the previous century (Wijewardana 1994, 13).

The Use of Percussion in Music of the Up-Country Tradition

In Sri Lankan traditional drumming, drum phrases as well as dance movements are represented by spoken phrases of drum syllables. In the up-country tradition in particular, the sounds of the spoken syllables loosely correspond with the timbres of strokes played on the drum named *gäta beraya* (pl. *gäta bera*, Figure 1),[3] and the relative durations of these syllables may once have carried aesthetic and astrological associations with syllable-organizing principles of medieval Sinhala and Telugu poetry composition (Sedaraman 1966, 4–5).

Traditional drumming in Sri Lanka has been characterized as rhythmically elusive, and as using a language-like phrasing that defies metrical quantification (Sykes 2013, 497). This speech-like phenomenon is most evident in drum pieces such as *Maṅgul Bera* (Kulatillake [1981] 1999, 92–93), which do not accompany dancing. Such pieces are constructed as a free-rhythmic string of short drum motifs: for example, the phrase shown in Figure 2 is built from motifs such as *taṃ jiṃ, taka, gata, kuṃ daṃ,* and *kuṇda gajiṃ,* and is typically played without a sense of meter or isochronous pulse.[4]

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2. Ethnomusicologist Ronald Walcott (1978, 19) suggests that the presentation of the gods' stories through song is at the heart of the ritual's efficacy (quoted in Sheeran 1999, 963).
3. The relationship between up-country syllables and the tones of the *gäta beraya* is examined in Bandara ([2000] 2008, 129–30). For a general discussion regarding the connection between percussion timbres and mnemonic syllables in South Asia, see Wolf (2014, 20–22).
4. This phrase, known as *Dēva Padaya*, is played at the beginning of *Maṅgul Bera* (Sedaraman 1966, 13).

Figure 1. Two *gäta bera* drummers (Sarath Wijesiri and Lakshman Polgolla) performing at a ritual in Mavanella, Sri Lanka. Photo by Pabalu Wijegoonawardane.

taṃ jiṃ taṃ jiṃ taka jiṃ gata kuňda gajiṃ,
tarikiṭa gata gata gogoňda kuňda gajiṃ -
takajiṃ gata kuṃ daṃ gata kuṃda kuṃdak jiṃ

Figure 2. *Dēva Padaya*, from *Maňgul Bera* of the up-country tradition.

Up-country music that accompanies dance also employs a similar drumming vocabulary. For instance, in the dance piece *Musalaḍi Vannama*, the drum phrase "*kuňda gajiṃ jiṃ kuňda gajiṃ jiṃ kuňda gajit taka takaṭa kuṃ daṃ*" (Sedaraman [1964] 2008, 101) uses motifs which also appeared in the excerpt from *Maňgul Bera* shown in Figure 2: *kuňda gajiṃ*, *taka*, and *kuṃ daṃ*.

In many up-country dance pieces, especially non-ritual ones, drum phrases are played in counterpoint with slower-moving ostinato patterns played on a pair of small cymbals (*tālampaṭa*, Figure 3).[5] As an example, Figure 4 shows how the above-mentioned drum phrase from *Musalaḍi Vannama* coincides with four iterations of the ostinato cymbal pattern "tit-tei"; here the onomatopoeic terms "tit" and "tei" represent a short cymbal stroke and a long cymbal stroke respectively (Somapala 1958, 90).[6]

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5. The instrument *tālampaṭa* (sometimes transliterated as *talampota*) is often translated as "finger cymbals"; however, they are played with one cymbal in each hand, never attached to fingers. A cymbal in a set of *tālampaṭa* typically has a diameter of 5 to 7 cm.

6. I use the term "stroke" to mean a pair of cymbals being struck together. "Strokes" refers to sequential soundings of the pair of cymbals. The qualifiers "short" and "long" refer to the inter-onset durations between strokes. In addition to representing short and long inter-onset durations, the labels "tit" and "tei" also ostensibly referred to "damped" and "undamped" cymbal strokes respectively (Somapala 1958, 90); however, there is no evidence that this practice was followed consistently (Wijewardana 1994, 96).

Figure 3. A pair of small cymbals (*tālampaṭa*) being struck by a musician named Neville at a ritual in Mavanella, Sri Lanka. Images extracted from a video by Asanka Rohana.

tit	tei	tit	tei	tit	tei	tit	tei
kuňda ga-	jiṃ jiṃ	kuňda ga-	jiṃ jiṃ	kuňda ga-	jit taka	takaṭa	kuṃ daṃ

Figure 4. A drum phrase coinciding with the ostinato cymbal pattern "tit-tei."

Thus, up-country rhythmic frameworks can be seen as a hierarchical nesting of two rhythmic levels, with the drum strokes having a higher onset density than the ostinato cymbal pattern. A lot of up-country drum music that accompanies dance today does sound like it has an underlying isochronous pulse; however, in the past, it is likely that these drum phrases were played with the same rhythmic flexibility as in *Maňgul Bera* (i.e., not articulating isochronous subdivisions of the beat), even when synchronizing with cymbal patterns.[7] As I show later in this article (Figures 6–10), there are four non-isochronous cymbal patterns and one isochronous pattern commonly used in the up-country repertoire. As such, some performances of up-country rhythm could have comprised two hierarchically adjacent streams of non-isochronous rhythmic activity; however, given the recurring nature of the ostinato cymbal patterns, these rhythms would still have fulfilled enculturated dancers' expectations of periodicity.[8]

Such periodic rhythm cycles without isochronous beats or subdivisions of the beat are not unique to Sri Lanka; they have also been encountered in places such as Baluchistan

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7. This interpretation is strengthened by the possibility that up-country drumming shared a common aesthetic with low-country drumming, from the southwest coast of Sri Lanka. The speech-like expressive timing of low-country drumming is discussed in detail in Suraweera (2009) and Sykes (2013).

8. Thus, isochrony in this music for dancing would occur only at the level of the cycle, where the cycle consists of one ostinato unit. Interpreted in terms of Hasty's (1997) theory of metric projection, Polak (forthcoming) proposes that what is thrown forward in time in non-isochronous rhythm cycles is not a single pulse, but rather a "whole *pattern* of latent durations and durational relations."

(During 1997), Iraq (Cler 1994), and Scandinavia (Kvifte 1999), most often "in folk music traditions, where a systematic conceptualization and training of music theory is less widespread" (Ekinci 2018, 56).[9] However, in contrast with rhythmic traditions where non-isochronous subdivisions of the beat articulate a stable timing pattern on a cyclic basis,[10] the timing of up-country drum phrases depends more on the syllabic properties of the drum words, rather than any particular "rhythmic feel." All that said, my goal here is not to argue for the inherent speech-like nature (as opposed to metrical quality) of Sri Lankan traditional drumming,[11] nor to show that humans can entrain to non-isochronous metric subdivisions,[12] but rather, to demonstrate the flexible nature of traditional up-country rhythm categories that were based on ostinato patterns of cymbal strokes. The following arguments are based on the assumption that Sri Lankan musicologists in the latter half of the twentieth century understood ambiguously timed up-country drum phrases as articulating expressive variations that deviated from a conceptual mechanical ideal, and that they transcribed the "ideal" versions of these drum phrases and accompanying cymbal patterns for the purpose of establishing a theory of Sri Lankan rhythm.

Understanding Up-Country Cymbal Patterns as Rhythmic Contours

How were up-country rhythmic frameworks conceptualized prior to the mid-twentieth century? To answer this question, I take three texts that advocate an isochronous-count-based approach to understanding up-country rhythm (Somapala 1958, Makulloluwa [1962] 1996, Wijewardana 1994) and read them against the grain; I use their criticisms of traditional up-country rhythm theory and practice to reconstruct the rhythmic conceptualizations and practices of earlier generations of up-country hereditary performers, and support these inferences with rhythmic nomenclature found in the writings of Bandar (1908), Sedaraman (1966), and Kulatillake (1976).

According to Kulatillake (1976, 37), traditionally the durations of cymbal strokes were not defined in relation to particular quantities of beats or beat subdivisions; rather, their lengths were variable depending on context, and were learned intuitively by pupils from observing their teachers' demonstrations. It is this variability that was the main source of frustration for reform-minded theorists such as Somapala, Makulloluwa, and Wijewardana; however, their criticisms regarding older methods of cymbal playing offer valuable insights into the ways in which hereditary performers may have thought about rhythm.

