

PERFORMING THE “CLASSICAL”: THE GURUKULA SYSTEM IN
KARNATIC MUSIC SOCIETY

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Recent scholarship has revealed that the representation of Karnatic music as a “classical” art form in South Indian society was a complicated process bound to the agendas of larger early twentieth-century nationalist projects in India. This thesis explores the notions of classicalness as they are enacted in Karnatic music society through the oral transmission process from guru to *shishya*, or disciple. Still considered one of the most important emblems of the “classical,” the *gurukula* (lit. “guru-family”) system has been transformed to accommodate more contemporary lifestyles and reinscribed within many other social and musical processes in South Indian classical music society. This thesis examines the everyday interactions between members of Karnatic music society, particularly the clapping of *tāla* during a Karnatic music concert and the musical exchanges between percussionists onstage during the *tani āvartanam* (Karnatic percussion solo), as public performances reminiscent of the relationship between guru and *shishya*.

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PRONUNCIATION GUIDE FOR NON-ENGLISH TERMS

The terms used to discuss aspects of Karnatic music are derived from Sanskrit, Telugu, and Tamil languages. Below is a basic guide to assist in the pronunciation of these terms.

Vowels:

a is pronounced as the “a” in “opera,” while *ā* is pronounced “ah,” as in “blah”

e is pronounced as the “e” in “pet,” while *ē* is pronounced “ay” as in “say”

i is pronounced as the “i” in “sit,” while *ī* is pronounced “ee” as in “tee”

o is pronounced as the “o” in “or,” while *ō* is pronounced “oh” as in “show”

u is pronounced as the “u” in “put,” while *ū* is pronounced as “oo” as in “school”

Consonants:

When a consonant has a dot underneath, it is pronounced with the tip of the tongue curled back to the roof of the mouth.

ṭ is pronounced like the “t” in “curt”

ṇ is pronounced like the “n” in “corn”

s is soft, as in “rust”

c is pronounced as “ch” as in “church”

j and *g* are both pronounced as soft “j,” as in “jelly”

r is pronounced as a single Spanish “r” in which the tongue bounces once off the roof of the mouth

When a non-English term is used repeatedly (such as *mridaṅgam*), I have only italicized it the first time it appears in the chapter. *Tāla*, *rāga*, and *guru*, because of their frequent use in Western scholarship, have not been italicized in this text.

The pronunciation of solkattu (rhythmic language) syllables is slightly different than the rules that have been outlined here. For solkattu phrases, consult the pronunciation guide that is outlined in Figure 5.1 on page 74.

CHAPTER I

INTRODUCTION TO THE PERFORMANCE OF THE CLASSICAL

During the first few decades of the twentieth century, the South Indian music field underwent a number of significant changes as it was resituated in the newly emerging urban milieu. Perhaps one of the most profound developments was the re-presentation of Karnatic music on the concert stage as a “classical” art form. Having been loosely established at least since the fourteenth century, the Karnatic music system suddenly became a site of nationalist discourse among South India’s urban elite. The desire to elevate a purely Indian musical practice, uncontaminated by colonial domination, to a format that could challenge the Western classical music forum became a key concern in pre-Independence nationalist agendas.¹ Notions of classicalness, largely based on early twentieth-century Indian perceptions of classical music culture in the West, became the foundation for aesthetical considerations and performance practices for Karnatic music in the decades that followed.

Movements to elevate and patronize a classical music tradition initiated a number of complex processes that reformed the South Indian music field, especially in an effort to distinguish “classical” music practices from a set of perceived “nonclassical” others. As recent scholarship suggests, the distinction between classical and nonclassical was largely based on the performance contexts of the music. “Classical” Karnatic music, or music that was performed for pure art’s sake, was juxtaposed against the music performed to accompany ritual, theatre, or dance traditions.² Subsequently, classical music practices were systematized and modernized so that they could appeal to the refined tastes of a modern urban audience. Repositioning this music on the concert stage allowed South Indian urban residents a way to publicly identify with their cultural heritage through what was projected as a pristine artistic tradition, uncontaminated by

colonial rule. At the same time, these performances of classical music offered many urban citizens access to an ancient past that had been somehow been lost in the emerging cosmopolitan lifestyle.

