## Bharatanatyam: Dancing through the Discipline of Organizing

Bharatanatyam, a classical Indian dance form, is an **organizing system** that governs the **design**, **staging**, **and execution of a dance performance** in the traditional Bharatanatyam style. This dance style is extremely culturally significant since it is over 4,000 years old and is rooted in Hindu mythology and spiritual themes, such as those discussed in ancient texts like the Mahabharata and Ramayana. Thus, this organizing system has been constructed over millennia. It is a cultural artifact that was originally performed in temples as a form of devotion.

It contains a multitude of components that have to be organized, including specialized gestures, body postures, the accompanying Carnatic style classical music, performance themes, and more. In this case study, I will be analyzing this art form at the resource level of dance pieces, which are constrained by different **implementation concerns** like stage formation, length, musical accompaniment, costumes, and skill level of dancers. When choreographing, maintaining, and adapting these pieces for performances, these **constraints** are optimized to produce the desired interaction with the audience of enjoying a traditional Bharatanatyam show.

What exactly is a dance piece? This fundamental question is at the heart of the **resource scope** of this case study. To use ballet as an example, you could perform Tchaikovsky's Swan Lake with a class of 5 year olds at a weekend dance recital or as a full scale production with a professional ballet company at the Sydney Opera House — even though these two performances are technically performing the same piece, these two adaptations are interpreted for vastly different constraints like the skill level of dancers, performance budget, age appropriate costumes, length of the performance, and complexity of stage formations. Thus, dance pieces can be conditioned by these various **organizing principles** in order to have the desired effect.

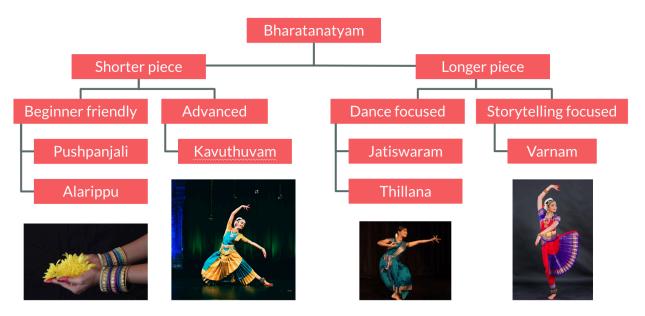
The desired effect of a Bharatanatyam performance is to produce an **interaction** with the audience in which the dancers uphold the highest artistic standards of this classical art form and the audience is left with a sense of enthrallment and amazement at the dance movements portrayed and often, their accompanying story. This interaction is summarized in the following Sanskrit axiom: "Yetho Hasta Thatho Drishti

Yetho Drishtis Thatho Manah Yetho Manas Thatho Baavo Yetho Baavas Thatho Rasah"

Which translates to: "Wherever the hand goes, the eyes follow
Wherever the eyes go, the mind follows
When the mind is engaged, expression results
Where there is expression, there is beauty."

This raises the question, does a dance piece consist of one unit or multiple parts? Regarding the **granularity** of a Bharatanatyam dance piece, it does not constitute a singular, monolithic unit. Rather, it comprises multiple component parts that are interwoven. Specifically, these are the *jatis* and *korvais*. Jatis are sequences of intricate step patterns and bodily movements that form the rhythmic foundation of the piece. They represent the technical choreographic elements. Korvais, on the other hand, are the storytelling components interspersed throughout the piece. During these sections, the dancers employ stylized hand gestures, facial expressions, and poetic verse to act out scenes depicting Hindu mythological tales and spiritual themes from ancient texts like the Mahabharata and Ramayana. Thus, a complete Bharatanatyam dance piece is formed through the choreographic integration of the jati step sequences with the narrative-driven korvai segments.