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9. Referring to meters based on drum strokes of irregular lengths, Peter Manuel (2015, 102) suggests that "such irregular and asymmetrical rhythms, which have their own expressive power, could be said to flourish precisely in a genre unimpeded by a codified classical theory—based on beat counts—with which they would be inconsistent."

10. Some examples of repertoires characterized by non-isochronous patterns of beat subdivisions that repeat systematically are Jembe music from Mali (Polak 2010) and Samba music from Bahia (Gerischer 2006).

11. This argument has already been made by Sykes (2011, 284–86) in reference to low-country drumming and extended to up-country drumming (371).

12. This argument is made in Polak, London, and Jacoby (2016).

As described by Somapala (1958, 94), Makulloluwa ([1962] 1996, 86), and Wijewardana (1994, 49, 54, 123), up-country performers traditionally categorized rhythmic frameworks according to patterns of cymbal strokes. A repeating unit of cymbal strokes was known by the term *tita*,[13] and rhythmic labels specified the number of sequential strokes in a unit: the labels *tani-tita*, *de-tita*, *tun-tita*, *siu-tita*, and *pas-tita* referred to patterns with one, two, three, four, and five cymbal strokes, respectively. With the exception of *tani-tita*, which only has one stroke per unit, the other *tita* patterns included both "tit" (short) and "tei" (long) strokes. Figures 5 to 9 show some common ostinato cymbal patterns associated with the above labels.

As recently as the 1950s, performers did not specify how the durations of the strokes should relate to each other as mathematical ratios or beat-groupings. For example, as analyzed by Sedaraman (1966, 116–17), an ostinato cymbal pattern such as *de-tita* (two strokes) could be quantified, on different occasions, as articulating a durational ratio of 2:3 or 2:4 or 2:5, and a pattern such as *tun-tita* (three strokes) similarly seen as articulating a durational ratio of

tei	

Figure 5. Example of a *tani-tita* (one cymbal stroke) ostinato unit.

tit	tei

Figure 6. Example of a *de-tita* (two cymbal strokes) ostinato unit.

tit	tit	tei

Figure 7. Example of a *tun-tita* (three cymbal strokes) ostinato unit.

tit	tit	tit	tei

Figure 8. Example of a *siu-tita* (four cymbal strokes) ostinato unit.

tit	tit	tit	tei	tei

Figure 9. Example of a *pas-tita* (five cymbal strokes) ostinato unit.

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13. The term *tita*, a categorical term that refers to a repeating pattern of cymbal strokes, should not be confused with "tit," the onomatopoeic syllable that represents a short cymbal stroke, although it is likely that the terms are related.

2:2:3 or 2:2:4.[14] From this it can be inferred that hereditary performers were not concerned with limiting the durational ratios among cymbal strokes to specific values when defining rhythmic categories. Rather, I argue, they viewed each cymbal pattern—constituting a particular number of strokes with variable durations—as a single conceptual rhythmic category; thus, durational ratios among cymbal strokes could vary between different pieces considered to have the same cymbal pattern. In other words, rhythmic frameworks were categorized as rhythmic contours (i.e., patterns of relative duration), rather than as precise metrical lengths.[15] By extension, cyclic rhythmic frameworks that embodied different metrical lengths, but had in common a cymbal pattern with the same rhythmic contour, would have been considered culturally equivalent.

To demonstrate the practical usage of this type of rhythmic conceptualization, Figures 10 to 14 show how some common basic drum phrases align with common ostinato cymbal patterns.[16] I do not include the isochronous count interpretations that were imposed on these phrases by Somapala (1958) and Makulloluwa ([1962] 1996); however, I have underlined the longer syllables (as per the conventions of Sinhala poetic scansion) and spaced out the syllables to represent their approximate timing. Enunciating these drum phrases out loud, as if speaking a sentence (i.e., paying attention to the longer and shorter drum syllables, but not synchronizing the syllables with an underlying isochronous pulse), will give the reader a preliminary sense of how drum phrases can retain a flexible speech-like character while aligning with cymbal strokes. However, as mentioned earlier, my point here is not to argue for the inherent speech-like quality of traditional drumming, but rather, to demonstrate the various possibilities for cymbal durations within any given traditional rhythm category based on cymbal ostinati. In Figures 10 to 13, each column represents a "tit" or "tei" cymbal stroke; I have used wider columns for the "tei" cymbal strokes, to indicate their relatively long duration. By adjusting the width of the columns to accommodate the approximate durations of the drum strokes, I show in Figures 10 to 12 how the relative durations between the "tit" and "tei" strokes in the same cymbal pattern (i.e., a single rhythm category) could change on different occasions, depending on the syllables of the main drum phrase being played.[17] While Figure 13 and Figure 14 do not show the variable nature of cymbal durations, I include them as examples of how drum phrases align with the rhythm categories *pas-tita* (five cymbal strokes) and *tani-tita* (one cymbal stroke). The category of *tani-tita* is defined by an ostinato unit that has just one cymbal stroke; thus, a succession of these units produces an isochronous cymbal

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14. I suggest that Sedaraman's quantifications may have been based on metric approximations of ambiguously timed drum phrases that aligned with cymbal patterns.

15. The term "rhythmic contours" is borrowed from Marvin (1991, 62–66). I thank the anonymous reviewer who brought the term to my attention.

16. The drum phrases in Figures 10 to 14 are derived from the writings of Makulloluwa (1962) and Wijewardana (1994). While an oral tradition poem cited by Kulatillake (1976, 34) refers to the traditional usage of seven categories of cymbal patterns, here I only indicate the five most commonly cited patterns.

17. During subsequent iterations of the ostinato cymbal pattern, these drum phrases could also be repeated as ostinati, but more often they are repeated in elaborated (*alaṃkāra*) versions (Wijewardana 1994, 82–83), which retain the durational proportions of the original phrase.

tit	tei
go go	ji ga ta

tit	tei
dom	jim ga ta

tit	tei
dom do	jim ga ta

Figure 10. Drum phrases aligning with a *de-tita* (two cymbal strokes) ostinato unit.

tit	tit	tei
kuň da	kuň da	ga ji ji

tit	tit	tei
do dom ta	dom ta ku	dom dom jim jim

Figure 11. Drum phrases aligning with a *tun-tita* (three cymbal strokes) ostinato unit.

tit	tit	tit	tei
gog	gog	jim	jim ga ta

tit	tit	tit[18]	tei
dom	dom	jim ta ku	ji ji kuň da

Figure 12. Drum phrases aligning with a *siu-tita* (four cymbal strokes) ostinato unit.

tit	tit	tit	tei	tei
gat	jit	ta ka	dom ta ka	ta ri ki ṭa

Figure 13. A drum phrase aligning with a *pas-tita* (five cymbal strokes) ostinato unit.

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18. Here, this "tit" is treated like a longer "tei" syllable.

tei		tei	
do	mi	ki	ṭa

tei		tei		
do͟m	ji	ji	ga	ta

tei				tei		
do	mi	ki	ṭa	ki	ṭa	do͟m

Figure 14. Drum phrases aligning with two iterations of a *tani-tita* (one cymbal stroke) ostinato unit.

rhythm. Since even the simplest of drum phrases are often longer than one cymbal stroke, Figure 14 shows some drum phrases that align with two iterations of the cymbal ostinato.

The value placed on these rhythmic categories is evident from the fact that cymbal patterns were a topic of frequent debate among hereditary performers (Wijewardana 1994, 22).[19] Their practical significance is also evident from the fact that these patterns (rather than rhythmic frameworks of abstract metrical lengths) were used as the basis of new extemporaneous dance, drum, and poetry compositions in competitive entertainment settings (ibid.).