Classical Indian music straddled a difficult position in early twentieth-century nationalist projects. On the one hand, these movements were concerned with projecting the nation as modern and scientific in order to compete with the perceived superiority of British colonial power (Nandy 1983; Prakash 1999). As a platform for nationalist discourse, South Indian classical music needed to be updated to a more modern format that would appeal to elite urban sensibilities (Weidman 2006). Using the Western classical music forum as a model, a set of South Indian music practices was repositioned on the modern concert stage, and movements were initiated to standardize these practices within a unified body of Karnatic music theory that could be institutionalized for study in schools. On the other hand, however, early nationalist movements were also concerned with maintaining their ties to an ancient Indian past. In the case of South Indian music, these ties were orchestrated through the purely Indian method of instruction that the guru represents. This system of oral transmission, which had passed musical knowledge down from generation to generation for centuries, became an important component of the Indian counterargument to the system of written notation used in the West.³

Known as *gurukulavasam*, the oral transmission process from guru to *shishya*, or disciple, is a distinctive emblem of classicalness in South India. Notions of classicalness are maintained in Karnatic music society through the process of a guru transmitting knowledge to a set of loyal, worthy disciples. In many ways, the process of transmission from guru to disciple itself exemplifies the values associated with classicalness, which is not surprising considering that ideas about the classical were woven from early twentieth-century preoccupations with the

purely Indian method of oral instruction that gurukulavasam represents. The gurukula (lit. “guru-family”) system not only represents and transmits the notions of classicalness, but is a performance of classicalness in its own right. However, this system has undergone a number of logistical transformations in its encounter with more contemporary lifestyles in the urban realm and has been challenged in more recent decades with the widespread availability of alternative methods of instruction. In the traditional gurukula format, for example, a disciple loyally served as a member of the guru’s household for an extended period of time in exchange for access to a lifetime of music knowledge. In today’s gurukula format, on the other hand, the student does not necessarily live with his guru and can supplement his learning process with recorded media, classroom-based music instruction, and performance tips from artists other than his own guru.

As a result of these developments, it has become more difficult to pinpoint the qualifications a musician must possess to be revered as a guru. Even the transmission process that the guru represents—the process that defines the guru’s role in society—is a private affair between the guru and his disciples, which is not witnessed by others and thus cannot be used to publicly confirm his role to the classical community. Thus, in performing his status to the Karnatic music community at large, a guru is often performing his position as an authority figure within the gurukula system itself. This performance is accomplished through everyday social and musical interactions which are framed as an encounter between guru and shishya.

Performing Their Classicalness

Having been designated as a classical performance realm since its inception into the Karnatic music society at the turn of the twentieth century, the *kaccēri*, or modern classical concert format, functions as a space in which the constructed ideologies of the classical music community are most obviously performed. The concert hall serves as a public arena in which the

indexical attributes of classicalness, especially as distinct from the realm of perceived nonclassical others, can be negotiated among the classical music community.⁴ Furthermore, the Karnatic music concert functions as a place in which a guru can publicly perform his role in the Karnatic music society by counter-positioning himself against a designated “shishya” onstage through social and musical processes resonant of the guru-shishya encounter. Even to an uninitiated audience member, many aspects of a Karnatic music concert appear to be a highly orchestrated, ritualized, staged presentation of classicalness. Echoing Richard Schechner’s tone in *The Future of Ritual* (1993: 5), what is the classical music community in South India doing at these concert gatherings other than performing themselves performing their classicalness?⁵

In choosing performance as my primary area of inquiry into classical music society, I do not intend to imply that the “classical” being performed in the Karnatic music community today is the same as the notions of classicalness that were established during the early twentieth century. Ideas about the “classical” are not static entities that can be studied out of context and out of time, but an ever-emerging network of relationships, constantly under negotiation by the members of the Karnatic music community itself.⁶ The concert hall indeed functions as a performance space for the classical, but also as a space in which these notions are negotiated, transformed, and re-established. In this thesis, I have chosen performance as my analytical platform because it is through performance that the processes of classicalness are momentarily revealed as “concrete, observable units of Indian culture” (Singer 1972: 71–2).

