# Conference Report.

# AAWM Special Topics Symposium 2023. Theoretical, Analytical, and Cognitive Approaches to Rhythm and Meter in World Musics Tiffany Nicely

### **Abstract**

The study of temporality in world musics raises several questions regarding how music is organized and perceived. The proliferation of theories and points of view to arise in the past two decades attests to the importance of and interest in topics related to this field. The *Analytical Approaches to World Musics Special Topics Symposium on Theoretical, Analytical, and Cognitive Approaches to Rhythm and Meter in World Musics* brought together forty scholars with fresh approaches to this field. This online conference took place over four days in June 2023. Co-chaired by Lina Tabak and the author of this report, the symposium featured six paper sessions, a special session planned by the organizing committee, a panel discussion organized by the program committee, a book dialogue, and a keynote by Daniel Avorgbedor. Presenters affiliated with six continents took part. The symposium was co-sponsored by the *Analytical Approaches to World Musics Journal*, the CUNY Graduate Center, the Barry S. Brook Center for Music Research and Documentation (CUNY), and the International Foundation for the Theory and Analysis of World Musics (IFTAWM).

Keywords: analysis; meter; rhythm; temporality; world musics.

### Résumé

L'étude de la temporalité dans les musiques du monde soulève de nombreuses questions sur la structure et la perception de la musique. La propagation des théories et des points de vue au cours de la dernière décennie témoigne de l'importance et de l'intérêt pour les sujets relatifs à ce domaine. Le Analytical Approaches to World Musics Special Topics Symposium on Theoretical, Analytical, and Cognitive Approaches to Rhythm and Meter in World Musics a rassemblé quarante chercheurs présentant de nouvelles démarches dans ce domaine. Cette conférence en ligne a eu lieu sur une période de quatre jours en juin 2023. Sous la co-présidence de Lina Tabak et l'autrice du présent compte rendu, le symposium a exposé six sessions de présentations orales, une session spéciale planifiée par le comité d'organisation, un panel mené par le comité du programme, une discussion centrée sur un ouvrage ainsi qu'une allocution d'ouverture prononcée par Daniel Avorgbedor. Des présentateurs provenant de six continents y ont participé. Le symposium était coparrainé par l'Analytical Approaches to World Musics Journal, le CUNY Graduate Center, le Barry S. Brook Center for Music Research and Documentation (CUNY), le Brook Center et l'International Foundation for the Theory and Analysis of World Musics (IFTAWM).

Mots clés : analyse ; métrique ; musiques du monde ; rythme ; temporalité.

The Analytical Approaches to World Musics Journal hosted its second Special Topics Symposium—Theoretical, Analytical, and Cognitive Approaches to Rhythm and Meter in World Musics—over four days in June 2023. An online conference co-chaired by Lina Tabak and Tiffany Nicely, the symposium featured six paper sessions, one special session planned by the organizing committee, a panel discussion organized by the program committee, a book dialogue, and a keynote by Daniel Avorgbedor. Presenters affiliated with six continents took part. The conference was co-sponsored by the Analytical Approaches to World Musics Journal, the CUNY Graduate Center, the Barry S. Brook Center for Music Research and Documentation (CUNY), and the International Foundation for the Theory and Analysis of World Musics.

The first day was devoted to papers on concepts related to temporality in African musics. This took the form of two paper sessions with a total of seven papers, "Perspectives on African Music I and II," which bookended the keynote address by Daniel Avorgbedor. The morning session featured papers by Simha Arom, Chris Stover, and Rainer Polak. Arom spoke of the structure of African musical time as being comprised of three types of units: beats, elementary durations, and cycles. He argued against the use of Western meter in transcriptions of African music, as it implies a "hierarchical grouping," and is "largely inadequate" in this context. Stover connected his phenomenological concept of "anexactitude" to Léopold Sédar Senghor's "liquid, continuous effect" (1945) of ensemble musical interaction, applying his concept to an analysis of an Afro-Cuban toque for Yemajá.

In his paper, Polak compared different African genres from Mali and Ghana in order to dispel the myth of general uniformity and stylistic coherence in musics from the continent. His empirical timing analyses of several ethnographic recordings showed that there is a variety of pulse non-isochrony in some African musics, while others are relatively isochronous. His work not only lends support to Gerhard Kubik's concept of an African "swing belt" (2010, pp. 50-52), but "weaken[s] the assumption that African music forms a stylistically coherent unit that can be presented as a singular ideal type."

