

# EE798P Assignment 3

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## 1 Notations

### 1.1 Variation 2

धा - | - धिं | - धिं | - धा | धा - | - तिं | - तिं | - ता

### 1.2 Variation 3

धा - | धिं - | - धिं | - धा | धा - | तिं - | - तिं | - ता

### 1.3 Variation 4

धा धिं | - - | - धिं | - धा | धा तिं | - - | - तिं | - ता

### 1.4 Variation 5

धा - | - धिं | धिं - | धिं धा | धा - | - तिं | तिं - | तिं ता

### 1.5 Variation 6

धा - | - धिं धिंधिं | धिं - | धा - | धा - | - तिं तित्तिं | तिं - | ता -

### 1.6 Variation 7

धा - | धिं - धिं | धिंधिं धिं | धा - | धा - | तिं - तिं | तित्तिं तिं | ता -

### 1.7 Observations

We can clearly observe that in Variation #6 and #7, there are 4 equal quarters instead of the usual 2 equal halves in some beats. This emphasizes the fact that a single stroke is being played in a quarter of a beat, resulting in up to 4 strokes of tabla per beat, a relatively common occurrence in Indian classical music.

## 2 Concepts

### 2.1 Taal

Taal is a key element in Indian classical music that encompasses the rhythmic structure and time cycle of a musical composition. It acts as the backbone of the performance, providing structure and rhythm. Taal is distinguished by a certain number of beats placed in a repeating pattern, which is commonly expressed by a set of syllables.

Each beat inside a Taal is referred to as a matra, and the collection of matras produces the peculiar rhythm of a specific Taal. Taals from the Hindustani and Carnatic traditions, such as Taal Dadra, Taal Teen (also known as Taal Trital), Taal Ek (also known as Taal Ektaal), and many others, are the most widely utilized Taals in Indian classical music.

### 2.2 Beat

The term "beat" refers to the underlying pulse or rhythmic unit that serves as the foundation of an Indian classical music composition. It is a permanent reference point for both performers and listeners. Beats are arranged into time signatures, which determine the amount of beats in a cycle.

The beat offers a consistent and consistent tempo, which allows musicians to maintain cohesion and synchronization during a performance. It is the music's heartbeat, setting the tempo and producing movement. Percussion instruments, such as the tabla in Hindustani music or the mridangam in Carnatic music, often highlight the rhythm, however other instruments also contribute to its articulation.

### 2.3 Stroke

The term "stroke" in Indian classical music refers to the technique and skillful usage of percussion instruments, particularly the tabla in Hindustani music and the mridangam in Carnatic music. The precise and deliberate striking or beating of a percussion instrument to produce distinct and controlled sounds is referred to as a stroke.

Each stroke of the tabla is a purposeful strike of the finger or hand on a specified location of the surface of the drum. Tabla players employ a variety of strokes to produce a wide range of tones and textures, as well as sophisticated rhythms and patterns. Different strokes are associated with specific syllables (known as "bols") that assist portray the composition's rhythm and structure.

### 2.4 Rhythm

Rhythm is the pattern of beats and silences in music. It encompasses the arrangement of notes and their durations, creating a sense of flow and groove. Rhythm is a crucial aspect of musical expression, influencing the overall feel and character of a composition or performance.

### 2.5 Downbeat (Sama)

The concept of the "downbeat" is critical in Indian classical music, particularly in the context of rhythm and percussion. It refers to the initial beat of a rhythmic cycle or tala, which is usually the most powerful and emphasized beat in the cycle. The downbeat serves as a fundamental point of reference for both performers and listeners, indicating the beginning of the rhythmic cycle.

Overall, the downbeat is very important in Indian classical music, serving as the foundation of the rhythmic structure. Its distinct articulation sets the tone for the entire rhythmic cycle, allowing for the delicate interaction of rhythm and melody that distinguishes this rich musical tradition.

### 2.6 Wave (Khali)

The term "wave" refers to the empty or unaccented phase within the cycle in the context of Indian classical music, notably in the rhythmic framework of a tala (rhythmic cycle). In Hindustani music, this is referred to as "khali."

In whole, in Indian classical music, the wave or khali creates a particular rhythmic contour, improving the whole musical experience. It demonstrates the richness and depth of the rhythmic tradition while displaying the performers' ability and ingenuity.

## 2.7 Tempo (Laya)

In Indian classical music, the concept of "tempo" is known as "laya," and it plays an important role in creating the rhythmic character and emotional expression of a musical composition or performance. Laya is a basic ingredient that profoundly effects the overall musical experience.

In summary, laya, or tempo, is a crucial aspect in Indian classical music that determines the speed, mood, and rhythmic intricacy of a musical performance. It is a tool used by musicians to convey emotions, demonstrate technical proficiency, and engage their audience, making it an essential aspect of this rich and nuanced musical tradition.