Following Schechner’s ([1977] 2003) and others’ lead, by “performance,” I do not limit my discussion only to the analysis of formal presentations of music and culture onstage.⁷ I also examine what has been called the “broad spectrum of performance” (Schechner 1993), extending my inquiry beyond the concert hall to include presentations of classicalness in the everyday

social and musical interactions of the Karnatic music society in South India. As Erving Goffman ([1959] 1977) has argued, the very presentation of self in everyday life is not only the “staged” performance of a social role but also the performance of the values of a society as well. In a similar line of thought, Victor Turner suggests that social roles and values are negotiated through observable units of social processes, which he terms as “social dramas” and which I am simply calling “performances” (1979: 63). Turner, drawing heavily on ritual theory, advocates that performance is an important area of inquiry because it reveals major categories, classifications and contradictions in social processes. It is through performance that these ever-emerging networks of socio-cultural processes are negotiated and, for a fleeting moment, are etched into existence.⁸

My argument in this thesis is that notions of classicalness in the Karnatic music society of South India are often enacted through performances that directly relate to or are reminiscent of the transmission process from guru to shishya. Based on observations and experiences from fieldwork conducted in South India in 2008, I explore how the gurukula system has been reinscribed within many different social and musical processes in the classical music community. In particular, I examine the interactions that occur during a Karnatic music concert, especially the exchanges between percussionists onstage during the *tani āvartanam* (Karnatic percussion solo), as public performances reminiscent of the guru-shishya relationship.

Performing Myself Performing the Shishya

I entered as a student into the gurukula system in South India with the intent of exploring how gurukulavasam, now modified to fit contemporary lifestyles, transmits the values of classicalness from generation to generation. In many ways, however, my gurukula experience differed from a typical guru-shishya relationship. First of all, my foreign status and connections

with respected members of the Karnatic performance circuit granted me certain concessions when it came to procuring a percussion teacher. I was fortunate to study with a well-known, senior *mridangam* artist in Chennai, but this arrangement was possible only because other members of the classical music community had recommended me as a student.⁹

It is not uncommon for gurukula arrangements to be coordinated through kinship or social ties, but a prospective student typically undergoes many challenges before a guru will accept him or her as a disciple.¹⁰ To a certain extent, I was required to prove my dedication as a student before this respected *vidwan* (or artist) agreed to teach me. During my initial interactions with this artist, for example, he did not agree to meet with me in person until after I had attended three of his concerts. Then, he required me to perform a short solo for him on frame drum so that he could evaluate my level of performance competence before he agreed to offer me instruction in South Indian rhythm. Finally, I was requested to shift my residence closer to his home before he would begin our lessons together. However, because I was scheduled to leave India in a few months, my guru did not delay the musical instruction for very long, and these “tests of dedication” were easily manageable.

As much as my status as a foreign researcher granted me certain concessions, my status as a female had an impact on my particular gurukula arrangement. According to my guru’s conservative Hindu views, it was not appropriate for me (a young, unmarried, American woman) and him (an elder, married, Brahman man) to be alone in the same room together. For the majority of our lessons, my guru’s wife sat quietly in the room “supervising” our interactions, as she strung together jasmine flowers for the evening *puja* (prayer) or drifted off to sleep when our lessons spanned the whole afternoon.¹¹ Perhaps if I had chosen a female guru our lesson format would have been quite different, but one of the prime objectives of my research was to gain

insight into the elite classical performance circuit. Currently there are very few female percussionists who have accumulated a high degree of public recognition and performance capital in the Karnatic music society of South India.¹²

The circumstances of my lesson arrangement cannot, however, be reduced to my female status alone. The relationship between me and my guru was perhaps just as complicated by the fact that I could not converse with my teacher in his first language of Tamil. Female scholar Regula Qureshi (2009: 170) has written about studying with her elder (male) guru in North India and suggested that the awkwardness of her presence in an all-male music room was overcome because she could easily interact with her teacher in the local language of Urdu. Furthermore, beyond certain language barriers, the nearly fifty-year gap in age between me and my guru inevitably influenced his perception of what was appropriate conduct between us. In more recent generations, it is not uncommon for young female students to study privately with male instructors or vice-versa. Therefore, if I had chosen a younger guru (male or female), the circumstances of my gurukula experience may have been different as well.