The afternoon Africa session included two papers that focused on metric non-isochrony. Jason Winikoff spoke on non-isochronous beats in Zambian Luchazi percussion, where the Mungongi dance music takes place in the rare meter of 5/8. James Morford approached "long-standing debates about aspects of rhythm in musics of Africa and African diasporas [...] re-visiting two examples of such debates." He argued that pulsation non-isochrony is a "metric trait, rather than a kind of expressive variation." Alice Xue continued the African focus with a paper on Por Por, an ensemble music from Ghana in which truck drivers utilize squeezebulb honk horns at drivers' funerals. Finally, Gérald Guillot applied his "biometrical hypothesis" to Gabonese songs.

In his keynote address, "Audiencing, Sensorial Affectivities, and the Construction of Liminal Spaces in Anlo-Ewe Performance Traditions," Daniel Avorgbedor spoke of the relationships between performer and audience, focusing on "creative, dynamic, and mutually transformative performance experiences and the various resources employed" in order to "highlight the centrality of the sensorial and how it is closely linked to the production of affect, and ultimately to the construction of performance excellence." Avorgbedor's main example, ahanonko, is an Anlo-Ewe greeting ritual which includes such "kinaesthetic and intermodal features" as "sound, haptics/ bodily contact, gesture and proxemics, poetry/prosody, and improvisation," as two men exchange words, using at least one of their "drinking names" or "praise names" (Yegblemenawo and Yegblemenawo 2021, p. 334) and an elaborate handshake. In this activity, the greeter and person being greeted have set roles, both of which include that of audiencer; those in the proximity of the greeting pair also actively audience. The experience incorporates seselelame, a sixth sense among the Anlo-Ewe coined by Katherine Geurts (2003) which may be described as "an ideal illustration of a culturally elaborated way in which many Anlo-speaking people attend to and read their own bodies while simultaneously orienting themselves to objects, to the environment, and to the bodies of those around them." Avorgbedor's discussion of ahanonko included several insights into how the ritual is an occasion for multiple types of audiencing. The participants and their witnesses draw on a wealth of previous experiences of ahanonko, which "structure the ways in which they witness, react to, and participate." After touching upon a few other examples, Avorgbedor concluded that "[t]he centrality or critical place of an audience in Ewe performance is linked to plural factors, most of which transcend any immediate artistic-aesthetic considerations."

The conference's second day included a more eclectic set of sessions. In a session titled "Cross-Cultural Analysis," Robert Peck applied his theory of "Maximal Evenness in Multiple-Voiced Rhythmic Patterns" to a variety of examples from world musics, expanding on previous studies where a single line of music was the focus of analysis. Kelly Jakubowski contributed a paper on groove-based musics in three musical styles: jazz, candombe, and jembe, with musicians and non-musicians from the UK, Uruguay, and Mali, respectively. Her conclusions suggest that "temporal processing relies on mechanisms that vary in their dependence on low-level and high-level perception, and emphasizes the role of cultural familiarity and expertise in shaping aesthetic preferences."

The "On Cycles" session included "Varieties of Slow Five-Cycles," presented by John Roeder. Here, Roeder analyzed and compared examples from early- to mid-20<sup>th</sup>-century musical recordings "from societies then relatively unaffected by each other and by the assimilation of Western metrical practices." The 6.5- to 14-second lengths of the cycles he focused on test the limits of metric perception as stated in current scholarship. According to London, for example, "[m]etric entrainment can occur only with respect to periodicities in a range from about 100 ms to about 5 or 6 seconds" (2012, p. 46). Eshantha Peiris examined "Timbral Cyclicity in the Performance of Sinhala Poetry" from Sri Lanka, specifically the *vannama* poetic genre. Here, he aligned concepts of timbral cyclicity in spoken poetry to that of the drumming that accompanies it, before inquiring whether "thinking of timbre-reco-

<sup>1</sup> Regarding his use of the word "audience" as a verb, Avorgbedor quotes Hannah Grannemann, from the 2022 *Routledge Companion to Audiences and the Performing Arts*: "[t]urning 'audience' into a verb conveys what an audience does as active rather than passive, somewhere in the space between listening/watching and fully participating."