In addition to the above *tita* labels, there are other names (with obscure meanings) that ostensibly referred to the same patterns.[20] While cymbal patterns may have had different names that varied among hereditary teacher lineages and over time, they have been consistently described in terms of long and short cymbal strokes. Due to this lack of specificity

19. As mentioned earlier, however, hereditary performers did not think of cymbal patterns in terms of underlying pulse lengths; in fact, according to Wijewardana (1994, 54), they had no verbal concept of isochronous pulse.
20. For example, the ostinato with one cymbal stroke, "tei," which could be labelled *tani-tita* (Wijewardana 1994, 114), also appears linked to the rhythmic labels *aḍa tita* (Gunasena 1953), and *pūrna tita* (Sedaraman 1966, 43). The ostinato pattern with two strokes, "tit-tei," which could be labeled *de-tita* (Wijewardana 1994, 114), also appears linked to the rhythmic labels *tāla tita* (Gunasena 1953) and *ēkat tālama* (*Tālaṃ* 1843). The pattern with three strokes, "tit-tit-tei," which could be labeled *tun-tita* (Wijewardana 1994, 114), also appears linked to the rhythmic labels *sembaḍa tālama* (*Tālaṃ* 1843) and *sembhaṭṭa tālama* (Bandar 1908, 135). The pattern with four strokes, "tit-tit-tit-tei," which could be labelled *siu-tita* (Wijewardana 1994, 114), also appears linked to the rhythmic label *nā-ilachchi tālama* (*Tālaṃ* 1843). There are several names linked to ostinato patterns with five strokes: the pattern "tit-tit-tit-tei-tei" is named *pas-tita* (Makulloluwa [1962] 1996, 91), the pattern "tit-tit-tei-tit-tei" is named *mūlānta tita* (*Tālaṃ* 1843), the pattern "tit-tit-tit-tit-tei" is named *kariyassa tālama* (ibid.), and the pattern "tei-tei-titi-titi-tei" is named *jampa tālama* (*Tālaṃ* 1843). Gunasena (1953) also mentions a pattern with six strokes, "tit-tit-tit-tit-tei-tei"; he calls this *pūrna tita*. In the above examples, references to the anonymously authored manuscript *Tālaṃ* (1843) are quoted in Wijewardana (1994, 20), who consulted a copy that was in possession of Ahangama A. M. Jayasoma; references to J. E. Gunasena's out-of-print book, *Siṃhala Nāṭya Pradīpaya* (1953), are quoted in Wijewardana (1994, 120).

regarding the lengths of cymbal-strokes, a piece starting with a *de-tita* (two cymbal strokes) pattern that articulated a durational ratio of 2:3 between the "tit" and "tei" strokes, could—for the final dance segment—abruptly switch to a *de-tita* pattern with a durational ratio of 2:4 or 3:4, while still being considered within the same rhythmic framework (Wijewardana 1994, 54). From this I infer that hereditary performers were not concerned with maintaining metrically identical durational ratios among cymbal strokes even throughout a single piece, as long as the relative short–long relationship of the "tit" and "tei" strokes was maintained.

Somapala, Sedaraman, and Wijewardana also mention some labels that may have referred to particular cymbal strokes, based on their characteristics, function, or position within an ostinato cymbal pattern.[21] In these labels, the term *tita* is seemingly used in the sense of an individual cymbal stroke, instead of the more conventional meaning as a pattern of them.[22] There are discrepancies in the ways different scholars define these terms, but the fact that they are frequently cited suggests that they held some practical significance for hereditary performers. Kulatillake (1976, 37) asserts that cymbal strokes "function . . . as the mediator between the dancer and the drummer"; in this context, labels such as these could have been used as points of reference during rehearsal.

CONCEPTS OF RHYTHM ACROSS SOUTH ASIA

Previous ethnomusicological writings (Kulatillake 1976, Suraweera 2009, Sykes 2013) have argued that the timing aspects of Sri Lankan drumming traditions are more productively studied on their own terms, rather than in relation to Indian metrical concepts of tāla. In fact, as I show later, thinking of Sri Lankan drumming in terms of such metrical concepts has actually changed the way in which up-country rhythm has come to be conceptualized and taught. Yet without advocating a return to thinking of Sri Lanka as being on the periphery of Indian cultural diffusion,[23] there is still much to be gained by considering Sri Lanka as part of a broader South Asian region, since intra-regional and historical comparisons may well show us how musical processes in the Indian subcontinent can shed light on musical phenomena in Sri Lanka, and vice versa.[24] As a preliminary step, I will highlight some similarities between

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21. This is analogous to the use of terms such as "downbeat," "upbeat," "off-beat," etc., in the context of Western meters.
22. Some examples are *sama tita* (Sedaraman 1966, 47), *pera tita* (Somapala 1958, 91), and *mūla tita* (Somapala 1958, 91), referring to the first stroke in a cymbal pattern; *pasu tita* (Somapala 1958, 91; Sedaraman 1966, 47) and *anta tita* (Somapala 1958, 91), referring to the last stroke in a cymbal pattern; *hrasva tita* (Somapala 1958, 90), referring to a shorter stroke in a cymbal pattern; *dīrga tita* (Somapala 1958, 90; Wijewardana 1994, 124), referring to a longer stroke in a cymbal pattern; *pūrna tita* (Wijewardana 1994, 123), referring to an cymbal stroke that articulates the entire pattern (i.e., the pattern consists of just one stroke that repeats in an isochronous manner); and *kaṇḍilam tita* (Wijewardana 1994, 124), referring to a cymbal stroke played during a rest in the melody and/or drumming.
23. The idea that Sri Lankan traditions are a sub-culture of India was exemplified in the influential writings of art historian Ananda Coomaraswamy (1877–1947; Donaldson 2001, 10–13).
24. There is a long history of interaction between the island of Sri Lanka and the Indian subcontinent. Mythological accounts in the sixth-century Pali chronicle *Mahāvaṃsa* speak of a migration from North India to Sri Lanka during the fifth century BCE; this came to be regarded as the "Aryan migration" in nineteenth-century

the traditional up-country rhythmic conceptualizations described above and some selected rhythmic concepts found in India. I do this not by focusing on isochronous counts, but by examining some of the ubiquitous clapping patterns found through South Asia.

Clapping Patterns in South Asia

There is a long documented history of clapping patterns in India; the earliest descriptions come from the *Nāṭyasāstra*, a Sanskrit theatrical treatise with oral roots dating back to the first century (Rowell 1992, 19–21).[25] Today, clapping patterns are commonly understood as "external representations" that articulate metric frameworks (Kippen 2006, 76); considered an integral part of the rhythmic framework, these patterns can be readily observed in performances of Indian classical music.[26] Contemporary explanations of these hand motions typically describe them as segmenting a rhythmic cycle that has a fixed number of isochronous beats by highlighting particular counts in the cycle. In this understanding, claps represent emphasized beats, and waves represent un-emphasized beats. However, some musicologists (Stewart 1974, Sharma 2000, Kippen 2006) have drawn an analogy between the principles of Sanskrit agogic verse and Hindustani clapping patterns that were previously associated with the North Indian genre of *dhrupad*; they use this analogy to argue that such clapping patterns can be productively understood in an additive manner, since claps of different durations add up to produce a cycle length. In this interpretation, a wave is simply a way of elongating a clap, and not a representation of an un-emphasized beat; thus, a clap followed by a wave constitutes a long clap. This implies that short and long claps concatenate to produce repeating clapping patterns characterized by a lower onset density than the surface rhythms of the accompanying drum patterns.

As an example of an established definition, the common Hindustani rhythmic

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scholarly and popular imagination, supported by the recent classification of Sinhala as being an "Indo-Aryan" language (Gunawardana 1990, 72–74). Archaeological evidence reveals that a large section of Sri Lanka was annexed to the South Indian Chola empire for the greater part of the eleventh century (De Silva 2005, 30), and that the northern part of the island was conquered in the thirteenth century by successive invasions from Pandyan kingdom of Madurai (110), and the East Indian kingdom of Kalinga (85). Historical evidence also suggests that mercenaries and traders from Kerala migrated to Sri Lanka during the thirteenth to fifteenth centuries (Obeyesekere 1984), and that waves of immigrants from South India have assimilated into the local Sinhala-speaking and Tamil-speaking populations since the fifteenth century (Roberts 1982, Tambiah 1992). From 1739 until 1815 the central mountainous kingdom of Kandy was governed by the Nāyakkar dynasty, a Telugu-speaking group who originated from Madurai in South India (De Silva 2005, 196–97), after which the region was subsumed by the expanding British empire (300). Even today, commonalities between South India and Sri Lanka can be seen in traditional Sinhalese kinship structures (Gunaratne [2002] 2004, 29–34), Sinhalese–Buddhist cosmology (Obeyesekere 1984), ritual costumes (Sarachchandra [1952] 1966, Raghavan 1967), and dance principles (Reed 2010, 36).