Additionally, my guru and I had arranged an atypical system of remuneration. Most of my South Indian colleagues also reported that they compensated their gurus, but it is apparent that the recompense my guru received from me was a much larger sum than he received from his local (non-foreign) students. When we discussed the terms of our monetary arrangement, he explained that he determined the cost of lessons according to the economic circumstances particular to each individual student and charged a fee based on the approximated standard rates for lessons in their home country. Students from India performed more service-oriented tasks and were therefore not required to pay as much for lessons as students from abroad. We agreed that I would compensate my guru on a per-lesson basis since I was going to be travelling

regularly to interact with other musicians and attend music concerts. The fee was comparable to the amount that a percussion teacher in the United States typically charges his students for an hour-long session, but the lessons with my guru were much more intense, often extending for several hours into the afternoon and packed with more information than I could process in a week.

Finally, my guru allowed me (as a foreign student) to make use of technology to record and document our music lessons. In a typical gurukula setting, all musical material is transmitted orally, and the student must immediately memorize the lessons without the aid of recording devices or paper and pencil. Most of the South Indian music teachers I have subsequently encountered throughout my research report that they strictly forbid their Indian students to write or record any part of their music lessons. Classical music is an oral tradition and must be transmitted as such; it must be absorbed, memorized, and played back immediately upon reception. This method of instruction is actually quite practical given that the memorization exercises practiced during music lessons use the same mental-transcription skills needed for the performance of music on the concert stage.¹³ Nevertheless, I was allowed to use audio-visual equipment to record the lessons with my guru and jot down notes as the lessons progressed because my teacher understood that I would want to reference the material again when I returned to my home country in the near future. As much as he was willing to cater to my specific needs as a student, however, my guru made it clear that he allowed me to record our lessons together only because I was a foreign student.

Although our private arrangements differed significantly from the most archetypal version of gurukulavasam, our interactions in the public realm mirrored and reinforced the average community member's impression of the gurukula system. For example, my guru often

requested for me to attend his evening concerts at the local *sabhās*, or cultural clubs, in Chennai. He never demanded that I attend his concerts—only requested—but I was acutely aware of the social implications of nonattendance and the potentially negative effect that it could have on our gurukula relationship. Attending his concerts was a beneficial part of the learning process as I could observe the musical interactions on stage and learn new rhythmical ideas and performance strategies. Not attending, however, could imply that I was not a truly dedicated student. Thus, I perceived the concerts as opportunities for me to accumulate knowledge on typical performance practices and concert etiquette while I was performing my social role as a dedicated shishya. For those audience members who were not already aware of my teacher’s status as a guru in Karnatic music society, the presence of his disciple did indeed confirm his role. In fact, on more than one occasion my guru addressed me while onstage in front of the Madras music community so that there was no doubt among the rest of the congregation that one of his disciples was sitting in the front row keeping *tāla* along with his rhythmic improvisations.

The Karnatic music concert in which my teacher performed his classical status as a guru, therefore, functioned as a public representation of a more private relationship between my guru and myself. While the audience may not have been aware of the specific details of our arrangement, their assumptions about the gurukula process coupled with our performance of the guru-shishya relationship, reinforced our statuses as guru and shishya within the Karnatic music society. Our relationship was made evident to the general Karnatic music public through social interactions both inside and outside the concert hall, but the most obvious external sign of my role as a disciple was the process of clapping *tāla* as an audience member, especially throughout the duration of his percussion solo. Many concert attendees assumed that I had received a great

deal of training in South Indian rhythm simply because my hand was constantly moving in some sort of tāla pattern.¹⁴

Exploring the Classical

In the following chapter, I begin by outlining in detail what I mean by “the classical” and identifying the gurukula system as one of the most important emblems of classicalness in Karnatic music society. In the third chapter, I examine a guru’s performance as an authority figure in the gurukula system by analyzing his everyday interactions with other members of the classical music community both inside and outside the concert hall. Transmission from guru to shishya is a process so familiar to the majority of classical musicians, in fact, that it pervades many other social and musical interactions within the classical music community at large. I switch my focus in the fourth chapter to explore how audience members can participate in the performance of “classicalness” through the clapping of tāla, a performance that is itself reminiscent of the transmission process from guru to shishya. Clapping tāla, as much as it is a musical process, can be a social process through which audience members can negotiate their status within the classical music community.