gnition as an evolutionary adaptation in humans [...] might add important nuance to questions regarding the origins of music and language." Ozan Baysal contributed a paper on the role of *usûl* in Turkish *makam* music, where it "not only functions as an individual voice in the overall texture, it also shapes an inextricable relationship with the flow of the makam structure." Baysal's paper updated the traditional usûl representation, analyzing examples from the *Mevlevi Avin* corpus. Balakrishnan Raghavan's "Planetary Compositional Set in the Seven Talas: The Rhythmic Scheme of the 18th Century South Indian Composer Muttusvami Dikshita" explored how "inextricably linked the vicissitudes of time" are, and the ways in which "their planetary effects guide Indian astrology and philosophy" particularly within this composer's music.

The second day concluded with an invited panel and discussion, "Rhythm and Meter in Latin American Popular and Folk Music," coordinated and chaired by Lina Tabak. Here, four panelists presented 12-minute papers before participating in a discussion that was also open to audience members. Rebecca Simpson-Litke opened the session with a paper on Latin social dance rhythms, exploring the form and basic dance steps of salsa, bachata, cha cha (chá), and merengue. She also touched on considerations of how these pieces are combined in large-scale structures "that control the ebb and flow of dance-floor energy." Luis Jure introduced the audience to a recently released collection of audio and video recordings of Uruguayan candombe drumming, spanning over 30 years of live and studio recordings. Further, the collection also includes analysis of "the most characteristic rhythmic patterns, [...] microtiming, and aspects of musical entrainment and the leader-follower relationship within the ensemble." Stephen Guerra spoke on Afro-Brazilian samba timelines, structurally connecting the 16-Inter-Onset-Interval samba timelines <221222122> and <33334> to the African 12-cycle standard pattern, proposing that "this speculation may color in a common technical gap of academic studies on the origins of the carioca ("from Rio") samba" James Salinas Burns applied his "theory of rhythmic gravity" to clave-based music. This is "an effect by which its strokes and contour affect how parts are laid out or interlock with it." Finally, David Peñalosa approached the topic of how clave is represented in academic and instructional literature, arguing that both clave and the "main metric beats" are emphasized by the dance steps while not necessarily by the music itself. He advocated for a "cross-rhythmic structure [...] revealed when these rhythms are transcribed within the correct metrical context."

The third day of the conference opened with the "Close Listening" session. Here, Keith Howard presented a paper that revisited two "transitional" Korean drum pieces that "mark[ed] a shift from the music of rural percussion bands and itinerant troupes of old to a repertoire suited to contemporary Korea." Howard also explored how these pieces changed the "rhythmic grammar" of Korean drumming. Yonatan Malin spoke on "Timing in Klezmer Music," documenting three features of klezmer timing, "variability within and between performances, an aksak meter with unequal beats in zhok or hora, and a distinctive 'move-ahead-and-wait' or 'anticipate-delay' gesture." Jay Rahn's topic was 'Are'are solo polyphonic panpipe music from the southern part of Malaita Island in the Solomon Islands, focusing on "temporal organization as [the] starting point and main concern" for its analysis. Rahn applied modern software to historical recordings in order to "trace with precision temporal aspects of the pieces that inform one's understanding of topics raised in [Hugo Zemp's] original analysis—information relevant to the pieces' meters, tempos, segmentations, formal structures, tremolos, and types of articulation."

In the "Views on Balinese Gamelan" session, Oscar Smith focused on contemporary Balinese compositions and how ensembles learn to synchronize music that utilizes non-isochronous "or otherwise metrically irregular temporal organisations," arguing that "the various multi-modal representations of musical knowledge that are communicated in rehearsal are a window into understanding how knowledge can improve ensemble synchrony." He included three case studies to demonstrate this understanding. Michael Tenzer provided a historical perspective on the writings of Gusti Putu Made Geria (1906-1983), "in effect the first Balinese musicologist." In inventing a lexicon of terms "for Balinese instrument functions and melodic patterns where none previously existed in oral tradition," Geria's work "must be understood as music analysis given the cultural context." Tenzer considered a selection of Geria's terms in detail, including recordings and notations of each.

