

# Understanding the Generative Features of the *Kónkóló* Timeline in Yoruba Music: Rhythm, Movement, Language, and Culture

Olupemi Oludare<sup>1</sup> & Katie Overy<sup>2</sup><sup>1</sup>UiL OTS, Utrecht University, <sup>2</sup>University of Edinburgh. Correspondence: [o.e.oludare@uu.nl](mailto:o.e.oludare@uu.nl)

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## 1. Background

- There is increasing interest in the connections between formal and traditional semantic approaches in analysing and communicating such musical meanings (Katz and Pesetsky 2011, Nevada and Leman 2011, Agawu 2016).
- In recent research on Yoruba traditional music and dance, there is increasing interest in not only how the *kónkóló* timeline serve as the background metric/rhythmic organization and time marker in Yoruba music, but also how it generates extra-musical (rhythm, movement, language, and cultural events) meanings (Omojola 2012, Vidal 2012, Oludare 2015). However, information on how the *kónkóló* timeline is linked to generating these musical semantics are insufficient in literature.
- Previous and separate bodies of work have investigated the nature of rhythm in terms of its cultural functions, cognitive and neural links with language and movement, as well as the potential pedagogical and therapeutic benefits of such links (Chernoff 1979, Nketia 1982, Agawu 2006, Clayton et al 2005, Overy & Turner 2009, Schaefer 2014), but it is still unclear the semantic analytical approach to communicate how the *kónkóló* timeline (auditory rhythmic input) generate various cognitive layers (performative output) displayed in Yoruba musical culture.

## 2. Aim

To understand how the *kónkóló* timeline generate musical and cultural meanings and communicated.

Our main research questions:

- What kinds of socio-cultural cognitive complexity does the generative features of the *kónkóló* timeline exhibit?
- What musical meanings does the *kónkóló* rhythm portend in its function and association with movement, language, and culture?

## 4. Analyses

- We analysed the *kónkóló* timeline's rhythmic (articulated and unarticulated) structure in the drum and dance performances, using the generative theory and hierarchical structure of African rhythm. (Chernoff 1979, 1991, Nketia 1982, Temperley 2000, Agawu 2006, 2016).
- We adopted a semantic approach to investigate how the *kónkóló* rhythm generates movement, language, and their functional meanings during cultural events.
- We examined the implied affective aspects and therapeutic benefits of the auditory (*kónkóló*) rhythmic input in the performances using the shared affective motion experience (SAME) model (Molnar-Szakacs et al 2012).

## 3. Methods

- Empirical studies:** 6 performances (1 each) of 3 traditional drum music and 3 dance song repertoires
- Participants Interview:** Each drum and dance ensemble leaders were interviewed

- Drum Dataset (DD):** Each drum ensemble music and rhythm were documented and studied