25. The word *tāla*, which usually refers to the cyclic rhythmic frameworks found in India, literally means "clap" in Sanskrit, and cognates of the word can also refer to cymbals; e.g., *tālampaṭa* in Sri Lanka and *ilatālam* in Kerala. In ancient times, "in many performances the [clapping] gestures were . . . reinforced by the sound of the small pair of bronze *tala* cymbals" (Rowell 1992, 194); this is comparable to current up-country practice.

26. It should be mentioned that clapping patterns are more rigorously adhered to in performances of Karnatak (South Indian) classical music than in the Hindustani (North Indian) tradition (Kippen 2006, 76).

framework *tīntāl* is usually understood as a sixteen-count cycle with claps on counts one, five, and thirteen, and a wave on count nine. In contrast, viewing *tīntāl* (which literally means "three claps") in an additive manner could mean understanding it simply as a repeating pattern of three claps, where the second clap is longer because it includes the duration of the wave as represented in Figure 15; in other words, the clapping pattern articulates a rhythmic contour of short-long-short.

Interpreting Indian clapping patterns in this additive manner draws attention to pan-regional commonalities in the ways that rhythm has been conceptualized in Sri Lanka and throughout mainland South Asia, for example as rhythmic contours. Without suggesting that these commonalities necessarily imply direct cross-influence between particular groups, and without denying the pervasive influence of twentieth-century classicizing discourses in South Asia, I argue that they can shed light on shared ideas that were present in many parts of the region in pre-modern times.

A particularly illuminating parallel with the up-country cymbal patterns described above can be found more than 2,700 kilometers away from central Sri Lanka, in the city of Multan in present-day Pakistan. Richard Wolf (2014, 86, 285) describes a pattern based on five claps that is used by Muslim musicians at the annual Muharram festival. The pattern is named *panj tār dī savārī* (five-clap *savārī*),[27] and the musicians are said to have counted the larger units with claps (not using a uniform time unit) and thought of the smaller units in terms of drum syllables. This system of counting, known as *vājā* in the local Saraiki language, is "oriented to an irregular sequence of accents marked by syllables and claps" (Wolf 2014, 93), and was the norm until it was "overlaid with the contemporary classical practice of describing metric structures in terms of *mātra*s," i.e., homogenous time units (106). A brief examination of the pattern in Figure 16 reveals how—due to the nature of the drum syllables—the five claps are not of equal duration.

clap				clap				wave				clap			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
dhā	dhin	dhin	dhā	dhā	dhin	dhin	dhā	dhā	tin	tin	tā	tā	dhin	dhin	dhā

Figure 15. The three claps of *tīntāl*.

X	2	3	4	5
jā _ _ nā _ _	ka _ te ke ta _ te ke	jhā _ tij jhā ge de ge de	gi _ nā _	ge de ge de

Figure 16. The five unequal claps of *panj tār dī savārī*.

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27. According to Wolf (2014, 67), the term *savārī* implies an association with a passenger or a ride.

Like up-country cymbal patterns, this pattern is conceived of and labeled in terms of the number of claps, with the durations of the claps determined by the drum pattern. Wolf's (2014, 81–114) research also provides other folk and tribal examples originating from diverse locations in India (Tamil Nadu, Madya Pradesh, Delhi, and Agra) where the organization of drum patterns does not depend on cycles of a fixed number of isochronous beats, but rather on verbal formulas, repeating motives, and/or the number of stressed beats.

The possibility that clapping patterns were once conceptualized purely as rhythmic contours is also evident when considering the history of the seven *sūlādi* tālas commonly encountered in Karnatak music discourse.[28] As a result of multiple efforts to codify theory occurring over five centuries (Krishna 2013, 469–84), contemporary Karnatak music textbooks list seven categories of tāla (clapping patterns), known as *sūlādi* tālas, where the number of pulses in the longest clap determines the name and precise metrical length of a particular cycle within a category. For example, the *sūlādi* tāla category of *triputa tālam* (which has three claps that articulate the rhythmic contour long-short-short) can generate the following five distinct tālas: *tisra jāti triputa tālam, caturasra jāti triputa tālam, khanda jāti triputa tālam, misra jāti triputa tālam,* and *sankīrna jāti triputa tālam*. These tālas in the *triputa tālam* category are differentiated by their *jāti*; that is, whether the long clap is three, four, five, seven, or nine isochronous pulses in duration, as represented in Figure 17.[29]

As explained by T. M. Krishna (2013, 469–76), when these seven rhythmic categories were first formulated around the fourteenth century, there was only one rhythmic framework associated with each category, in which the durations of the claps were defined by melodic phrases. The concept of *jāti* variability first appeared in the sixteenth-century treatise *Sangita Suryodaya* (ibid., 475); this allowed for different versions of the same *sūlādi* tāla to be nominally differentiated depending on the number of pulses included in the long clap. Based on this information, and assuming that written theory was preceded by practice, I propose that

Triputa Tālam:	Long clap		Short clap	Short clap
tisra jāti triputa tālam:		3 pulses	2 pulses	2 pulses
caturasra jāti triputa tālam:		4 pulses	2 pulses	2 pulses
khanda jāti triputa tālam:		5 pulses	2 pulses	2 pulses
misra jāti triputa tālam:	7 pulses		2 pulses	2 pulses
sankīrna jāti triputa tālam:	9 pulses		2 pulses	2 pulses

Figure 17. The five variable versions of *triputa tālam*.

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28. Many of these tālas and their derivative rhythmic frameworks are not actually employed in the Karnatak repertoire as practiced today.
29. In contemporary practice, these pulses between claps are materialized by finger tapping and waving gestures.

fifteenth-century proto-Karnatak performance practice may have employed a flexible interpretation of relative clap durations, where clap lengths were associated with flexible melodic phrases rather than precise metric lengths, before the different possible lengths of the long claps became codified as being conceptually distinct entities.

Another set of metric frameworks found in Karnatak classical music, the *chāpu tāla*, may have originated in the *bhajana* devotional traditions or the *harikithā* storytelling traditions of the nineteenth century, "where musicians used castanets to maintain rhythm" (Krishna 2013, 477). Krishna provides an example of such a pattern that "may have been maintained with just two clicks of the castanets" and materialized pulse-grouping ratios of 3:4 or 2:3 (477). This use of percussion instruments, rather than claps, to articulate the rhythmic framework is paralleled in the use of cymbals (or previously, gongs) in the Sri Lankan up-country tradition.

What should we make of these pan-regional similarities with regard to categorizing rhythmic frameworks? A cursory survey of some of the diverse musics found around South Asia reveals that readily audible differences between genres (e.g., differences in instrumental timbres, styles of melodic ornamentation, melodic scales and contours, degree of rhythmic complexity, and even compositional forms) are far more apparent than the few selected conceptual rhythmic similarities that I have illustrated here. As such, it would be an exaggeration to claim that the traditions described above (separated as they are by geographical distance and/or historical time) have necessarily had direct contact, or that they necessarily derive from common musical ancestors as described in ancient Sanskrit treatises. That said, it has been argued that "similar musical nomenclature occurring across languages constitutes evidence of deeply shared ideas about musical process" (Wolf 2014, 113). Given the historical evidence, I suggest that family resemblances in musical concepts can also constitute evidence of ideas that have spread throughout parts of South Asia.

The recognition of such resemblances can be useful in generating questions for field research, for challenging established narratives of musical histories, and as a basis for informed speculation about the movements and behaviors of peoples. In that spirit, I conclude this section by offering the following preliminary observations: The term *sembaḍa tālama*[30] is described in the Sri Lankan up-country manuscript *Tālaṃ* (1843) as being "tit-tit-tei" (Wijewardana 1994, 20). This same pattern (implying short-short-long) is mentioned by Mahawalatenne Bandar (1908, 135) under the similar-sounding name *sembhatta talama*. Another similarly named pattern, *chempata tala*, is found in the *kombu pattu* temple music tradition of Kerala, in which a similar repeating structure of x . x . x . u .[31] is accented by *ilatalam* cymbals (Killius 2006, 73). Yet another similarly named pattern, *jhompata tala*, is

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30. In Sinhala ritual traditions, *tālama* usually refers to a type of poem that is recited and drummed (Sedaraman [1964] 2008, 115), however, here the word is used more in the sense of a cyclic rhythmic framework, similar to the term *tālam* used in Karnatak music.