In the final session of the third day, "Choreomusical Interactions," Nathan Bernacki analyzed the Macedonian dance-song Daoular Tsalar using an analysis of interonset intervals, ethnography, and embodied practice. In this example of the Zurla/Tapan tradition, the timing progresses from "loose to strict meter throughout the performance," during which Bernacki demonstrated how, "while a similar proportional structure is maintained across the entirety of the performance, progressive adjustments to individual beats during Section 2 [the acceleration] drive the proportions toward a strict 2:3 beat ratio in Section 3 [fast section]." Bernacki's video of himself performing the dance showed the pieces' "choreographic continuity and large-scale similarity in beat proportions, suggest[ing] that the slow and loose five beat cycle of Section 1 can be understood as an expanded form of the five-beat non-isochronous meter of Section 3 (12/8, 2+3+3+2+2)." Daniel Goldberg's "Dancing Under Pressure: A Pilot Study of Bulgarian Dance Using Insole Pressure Sensors" was a report from a five-person team seeking to make a "quantitative examination of Bulgarian dance movement." The team used custom-designed insole pressure sensors in the dancers' shoes to "measure timing of dance steps and nuanced weight shifts while working with dancers in their usual rehearsal space and attire." In this paper, Goldberg demonstrated that their method "produces data that can help answer questions about the relationship among musical meter, perception, and culture." The results, in addition to pointing out "metrically important time points within each measure and multi-measure cycles," demonstrated that Bulgarian participants "danced with more consistent timing" than those from the U.S. Judith Olson focused on Transylvanian and Hungarian village dancers and the Roma musicians who play for them and interact with them in community improvisation. She examined the roles of the various musicians and dancers and what they each contribute to the overall experience. Rebecca Simpson-Litke provided an in-depth choreomusical analysis of "an exceptionally engaging and iconic performance of 'La cumparsita' by dancers Cecilia Narova and Juan Carlos Copes from the 1998 motion picture Tango by director Carlos Saura," finally "showing how movement patterns play with and against musical patterns to create interest and complexity in each large-scale section of the piece."

The symposium's fourth and final day began with an invited panel on "Rhythm and Meter in South, Central, and West Asia." This wide-ranging session began with Preeti Rao, speaking on the process of automating the rhythmic analyses of *Dhrupad* vocal performances of North Indian music with audio processing tools. Raina Swaminathan presented "Queer Rhythmic Possibility in South Asian Diasporic Music." Drawing on examples from classical and religious music in Pakistan and Tajikistan, Richard K. Wolf argued for "the primacy of the emphasized stroke as the basis for time reckoning, over and above isochronous sub-units" in several South and Central Asian traditions. Polina Dessiatnitchenko spoke of Azerbijani gəzəl poetry performed in different genres, including recitation and in classical muğam. Dessiatnitchenko's analysis focused on "how meter and rhythm shape creativity," as well as "how music provides utmost possibility for intertextual gaps." Richard Widdess focused on the percussion and vocal repertoire, gũlābājā, performed by Newar Buddhists in the Kathmandu Valley. The set of gvārā songs incorporated into this repertoire "employs tāla-like metrical patterns, but differs from Hindustani music in that (a) the function of time-keeping is separate from that of drum playing, and (b) the metrical pattern can change during the course of a song (i.e. the song is heterometric)." Widdess examined "the use of tāla patterns in gvārā to map large heterometric temporal periods, with particular reference to pedagogical notations published locally to support oral transmission." Martin Clayton employed 2D movement information from video performances to "explore the embodiment of the music's temporal structure in the movement of performers" of Hindustani music.