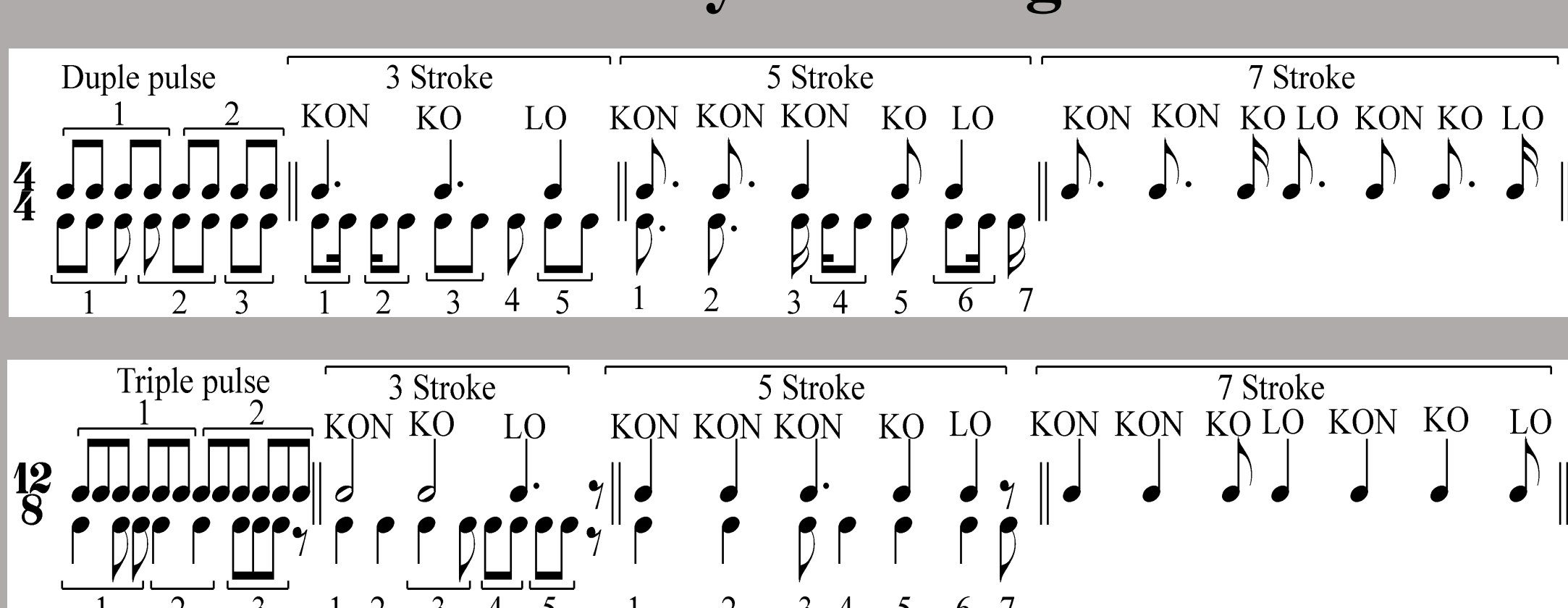


- Dance & Song Dataset (DSD):** Each dance ensemble movement & songs were documented and studied



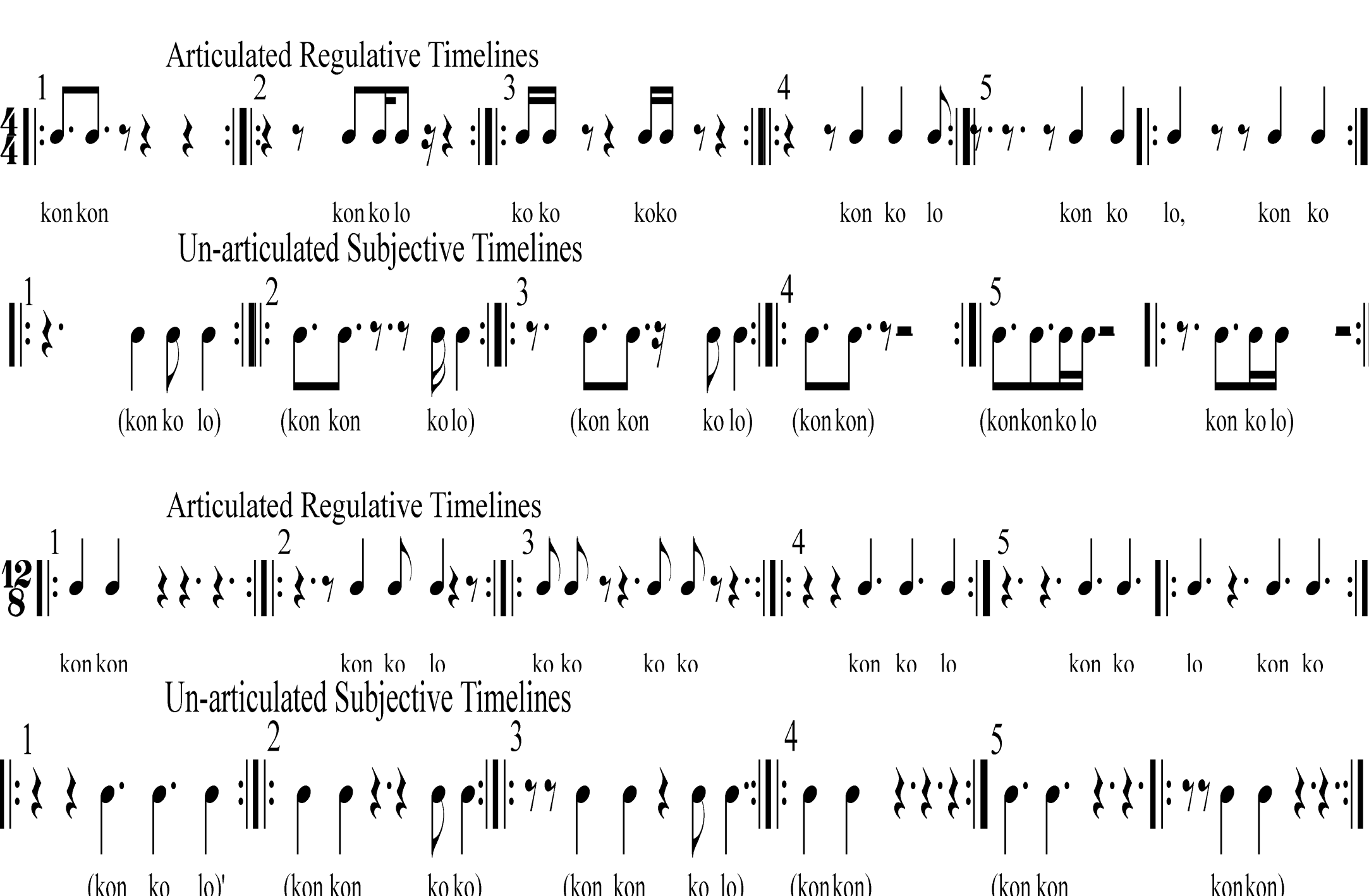
## 5. Results and Discussions

### *Kónkóló* rhythmic organization



Rhythmic development of the duple and triple pulse *kónkóló* timeline.