31. Here "u" indicates a silent beat; this essentially makes the third "x" longer than the first two, resulting in a rhythmic contour of short-short-long.

described by Venkamakhin, in the seventeenth-century proto-Karnatak treatise *Chaturdandi Prakashika*, as having the clapping pattern Druta-Druta-Laghu, i.e., short-short-long (Krishna 2013, 468). The fact that these similar labels from South India and Sri Lanka all refer to patterns with the same rhythmic contour supports the idea that rhythmic contours were in fact considered conceptual rhythmic categories across the region, and that particular categories (and their names) spread along with the travels of musicians. However, we should exercise caution when assuming that similar labels meant the same thing over the long term; countering my observation above, another similar-sounding term *jhombada*, as described in the medieval Sanskrit treatises, seems to refer to an entire genre of compositions, not to a rhythmic framework (Rowell 1992, 281–83).

Indian Cultural Nationalism and Changing Concepts of the *Mātrā*

As with clapping patterns, the understanding of rhythms in terms of isochronous time-units, known as *mātrā*, has a long history in India. As explained by Lewis Rowell,

> the temporal aspects of the [ancient Vedic] chant were regulated, as one would expect, by the syllabic quantities of the text—as measured in *mātrā*s (a unit equal to one short syllable) and their multiples. Three basic durations were recognized: short, long, and protracted (*pluta*), in an invariant ratio of 1:2:3 *mātrā*s. The same durations form the basis for the system of *tāla*. (1992, 67)

However, given the Brahmanical literary nature of the Vedic traditions and the Sanskrit treatises, it is likely that these systems of isochronous time-reckoning co-existed in South Asia with other ways of conceptualizing musical rhythm, such as the clap-based rhythmic concepts mentioned above. As James Kippen writes with regard to Hindustani music,

> *tāl* is far from systematic, and one encounters discrepancies between musicians and stylistic traditions suggesting that, in all likelihood, formalizations of metre and rhythm have grown somewhat organically out of regional genres and repertoires that often had little in common. Some hereditary musicians know or use very little theoretical terminology, though in general an awareness of concepts and terms has gradually spread with exposure to modern musical and musicological literature and institutional music education. (2006, 75–76)

Given its documented history, it would be an exaggeration to suggest that isochronous pulse-reckoning in Indian music is a direct result of modes of thinking born of the colonial encounter. However, it is hard to deny the indirect influence of colonial discourses on the music reform projects that imbued Indian rhythm systems with an appearance of scientific rationality and theoretical sophistication.[32] While earlier versions of the seven *sūlādi* tālas of

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32. As analyzed by Partha Chatterjee (1993), anti-colonial nationalist movements in South Asia operated on two fronts: as cultural reform movements that enabled colonized subjects to create an autonomous space that differentiated them from the supposed materialism of the West, and as modern political movements that sought to challenge the British colonial state. However, the modes of nationalist thought that drove these movements were "born out of the encounter of a patriotic consciousness with the framework of knowledge imposed upon it

Karnatak music theory are documented in Venkatamakhin's seventeenth-century *Chaturdandi Prakashika* (Krishna 2013, 470), and the present-day versions first appear in the eighteenth-century treatise *Sangita Saramrta* (ibid., 475), it is mainly through the textbooks of P. Sambamoorthy (1901–1973) that the currently known thirty-five Karnatak tālas have gained widespread currency among Karnatak music educators.[33] As described by Matthew Allen (2008), Sambamoorthy was a member of the "Experts Committee" at the Music Academy of Madras; this socially elite group of nationalists considered it their prerogative to educate hereditary Karnatak musicians to perform their music in ways that reflected a "scientific" practice worthy of the emerging postcolonial Indian nation. In his need to demonstrate the scientific organization of Karnatak music, Sambamoorthy lectured and published extensively, helped establish Karnatak music as a university-level subject, and in the process coined a lexicon of Sanskrit musical terms, laying the groundwork for a new, self-consciously rational, south Indian musicology (ibid., 97).

In *Two Men and Music: Nationalism and the Making of an Indian Classical Tradition* (2005), Janaki Bakhle details the ways in which Vishnu Narayan Bhatkhande (1860–1936) sought to classify, categorize, and classicize[34] Hindustani music, writing in the elite language of rational and secular musicology during the early decades of the twentieth century. The widespread acceptance of the descriptions of Hindustani tālas commonly encountered today can be attributed to Bhatkhande's textbooks, which were intended to aid in the mass dissemination of Hindustani music among India's emerging Hindu middle class. While the idea of counting rhythms in terms of isochronous *mātrā* (counts) does not originate with Bhatkhande, his writings served to popularize a conceptualization of the *mātrā* that differed from that of earlier generations of musicians. As argued by James Kippen (2006, 100–101), Hindustani musicians in the nineteenth century thought of the *mātrā* as a time unit that could only occur within a limited bandwidth of absolute durations; i.e., the *mātrā* needed be of a duration that could comfortably be perceived as the pulse of the music. In that era, as indicated in Figure 18, the rhythmic framework *tīntāl* could be described as embodying a metrical length of sixteen counts, eight counts, or four counts, depending on its tempo.[35]

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by colonialism" (Chatterjee 1986, 79); thus, even in the reformation of indigenous traditions that would distinguish India from the West, cultural nationalists tended to internalize the intellectual priorities of Western orientalist scholarship, for example when "appropriating classical texts and traditions of science as the heritage of the nation" (Prakash 1999, 7). Marc Perlman (2004) discusses a similar phenomenon from twentieth century Java, where explicit musical theorizing (in relation to European epistemic models) became valued as a perceived attribute of modernity.

33. The currently known thirty-five Karnatak tālas constitute the five respective versions of the seven *sūlādi* tālas, differentiated by their groupings of isochronous pulses. As mentioned earlier, many of these tālas are not actually employed in the Karnatak repertoire as practiced today.

34. Katherine Butler Schofield (2010) suggests that "re-classicize" is a more accurate term, given that similar processes of classicization took place in the seventeenth-century Mughal courts.

35. Figure 18 is derived from James Kippen's (2006, 101) translation of Gurudev Patwardhan's *Mṛdaṅg Aur Tablā Vadanpaddhati* (1903). According to Kippen, the counts and clapping structure are clearly implied in Patwardhan's original notation.

Slow-tempo *tīntāl*

clap				clap				wave				clap			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
dhā	dhīṅ	dhīṅ	dhā	dhā	dhīṅ	dhīṅ	dhā	dhā	tīṅ	tīṅ	tā	tā	dhīṅ	dhīṅ	dhā

Medium-tempo *tīntāl*

clap		clap		wave		clap	
1	2	3	4	5	6	7	8
dhā dhīṅ	dhīṅ dhā	dhā dhīṅ	dhīṅ dhā	dhā tīṅ	tīṅ tā	tā dhīṅ	dhīṅ dhā

Fast-tempo *tīntāl*

clap	clap	wave	clap
1	2	3	4
dhā dhīṅ - dhā	dhā dhīṅ - dhā	dhā tīṅ - tā	tā dhīṅ - dhā

Figure 18. The three versions of *tīntāl*, dependent on tempo.

In contrast with nineteenth-century thinking, in Bhatkhande's theories "the *mātrā* was conceived to have an infinitely flexible duration: it was thus capable of describing a more extreme range of tempi that reflected performance styles in vogue in the early twentieth century" (Kippen 2006, 184). As such, a rhythmic framework such as *tīntāl* could now be represented in only one form (in this case, the sixteen-count version), which could be played at a tempo so fast or so slow that the nominal count is not necessarily heard as being the salient pulse of the music.

It is difficult to pinpoint the exact factors that have led to rhythmic frameworks in India being defined in relation to isochronous counting; the possibilities include methods of classification and standardization derived from the colonial encounter, the ossification of older, more flexible, modes of Indian thinking, and naturally evolving performance practices. But regardless of how such definitions became the norm, I suggest that the complex rhythmic juxtapositions that have been performed by Indian classical percussionists since the mid-twentieth century would not be have been possible without the intellectual possibilities afforded by the conceptualization of tālas in terms of isochronous beats and beat subdivisions.[36]

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36. Examples of these complex rhythmic juxtapositions are the techniques of *layakari*, as performed by Hindustani tablists, and *gati bhedam*, as performed by Karnatak mrdangists in compositions known as *korvai*. These polyrhythmic techniques are most often heard in the context of percussion solos.