In the fifth chapter, I analyze the Karnatic percussion solo, or tani āvartanam, as a performance of the values of classicalness by examining it through the guru-to-shishya transmission lens. The most visible demonstration of my teacher’s status in classical music society was the virtuosity and authority he exhibited in his performances of the tani āvartanam, also known simply as the tani. Except for a select few dissertations (Brown 1965; Nelson 1991), the tani has largely been ignored in Western scholarship, and South Indian rhythmic improvisation has been regarded as a secondary, almost superfluous, attribute of Karnatic music. I move Karnatic rhythmic techniques to the forefront of my musical analysis and outline an

approach to understanding South Indian rhythmic improvisation as a process. Finally, in the concluding chapter, my approach to the analysis of music as a process is explored as a model for a process-oriented approach to the study of culture, specifically the gurukula system in South Indian classical music culture.

CHAPTER II

THE CREATION OF THE “CLASSICAL”

By the time he began conducting his fieldwork in Madras during the 1950s, Milton Singer (1972: 171) observed that Karnatic music was almost never discussed without referring to the art form as “classical.” For most Indian music scholars, this term has largely been taken for granted, typically referring to Indian music that is patronized by a small educated elite and which uses the concept of *rāga* to explain its melodic aspects and *tāla* to explain its rhythmic elements. A common assumption is that the music has been designated as classical because it is legitimized by an ancient body of theory, most often in Sanskrit, and has been preserved through an oral system of transmission for several generations (Groesbeck 1999: 87–8). Recent scholarship, however, has revealed that the representation of Indian music as a classical art form was a complicated process bound to the agendas of larger early twentieth-century nationalist, anti-colonialist, social reformist, and regionalist projects.¹⁵ The music which is now staged as the classical music of South India is the result of a set of classical music ideologies that were constructed, as Amanda Weidman states, in and through the colonial encounter, “neither properly Western nor Indian, but specifically colonial in that they position the West and India in relation to each other” (2006: 9).

This chapter is concerned with unraveling the complicated nature of the term “classical” as it applies to the social and musical practices of the Karnatic music community in South India. It will reveal that notions of classicalness were constructed by early twentieth-century South Indian urban elites to distinguish a set of classical music practices from the applied musics associated with ritual, dance, and drama and to elevate the music to the same stature as the classical art music of the West. As Karnatic music has been reconstructed and perpetuated as a

classical art form over the last century or so, notions of classicalness have pervaded not only the performance of music onstage, but also the everyday musical and social interactions between members of the Karnatic music society offstage as well. Performance of the classical, therefore, is as much the performance of a set of cultural values that arose from India's interaction with Western colonial powers as much as it the performance of a canonized musical form.

Music and the Nationalist Agenda

Throughout its history, India has been exposed to many outsiders and foreign influences, which have been accommodated within Indian society “with varying degrees of syncretism and separation...part-distanced, part-imitated, part-absorbed” (Washbrook 2004: 495). The society's relationship with British imperial rule, however, was quite a bit more complicated. By the time the British Raj had been established in 1858, both the colonized and the colonizers had become dependent upon one another for political and economic survival. While the British were the ultimate authorities in economic and political affairs, they compensated local indigenous Indian residents for goods and services that they required to maintain a comfortable lifestyle. Likewise, many Indian citizens were financially dependent on the British for well-paying positions that reinforced British colonial rule. In the southern half of the country, the establishment of the city of Madras (now Chennai) as the head of the Madras Presidency and the sudden influx of foreign residents in the late 1700s had a profound impact on the organization of South Indian society, especially upon the caste-based system of stratification that had been a part of Indian society for several centuries.¹⁶

Scholars such as Arjun Appadurai (1981) suggest that the boundaries between castes had been much more fluid and dynamic in Indian society before the British assumed imperial rule over the country. The rigidity of caste-based stratification in Indian society during the nineteenth

and twentieth centuries can be largely attributed to British colonists' misinformed interpretation and appropriation of the indigenous social structure. While the British treated higher caste members of Indian society as bureaucratic officials, favored merchants, or even near-equal colleagues, lower caste members were relegated to employment as domestic servants and unskilled laborers.¹⁷ The discrepancies between higher and lower castes were particularly noticeable in colonized urban hubs such as Madras. This disparity initiated a self-conscious mindset among much of the colonized Indian public, who began to see their salvation in becoming more like the British (Nandy 1983: 7). By the turn of the twentieth century, certain areas of Indian life, particularly the arts and music, were being cultivated in emulation of (or in competition with) the “superior” European format.