The **hierarchical Miller framework** demonstrates various types of Bharatanatyam pieces that all include a different mix of jatis and korvais, as illustrated in the diagram below:

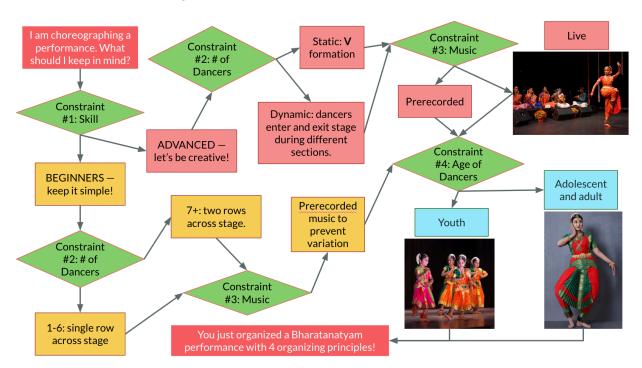


Shorter, beginner friendly pieces like <u>Pushpanjalis</u> and <u>Alarippus</u> (3-5 minutes) symbolize a ceremonial offering of flowers at the beginning of a devotional session, so these pieces contain a short jati portion and then conclude with an offering of flowers. Shorter, more advanced pieces like <u>Kavuthuvams</u> (3-7 minutes) are devotional pieces to commemorate specific deities, so these pieces start with a jati portion and then contain a korvai specific to a parable relating to the deity in focus. Longer, dance focused pieces like <u>Jatiswarams</u> (9-13 minutes) consist entirely of jatis and are often an exhibit of the vast spectrum of movements in this art form. <u>Thillanas</u> (7-12 minutes) are similar but may include a short korvai segment. Finally, longer, storytelling focused pieces like <u>Varnams</u> (15-30 minutes) are heavily packed with korvais to extensively portray a storyline through classical gestures; these pieces enable a dancer to deep dive into a narrative and explore their connection to the timeless characters in these pieces.

I have hyperlinked performances to the hyponyms mentioned above to add some perspective:)

As for **abstraction**, how do instances of a performance of a dance piece differ from the larger category of that dance piece overall? While the canonical Bharatanatyam repertoire represents an overarching class of established dance pieces, each specific performance instantiation can vary significantly as an individual instance. This variability arises from the nuanced ways the organizing principles governing the piece's constraints get applied. Factors like staging, length, musical accompaniment, costuming, and skill level of the dancers all impact how a particular Bharatanatyam production gets realized as a singular instance, separate from the general choreographic blueprint. So while upholding the core essence, each performance emerges as a distinct, **custom interpretation conditioned by its unique implementation** parameters.

To illustrate these factors, I have constructed a **decision tree** detailing the various choices that must be made during the choreographing and adaptation process to produce different variations of a single piece:



By laying out this decision-making process in a clear, linear flow, this diagram reinforces my central argument that Bharatanatyam pieces are not rigid, monolithic compositions — rather, they are **highly modular resources** in the organizing system that can be strategically adapted by exercising different combinations of **choices across numerous variables**.

Therefore, even though this organizing system has existed for millennia, the resources in it **continue to be organized in the present day** by various principles in order to accommodate the desired interaction with the audience by real world performance constraints like dancer skill level, number of dancers, musical accompaniment, and dancer age which dictates costumes.

All in all, Bharatanatyam behaves as a design system of Indian classical culture, with cultural and religious importance embedded in the intricacies of this art form. In this case study, I identified the resource as dance pieces and analyzed the time horizon over which they have been organized. Then, I created artifacts to demonstrate the hierarchy of Bharatanatyam pieces as well as the various organizing principles that guide the decisions made when adapting one such piece for a performance. As a dancer for over 10 years and lifelong admirer of the art form, it has been very meaningful to me to combine my love and understanding of Bharatanatyam with my passion for cognitive science and the discipline of organizing.



Me (right) performing a Kavuthuvam circa 2011



Shortly after performing a Thillana circa 2018

\*Note the differences in costume between the two pictures, corresponding to my age and maturity as a dancer, demonstrated as constraint #4 in my decision tree artifact!\*