In contrast with cultural nationalism in India, which evolved in opposition to perceived Western traditions, some cultural movements in Sri Lanka—in particular the *Hela Hawula* movement of Sinhala linguistic purism—sought to define the nation not in relation to the West but in opposition to North India (Field 2017, 34). Inspired by this thinking, two mid-twentieth-century Sri Lankan cultural nationalists—Vincent Somapala and W. B. Makulloluwa—sought to theorize the up-country drumming vocabulary in ways that highlighted difference from Hindustani music, yet did so by drawing on the concept of isochronous *mātrā* counting from Indian music theory as they knew it.

Sinhalese Cultural Nationalism and Kandyan Dance

The process of theorizing up-country musical rhythm is closely tied to the modern history of up-country dance (or "Kandyan Dance," as it was labelled by the British) in Sri Lanka. The annexation of the mountain kingdom of Kandy by the British colonial administration in 1815 had initiated a shift away from the traditional land-tenure system toward a cash-based economy, and by the end of the nineteenth century new contexts had sprung up for the dance genre beyond its traditional ritual functions (Reed 2010, 96). The decline of earlier patronage relationships resulted in hereditary up-country performers being hired by Kandyan aristocrats and British colonial officials for ceremonial purposes and to entertain visitors (96–98); thus, the dance style itself became re-contextualized as an exhibitionary art form. By the 1920s, up-country dance was being taught to performers outside of hereditary lineages, including to social elites and to females, and by the post-independence 1960s up-country dance had become a national symbol of Sri Lankan cultural heritage, having been "classicized" as a stage dance and standardized for mass education through state intervention (114–34).[37]

Scholars have suggested several reasons as to why mid-century cultural nationalists chose the up-country performance tradition over other Sri Lankan folk traditions to symbolize national culture. One is that the kingdom of Kandy had remained free from European colonial rule for three centuries longer than the rest of Sri Lanka; as such, Kandy was seen as the religious and political center of the island and Kandyan culture seen as genuine and pure (Ambos 2011, 255). Conversely, low-country (i.e., coastal) culture, which prior to the British had seen three centuries of Portuguese and Dutch colonial influence, was believed to be "corrupted and hybrid due to the absorption of elements from other cultures" (ibid.). As historian Nira Wickramasinghe notes,

> the national identity of the newly independent nation-state of Ceylon or Sri Lanka owes much to the articulation of Kandyan things as authentic. Colonial discourse gave pride of place to Kandyan things that the British imagined pure and unspoiled, whilst nationalist leaders who set about defining what they perceived to be the emblems of the

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37. Similar dance reform movements had taken place in India a few decades earlier, for example in the case of South Indian *Bharatanāṭyam* (Allen 1997).

future state tended to privilege the Kandyan heritage. ([2002] 2004, 71)

Another reason for favoring up-country dance is that a worthy alternative, namely low-country ritual dancing, was associated with devil worship by the colonial gaze, and linked to the "dark side of religion" by the nineteenth-century "Protestant Buddhist" movement—which sought to promote an idealized and essentialized image of Buddhist philosophy (Ambos 2011, 254–55). Low-country dance would thus have been considered inappropriate for representing a post-independence national identity. Significantly, the new postcolonial nation-state was envisioned as being essentially Sinhalese in ethnicity and Buddhist in religion, in a way that "othered" the social contributions of other ethnic–religious communities. Up-country dance could become Sri Lankan national cultural heritage precisely because it represented Sinhalese–Buddhist cultural heritage.

This association between up-country dance and Sinhalese–Buddhist ethnonationalism has continued beyond the country's ethnically divisive civil war (1983–2009), and the image of the dancer continues to be exploited politically; for example, "by being accompanied by Kandyan dancers . . . politicians place themselves in the tradition of the Kandyan kings and aristocracy" (Ambos 2011, 254–55). The connection has also been viewed negatively, for example in July 2016 during a confrontation at Jaffna University in the (majority-Tamil-speaking) north of Sri Lanka: up-country dancers who forcibly attempted to participate in an undergraduate welcome ceremony were assaulted by ethnically Tamil students (Jeyaraj 2016), who viewed the dancing as an intrusive demonstration of Sinhalese–Buddhist hegemony. Up-country dance is also commonly taught and practiced in Sinhalese diaspora communities in Australia, New Zealand, USA, Canada, UK, France, and Italy, where it functions as a cultural identity marker.

Sinhalese Cultural Nationalism and Isochronous Counting

The *Hela Hawula* collective (founded in 1941) was an anti-Sanskritic intellectual movement of Sinhala linguistic purism, which promoted political and educational reform based upon rigorously standardized Sinhala grammar. Founded by the poet Munidasa Cumaratunga, the *Hela Hawula* positioned itself in opposition to the dominant "Arya-Sinhala" Buddhist revivalist ideology of the time, which promoted the reconstruction of a Sri Lankan culture modeled after that of North India. The *Hela Hawula* instead argued that the Sinhala language should be purged of all "foreign" loanwords (e.g., from Sanskrit, Portuguese, etc.), and that contemporary Sinhalese music should similarly rid itself of the recent influence of North Indian Hindustani music (Field 2017, 34–41). Cumaratunga himself wrote a treatise, *Hela Mīyäsiya*, laying out his vision that Sinhala song should be based on the singing of traditional Sinhala poetry, but he died before he could complete the subsequent volumes dealing with rhythm and percussion instruments (ibid., 39). However, the influence of Cumaratunga's anti-Indian agenda is apparent in the writings of his protégé Vincent Somapala, who would go on

to theorize up-country percussion rhythms using the same tools of metrical analysis associated with Sinhala poetry.[38]

Somapala (1958, xii) believed that Sinhalese traditions of drumming and metered poetry could not yet be compared to "developed music" (*diyunu vū saṃgītaya*) since they were not systematized, but that it was timely for such a "system of *tita*" (*tit kramaya*) to be established (89–97). Convinced of a direct correlation between Sinhala poetic meters and cymbal patterns, he first unfavorably compared the traditional ways of defining rhythmic cycles (i.e., by the number of cymbal strokes in an ostinato unit) to the *akshara* system of poetic meter, where a line of poetry is regulated by a pre-determined number of syllables, which could be long or short;[39] he then suggested that up-country rhythmic cycles should instead be defined more precisely by their number of isochronous pulses (*mātrā*)—similar to the *mātrika* system of poetic meter, where a line of poetry is regulated by a precise number of morae/instants rather than syllables (Somapala 1958, 89, 95).[40] Here Somapala's analogy hints at the rhythmically flexible nature of the traditional rhythmic labels; although the *akshara* system specifies the number of syllables per poetic foot, the syllables are quantity-neutral (Deo 2007, 67); i.e., there is freedom regarding whether a syllable should be long or short.[41]

Based on the analogy, I consider the possibility that in traditional up-country contexts a rhythmic cycle defined by a particular number of cymbal strokes could have combined long and short cymbal strokes in any order, not limited to the specific sequences illustrated in Figures 6 to 9.[42] In contrast, by choosing to redefine up-country rhythm labels in terms of salient beats that constitute precise metered groupings of isochronous sub-pulses, Somapala set the groundwork for a quantifiable, "scientific" theory of Sri Lankan up-country rhythm, which could stake a claim for cultural legitimacy. In spite of his *Hela Hawula*-inspired anti-Indian inclinations, however, Somapala was keen to draw on relevant commonalities with Hindustani music in his articulation of a uniquely Sinhalese rhythmic theory. Taking it for granted that the definitions of Indian tālas had always been in terms of isochronous *mātrā* (rather than recently popularized by Bhatkhande and Sambamoorthy, for example), he applied the same principle to up-country percussion music.