### Syncopation & Metronome Sense Features



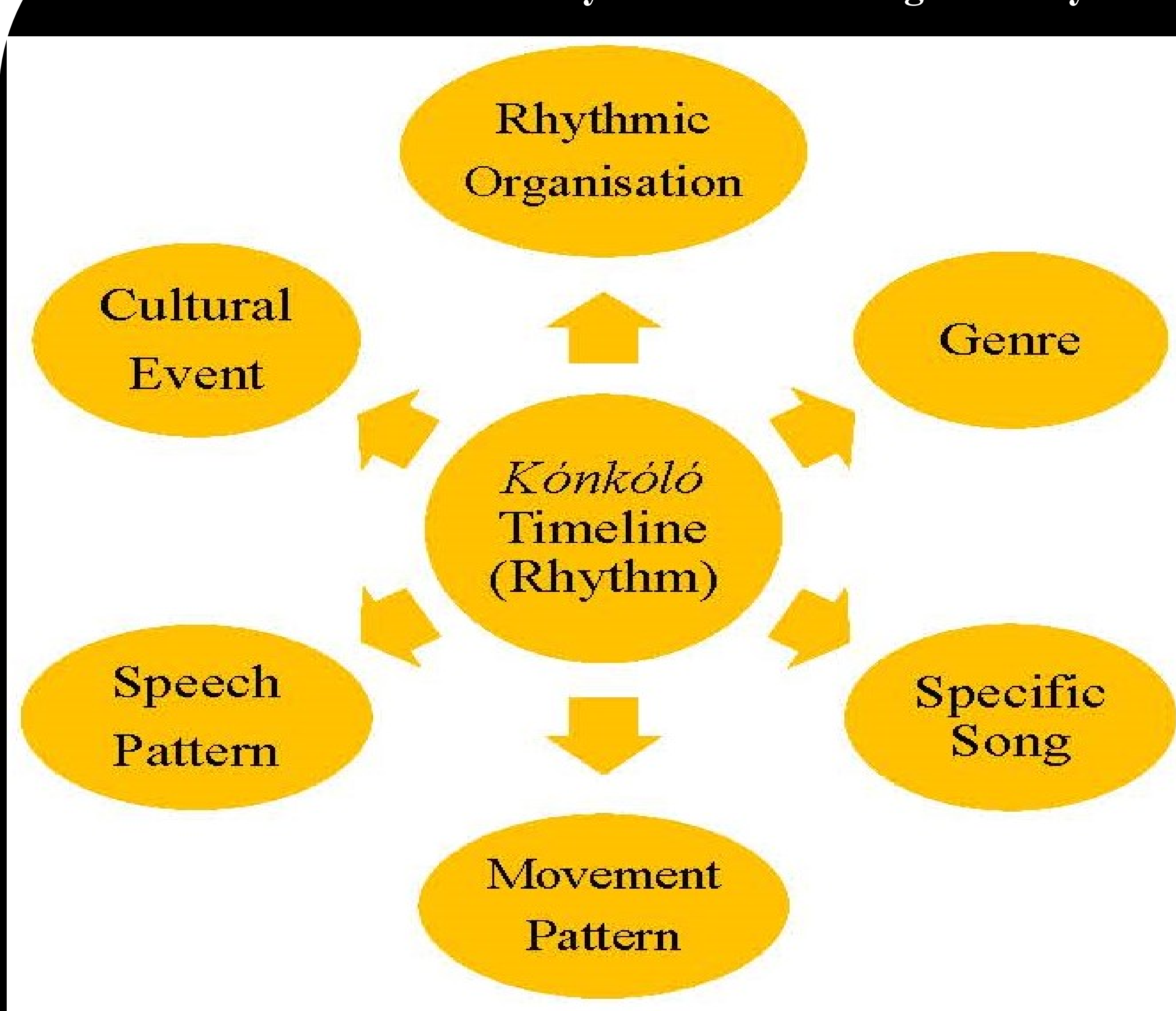
The *kónkóló* timeline serves as an underlying source of a form of 'isochronous' metric periodicity in Yoruba music.