Closing the symposium, Michael Tenzer led a book dialogue on Steven Blum's Music Theory in Ethnomusicology (2023), with the purpose of "exploring, critiquing, and extending the book's implications." He and Blum convened a panel of five scholars to each "latch on to something in the book that was provocative to them and explore it in relation to their own interests." These panelists—Alessandra Ciucci, Jade Conlee, Marc Perlman, Rainer Polak, and Jason Yust—represented a diversity of interests and career stages. For Tenzer's part, the book presents "a diachronic view of what theory has been and how it has developed, and a heterogeneous portrayal of the many ways theory is construed, used, and transmitted." Alessandra Ciucci focused on Chapters 5 and 6, where Blum "pay[s] particular attention to indigenous terms and concepts." Ciucci spoke of "the role of fieldwork—as part of ethnomusicological method—in the construction of a frame of reference from which it is possible to draw, to transcend the merely literal or semantic to attain cultural meaning." Jade Conlee referred to Chapters 1 and 4 to "discuss relationships between the emerging subfield of antiracist music theory and analytical approaches to world music," advocating for "an analytical approach that highlights the ontologies of music, sound, self, and world that shape musical choices and grammar." Marc Perlman addressed cross-culturally applied music-theoretical concepts, focusing on Blum's Chapter 4 exploration of the concept of mode. According to Blum, mode has been claimed by many scholars to be a term that applies broadly to techniques in many traditional musics, while in his view the term should not be utilized so freely, particularly where local terminology is

applied and the word in question has a much greater specificity. Blum concludes his discussion on mode: "interpretation of terms for musical resources in ancient Greek, Arabic, Sanskrit, Chinese, and other languages does not require an internationalized 'concept of mode,' developed over the past century to designate resources serving quite different functions" (2023, p. 90). Perlman then suggested another example of broad "cultural expansion," that of the concept of improvisation, remarking that "in both cases the expanded terms became very difficult to theorize," largely due to their Western and colonial origins. Rainer Polak contributed connections to Chapter 6, which deals with "actors, actions, and outcomes" with a focus on semantic concepts. Polak reported on some "linguistically framed concepts of musical action" from Mande-speaking groups, suggesting that "while it's productive to consider the semantic conceptualizations that practitioners provide, action-immanent concepts that are not verbalized or are only vaguely verbalized can only be uncovered by the detailed examination of musical behaviors." Jason Yust referred to Chapters 3 and 4, locating Blum's approaches to both poles of the "axis of cultural relativism, with comparative and globalizing efforts on one side and a view of musical traditions as independent, internally coherent self-contained systems of the other." Yust also commented on Blum's exploration of the concept of mode, arguing that it has never shaken the European concept of tonality. These brief presentations were followed by responses by Blum himself, as well as a general discussion.

The papers, panels, and conversations held as part of the 2023 AAWM Special Topics Symposium on Theoretical, Analytical, and Cognitive Approaches to Rhythm and Meter in World Musics created a robust dialogue among scholars from around the world. Featuring newer approaches, such as choreomusical analysis, examinations of micro-timing, and computer-assisted analysis, as well as reappraisals of longstanding analytical techniques, the presentations sparked a lively and wide-ranging dialogue. As a continuation of the work begun at this symposium, eight of the papers presented are being included in a special issue of the AAWM Journal, volume 13 n° 1, published in 2025.

## **BIBLIOGRAPHY**

Avorgbedor, Daniel (2023), "Audiencing, Sensorial Affectivities and the Construction of Liminal Spaces in Anlo-Ewe Performance Traditions," keynote address, *AAWM Symposium on Rhythm and Meter in World Musics* (virtual).

Blum, Steven (2023), Music Theory in Ethnomusicology, New York, Oxford University Press.

Grannemann, Hannah (2022). "'Audiencing'": Introducing the Routledge Companion to Audiences and Performing Arts," Row X Blog, <a href="https://www.artsjournal.com/rowx/2022/05/20/audiencing-introducing-the-routledge-companion-to-audiences-and-performing-arts/">https://www.artsjournal.com/rowx/2022/05/20/audiencing-introducing-the-routledge-companion-to-audiences-and-performing-arts/</a>

Kubik, Gerhard (2010), Theory of African Music Volume II, University of Chicago Press.

London, Justin (2012), Hearing in Time, Oxford/New York, Oxford University Press.

Senghor, Léopold Sédar (1945), Chants d'ombre. Suivi de Hosties noires. Poèmes, Paris, Seuil.

Yegblemenawo, Doreen Enyoname Esi, and Stella Afi Makafui Yegblemenawo (2021), "Documenting Praise Names *Ahanoŋkɔ* Among Ewes. A Socio-Semantic Perspective," in Akinbiyi Akinlabi *et al.* (eds.), *Celebrating 50 Years of ACAL. Selected Papers from the 50<sup>th</sup> Annual Conference on African Linguistics*, Berlin, Language Science Press, pp. 331–349.