The paradigm shift initiated by Somapala had virtually no public impact, but his ideas

38. Somapala was a self-taught musician (Kulatillake 1993, 297).
39. The *akshara* system of versification is associated with archaic Vedic poetry (Deo 2007, 67).
40. The *mātrika* system of versification is the most common type found in traditional Sinhala poetry (Makulloluwa [1962] 1996, 3).
41. Somapala's comparison of cymbal patterns with *akshara* and *mātrika* poetic meters differs in approach from that of the hereditary performer Sedaraman (1966, 4–5), who compares drum motifs with tri-syllabic combinations found in *gana chandas* poetic meters, where the focus is on the specific placement of long and short syllable combinations.
42. This is supported by Somapala's (1958, 93) listing of cymbal patterns such as "tei-tit-tit" and "tei-tit-tit-tit-tit." In contrast, present-day understandings typically assume that the relatively short "tit" strokes appear earlier in the ostinato pattern, and that the relatively long "tei" strokes signify the end of the pattern (Wijewardana 1994, 61).

would soon be refined and gain widespread acceptance through the work of his colleague W. B. Makulloluwa (Wijewardana 1994, iv). Unlike Somapala's analysis, Makulloluwa's theory of up-country rhythm was meant to be prescriptive as much as descriptive, given his mandate to establish Sinhalese folk and ritual music—as opposed to Hindustani music—as the national music of Sri Lanka. In 1962, Makulloluwa published the treatise *Hela Gī Maga* ("The Way of Sinhalese Song"), which detailed his revised principles for systematic *tita* categories based on isochronous pulse-groupings. His appointment as "Chief Inspector of Music," which coincided with the rise of a populist Sinhalese ethno-nationalist government (Reed 2010, 135–36), allowed him to disseminate this revised system of *tita* through the national school curriculum; this agenda was aided by the inclusion of "Folk Music" as a subject in the school curriculum, and by regular training workshops for school teachers (Wijewardana 1994, 62).

The influence of Cumaratunga's *Hela Hawula* ideology can be seen in Makulloluwa's desire to insulate Sinhalese music from foreign influence, in his interest in codifying Sinhalese musical syntax as the basis of a National Tradition of Art Music, and in his opposition to Hindustani music (Makulloluwa [1962] 1996).[43] However, in a broader sense, Makulloluwa was a product of the anti-colonial cultural movements that began in India. His search for the folk roots of Sinhalese music may have been inspired by Bengali cultural nationalist Rabindranath Tagore (Ariyaratne 1999, 160–61). His need to theorize was inspired by the Indian musicologist S. N. Ratanjankar (Makulloluwa [1962] 1996, v). Further, his writings betray the ahistorical view of static folk and ritual traditions characteristic of early twentieth-century orientalist and nationalist scholars.

The shift in thinking from rhythmic contours to metric cycles can be seen more clearly through a comparison of traditional *tita* conceptualizations with Somapala's and Makulloluwa's analytical interpretations: Consider the traditional cymbal pattern *tun-tita* (i.e., three strokes), which was commonly described as "tit-tit-tei" (i.e., a rhythmic contour of short-short-long). Somapala's rhythmic categories do include examples that have three cymbal strokes; however, in his system they are labeled according to the number of isochronous counts per cycle—e.g., "pattern with four *mātrā*" or "pattern with five *mātrā*"—and divided into segments.

Somapala (1958, 93) names the pattern shown in Figure 19 as *siu-mat de-bā pera-tita* (four-*mātrā* two-segment front *tita*), and also provides an example of a *gäta bera* phrase, shown in Figure 20, that would fit over such a cycle (95). Here, the primary criterion for labeling is the total number of *mātrā*/counts in the cycle (in this case, four); the cycle is understood to consist of two segments (counts one-two, and three-four), and Somapala calls it "front *tita*" because the shorter "tit" strokes appear at the start of the cycle. He also describes this pattern as *ardha-chaturasra jāti ēka-tāla* (half-square type, one-stroke), using modified Karnatak terminology to suggest that each segment of the cycle contains two counts (92). However, as Wijewardana

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43. Hindustani music had been heavily promoted by the national radio station (Kulatillake 1993, 297).

tit	tit	tei	
1	2	3	4

Figure 19. Somapala's *siu-mat de-bā pera-tita.*

1	2	3	4
doṃ	jiṃ	jiṃ	ga ta

Figure 20. Somapala's example of a drum phrase that would fit over four *mātrā.*

points out (1994, 56–57), the characteristics prioritized in this labelling have no obvious connection with the three cymbal strokes highlighted in the traditional name *tun-tita.*

Somapala (1958, 93) lists another four-*mātrā* pattern (Figure 21), *siu-mat de-bā pasu-tita* (four *mātrā* two-segment back *tita*), that is seemingly identical to the previous pattern, except that it begins with the second segment. He calls it "back *tita*" (*pasu-tita*) because it begins with the longer "tei" stroke. Without an example of how a drum phrase might have been played along with this cymbal pattern, it is difficult to know whether Somapala was merely restating the same pattern from a different starting point, or if the "front *tita*" and "back *tita*" actually constituted audibly differentiable rhythmic categories. However, the fact that he chose to distinguish between patterns starting with "tit" and "tei" strokes suggests that, for traditional practitioners, the "downbeats" of cycles may not have been as self-evident as later theorists (such as Makulloluwa and Wijewardana) assumed them to be.

Somapala's (1958, 93) *pas-mat de-bā tita* (five *mātrā* two-segment *tita*; Figure 22) also matches the rhythmic contour of the traditional three-stroke pattern (*tun-tita*); Figure 23 is Somapala's example of a *gäta bera* phrase that would fit over two such cycles of five *mātrā* (96–97). However, his basis for dividing the cycle into two segments has no precedent in the traditional labeling systems.

tei		tit	tit
1	2	3	4

Figure 21. Somapala's *siu-mat de-bā pasu-tita.*

tit	tit	tei		
1	2	3	4	5

Figure 22. Somapala's *pas-mat de-bā tita.*

1		3		5	6		8	9	10
doṃ		doṃ		ga	jiṃ		ji	kuň	da

Figure 23. Somapala's example of a drum phrase that would fit over five *mātrā*.[44]

In contrast, Makulloluwa—who was inspired by Somapala's theories (Makulloluwa [1962] 1996, vi)—based his *tita* categories on traditional labels. However, in addition to mentioning the number of cymbal strokes per ostinato unit, he also specified the exact metrical duration of each stroke in a particular category, essentially treating each metric cycle as conceptually distinct. As part of his interest in revising the "system of *tita*" (*tit kramaya*) and establishing it as the basis of a new Sri Lankan art music, Makulloluwa sought to define principles that regulated the possibilities for the length of cymbal strokes within the system. In his treatise *Hela Gī Maga*, the options that he gave for the length of a cymbal stroke were two, three, and four isochronous pulses; he named these pulse groupings *sulu* (little), *mädum* (middle), and *maha* (great) respectively. He also stipulated that shorter strokes should appear before longer strokes in a cycle, discounting the possibility of Somapala's "back *tita*" patterns that begin with a longer "tei" stroke.

Makulloluwa ([1962] 1996, 112) names the pattern in Figure 24 *de-sulu maha tun-tita* (two-little great three *tita*), meaning that it has three cymbal strokes of pulse lengths 2+2+4, and he includes an example of a *gäta bera* pattern that could go with it. Similarly, the pattern in Figure 25 is *de-sulu mädum tun-tita* (two-little middle three *tita*), meaning that it has three cymbal strokes of pulse lengths 2+2+3 (III).

tit		tit		tei			
1	2	3	4	5	6	7	8
doṃ		doṃ		jiṃ		ga	ta

Figure 24. Makulloluwa's *de-sulu maha tun-tita*.

tit		tit		tei		
1	2	3	4	5	6	7
kuň	da	kuň	da	ga	ji	ji

Figure 25. Makulloluwa's *de-sulu mädum tun-tita*.

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44. There is a discrepancy between Somapala defining the cycle as having five *mātrā* but numbering the beats from one to ten in his illustration of two cycle lengths.

When considering interpretations of the three-stroke (*tun-tita*) rhythm category, it is interesting to compare Somapala's durational ratios for "tit-tit-tei" (i.e., short-short-long), namely 1:1:2 and 1:1:3, with Makulloluwa's ratios of 2:2:3 and 2:2:4 (i.e., 1:1:2). While it is it possible that these two colleagues, Somapala and Makulloluwa, were exposed to two different repertories of up-country drumming, I find it more plausible that they were simply imposing different count-based interpretations onto the same ambiguously timed drum patterns, each locked into the possibilities allowed by their own theoretical frameworks.[45]

I now revisit the cymbal pattern known as *pas-tita* (i.e., five strokes), which was commonly described as "tit-tit-tit-tei-tei" (i.e., short-short-short-long-long, where the relative durations were not precisely defined). *Pas-tita* is most commonly associated with the up-country piece *Maṃgalam*,[46] even though *Maṃgalam* was performed in the nineteenth century using only a *de-tita* (two strokes) pattern (Makulloluwa [1962] 1996, 90; Wijewardana 1994, 88). Somapala (1958, 94) documents this pattern (Figure 26) as *sat-mat de-bā pera-tita vilambita laya* (seven *mātrā* two-segment[47] front *tita* slow tempo). His *sat-mat de-bā pasu-tita madya laya* (seven *mātrā* two-segment back *tita* medium tempo), represented in Figure 27, also fits the five-stroke criteria for *pas-tita* (93). That Somapala chose to describe two different *pas-tita* patterns with specific tempo designations suggests that traditionally certain cymbal patterns may indeed have been associated with particular tempi, but this is difficult to verify without knowing what specific drum patterns were associated with these cymbal patterns.