## 6. Conclusion

The *kónkóló* timeline function not only as a hierarchical system of metric/rhythmic organization, it also generates a form of socio-cultural cognitive layers, which serve as the connection between formal and traditional semantic approaches of analysis.

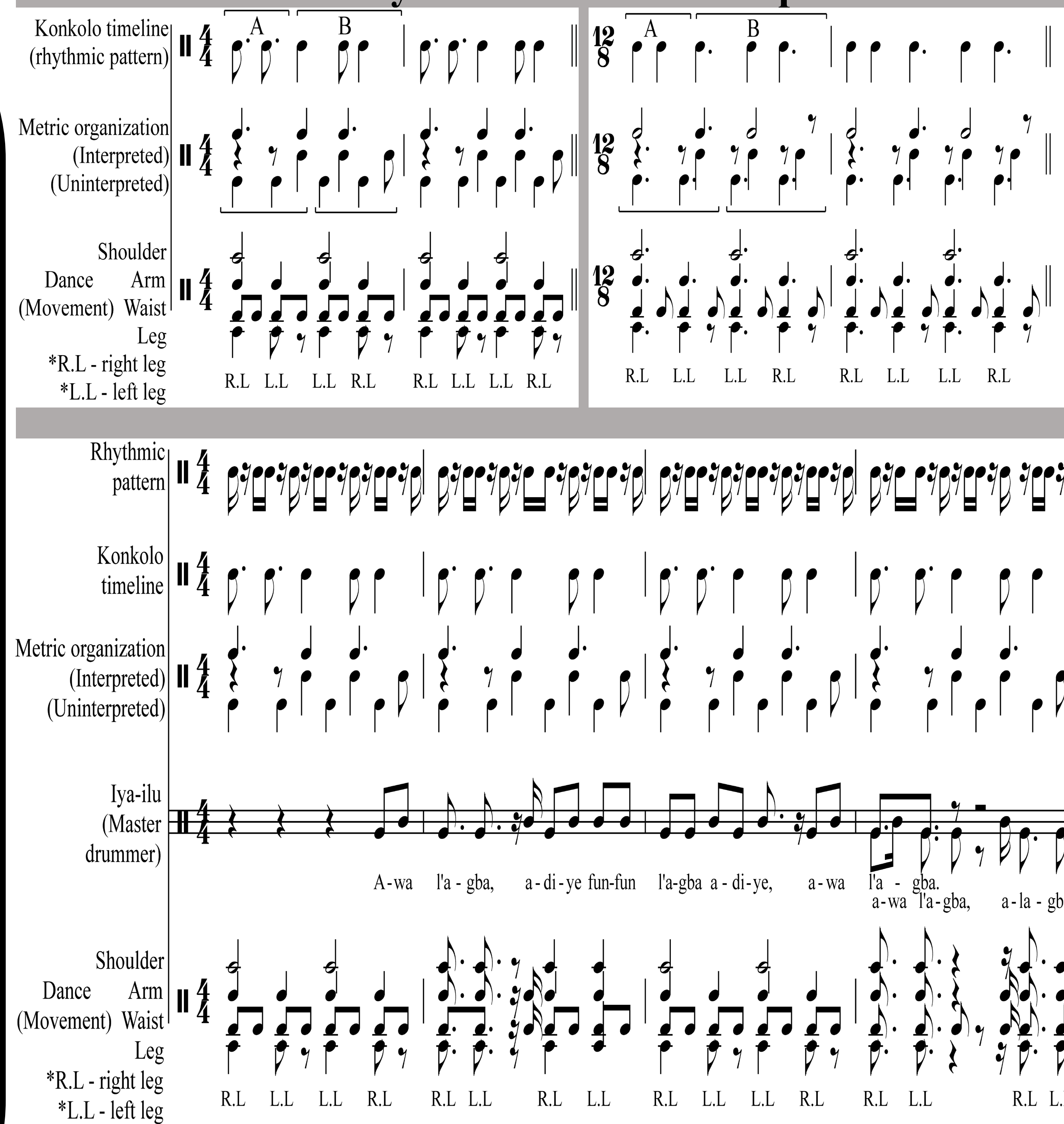
- The generative features of the *kónkóló* timeline in Yoruba music is sacrosanct, towards its musical and cultural meanings

### Link between the *kónkóló* rhythm and the 6 cognitive layers



Proposed socio-cultural cognitive layers associated with recognizing and understanding the *kónkóló* timeline (rhythm): centre is the auditory input; outside are performative outputs

### *Kónkóló* rhythm and Movement pattern



*Kónkóló* patterns and movement (dance) patterns with and without Improvisation.

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