Makulloluwa was aware of how *pas-tita* was employed for *Maṃgalam* by hereditary performers, and documents it in his treatise (Makulloluwa [1962] 1996, 90), as shown in Figure 28. However, he did not consider *pas-tita* to have a legitimate place in the "system of *tita*" (*tit kramaya*). Believing that the "thirty-two *tālam*" mentioned frequently in oral-tradition

tit	tit	tit	tei		tei	
1	2	3	4	5	6	7

Figure 26. Somapala's *sat-mat de-bā pera-tita vilambita laya.*

tei			tit	tit	tit	tit
1	2	3	4	5	6	7

Figure 27. Somapala's *sat-mat de-bā pasu-tita madya laya.*

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45. A ratio of 1:1:3 (as allowed by Somapala) is not possible using Makulloluwa's cymbal pulse duration options of two, three, and four.

46. *Maṃgalam* is usually the first piece to be danced at a dancer's initiation ceremony.

47. There is a discrepancy between Somapala's labeling it as "two-segment" and illustrating it with three segments.

tit	tit	tit	tei		tei	
1	2	3	4	5	6	7
gat	jit	ta ka	doṃ	ta ka	ta ri	ki ṭa

Figure 28. Makulloluwa's example of *pas-tita* for *Maṃgalam*.

Sinhala poetry referred to rhythmic frameworks,[48] Makulloluwa concluded that the up-country tradition must have once had thirty-two distinct cymbal patterns (Wijewardana 1994, 64–66), and sought to reconstruct them using combinations of pulse durations two, three, and four.[49] However, even though he could find no practical examples in the up-country repertoire for most of the patterns that he generated through these arithmetic procedures, the logic of his calculations did not allow for the existence of a five-stroke pattern in the list of thirty-two patterns, not even for a pattern that was actually in use. And so, he dismissed the traditional *pas-tita* as a recently-invented anomaly, recommending that *Maṃgalam* instead be performed using *mädum maha de-tita* (middle great two *tita*, i.e., 3+4; Makulloluwa [1962] 1996, 91), even though this would change the way that *Maṃgalam* is danced (see Figure 29).

That said, Makulloluwa was careful to ground his rhythm categories in real up-country drum patterns whenever possible, even if a drum pattern lasted for more than one iteration of the ostinato cymbal pattern. For example, the above-mentioned *mädum maha de-tita* (i.e., 3+4) is listed as *de-bā mädum maha de-tita* (two-segment middle great two *tita*, i.e., two iterations of 3+4) to accommodate the fourteen counts of the drum pattern (111; see Figure 30).

tit			tei			
1	2	3	4	5	6	7
gat	jit	ta ka	doṃ	ta ka	ta ri	ki ṭa

Figure 29. Makulloluwa's prescribed *mädum maha de-tita* for *Maṃgalam*.

tit			tei				tit			tei			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
doṃ		do	jiṃ		ga	ta	ji	ga	ta	doṃ		ga	ta

Figure 30. Makulloluwa's *de-bā mädum maha de-tita*.

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48. In Sinhalese ritual traditions, *tālama* (pl. *tālam*) usually refers to a type of poem that is recited and drummed (Sedaraman [1964] 2008, 115).
49. Examples of these pulse durations and their combinations are: 2, 3, 4, 2+3, 2+4, 3+4, 2+2+3, 2+2+4, 2+3+3, etc.

<center>CONCLUSION</center>

During its period of hereditary oral transmission, the up-country performance tradition in Sri Lanka deployed a flexible concept of rhythm based on relative (rather than absolute) durations of percussion strokes. Following the commodification of up-country dance as "national culture" in the mid-twentieth century, up-country rhythm became rationalized as metric cycles according to measurable time-units and codified for mass education; these scholarly theorizations form the basis for present-day understandings of the rhythmic tradition. Examples from the Indian subcontinent demonstrated how similar paradigm shifts—from understanding rhythm frameworks as rhythmic contours to understanding them as embodying multiples of isochronous pulses—have occurred throughout the modern history of South Asia; the ideological motivations behind these intellectual transformations illuminate some of the ways in which social histories can shape not just musical contexts but also the very sounds of music and the ways that people perceive them.

Today, following the decline of rituals such the *kohoṁbā kaṃkāriya* in Sri Lankan society, up-country performance can most commonly be experienced in contexts such as state ceremonies, performances for tourists, and Sinhalese weddings.[50] Drumming invariably accompanies dancing, but it is appreciated more for its Sinhalese–Buddhist cultural symbolism than for its musical value. In contrast with dancers, who are now as likely to be female as male, up-country drummers who perform in public are still almost always men, although they no longer hail exclusively from hereditary families. The up-country drumming language is taught as part of the Sri Lankan national school curriculum and in state-run universities, and the system of *tita* that was first defined by W. B. Makulloluwa constitutes an important part of the syllabus. The rhythmic labels originally introduced by Makulloluwa— such as *mädum tani tita* (medium single *tita*, i.e., three pulses) or *sulu maha de-tita* (little great two *tita*, i.e., pulse-grouping pattern of 2+4)—are still frequently used by performers as a shorthand reference.[51] However, further research is required to uncover the ways in which the current drumming repertoire and the playing of surface rhythms (as opposed to structural rhythms) has been respectively shaped by both the legacies of pre-modern oral tradition and modern scholarly theorizing.

One drawback when trying to trace long-term trajectories of Sri Lankan musics—as compared to Indian musics—is the lack of pre-modern musical treatises[52] and useful pre-1970s audio recordings that could be used as points of reference. As such, the researcher of Sri Lankan traditional music needs to rely on their interpretations of oral traditions, which are

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50. Up-country performances are no longer limited to the weddings of people of Kandyan heritage.
51. This can be compared to the way a jazz musician might refer to a time signature (e.g., "Let's play *Autumn Leaves* in five-four") and expect their bandmates to know what they meant.
52. Medieval Sinhala texts—such as the twelfth-century *Dharmapradīpikāva*—do feature music-related passages seemingly translated verbatim from the *Nāṭyasāstra* (Kulatillake [1974] 2007, 159); however, there is no evidence that this indicates anything more than the prestige accorded to Sanskrit-based knowledge by medieval Sinhala scribes.

most readily obtained ethnographically. It is my hope that the information and arguments presented in this article can serve as a starting point for, among other things, inquiries regarding the relationship between ritual-derived drumming patterns and: a) up-country dance movements, b) up-country temple drumming (*hēvisi*), and c) the singing traditions of the historical Kandyan court (*kavikāra maduwa*). With regard to performance practice in up-country drumming, future research could look at stylistic idiosyncrasies that may have declined since the standardization initiatives of the mid-twentieth-century cultural nationalists, and how the playing of surface rhythms may have changed in the twentieth century following the changes in performance contexts and the shift toward thinking of rhythmic contours in terms of isochronous pulses. Moving beyond Sri Lanka and the greater region of South Asia, the ideas presented here could also warrant examining musical traditions in countries such as Egypt, Tunisia, Iran, Japan, Korea, etc., to see if useful parallels in musical concepts could be drawn with other musics that have been re-branded as "classical" in the twentieth century.[53] And from a music theory standpoint, the musico-historical processes described here could inspire alternate interpretations of still other kinds of musical change, such as the birth and demise of the "rhythmic modes" used in the Notre Dame polyphony of thirteenth-century France,[54] the historical mechanics of the *aksak* "limping" rhythms of Turkey, Central Asia and the Balkans, and the transformation of West African phrasing referent rhythms in South America.

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53. The relationship between musical repertoires and explicit theorizing is critically explored in the contexts of Javanese Gamelan and Ottoman music by Perlman (2004) and Ekinci (2018) respectively.
54. Medieval rhythmic modes were defined in terms of relatively long and short note durations (Waite 1954).

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