The spirit of nationalism spread throughout India in the early twentieth century with the revival of classical texts and traditions that reflected the country's pristine and ancient heritage (Prakash 1999: 6–7). From an anti-colonialist perspective, it is not surprising that the emerging cosmopolitan population chose the arts and, more specifically, music as a site for the negotiation of nationalist discourse. Post-colonial scholar Partha Chatterjee (1993) points out that musical practices were part of an inner realm in which colonized Indian citizens could exercise a large degree of freedom and independence separate from the outer domain of colonial rule.¹⁸ By the turn of the twentieth century, the emerging urban arena was a space in which these “purely Indian” practices were being displayed and performed in a very public manner. For example, Mary Hancock suggests that the ethos of the *bhakti* movement—a religious movement which stressed devotion to the Hindu deities as opposed to strict ritual observance or meditation—was appropriated by upper-caste urban residents to publicly express a sense of bourgeois nationalism, a “hallmark of new, nationalized, and self-consciously modern elite sensibilities” (1999: 57–8).

Music and religious devotion were used by urban elites to portray a common nationalist outlook, and the representations were often “performed” so deliberately and publicly that it led Singer (1972: 70–1) to analyze “concrete observable units of Indian culture” in twentieth-century Madras as “cultural performances” of larger Indian values.¹⁹

The modern concert stage format emerged in early twentieth-century India as a social space in which a middle and upper-class cosmopolitan audience could gather to publicly patronize the purely Indian arts and collectively support a nationalist agenda which strove to position Indian musical practices on the same platform as the classical music of Europe. Determining which Indian art forms should be situated on the concert stage as “classical,” however, was not a simple task for early twentieth-century movements. Singer (1972) himself talks about the incredible number and diversity of cultural practices he observed while searching for a “Great” tradition that could represent all of India.²⁰ In addition to music, the urban public patronized ritual and dance performances associated with temple and theatre traditions, which were based on a combination of ancient scripture, music and dramatic narrative. These theatrical and musical performances, according to Subramanian (2008a), were important for the relocated urban elite because they represented a past that had been lost to an altered social reality of colonial rule. Nationalist movements relied on locating these authentically Indian traditions, which were then reconstructed and invested with notions of classicism and antiquity while being repositioned on the new modern stage platform. The complicated journey from “traditional” to “classical” is especially obvious in the relocation of South Indian musical practices from the regional royal court to the urban concert stage. By “traditional,” I mean that the music was located in an indigenous practice and highlighted as an authentically Indian art form. By “classical,” I imply that the music had been elevated to the concert stage and instilled with the

values of larger twentieth-century nationalist ideologies looking to maintain ties with an ancient Indian past.

Development of the Southern Music Style

India's music field has long been divided, at least since the fourteenth century, into two distinct overarching styles: the northern Hindustani tradition and the southern Karnatic tradition.²¹ The Karnatic music style is a coalescence of various ritual, dramatic, devotional, and courtly practices from the large region in South India designated as Karnataka.²² Historical references to music in the southern half of the peninsula can be found in poetry and inscriptions as far back as the first century CE, but scholars typically take the fourteenth century, when the theoretical foundations of Karnatic music were being laid by the court musicians of the newly established Vijayanagar empire, as their departure point for the history of Karnatic music (Subramanian 2006: 29–30).²³ The most crucial stage in the development of music in the southern half of the peninsula, however, occurred between the seventeenth and mid-nineteenth centuries when the region was divided into smaller regional royal courts after the Vijayanagar empire had fallen. While the patronage of music and the arts was an important display of royal stature in nearly every South Indian regional court, it is the court at Tanjore that is regarded as the birthplace of Karnatic music as it is known today. The Tanjore rulers, who were music lovers and composers themselves, patronized the development of Karnatic music as it had never been sponsored before by encouraging large musical research and formalization projects, inviting musicians and composers from all over South India, and even organizing music competitions and contests.²⁴

Like other regional courts during the era, the Tanjore court's interest in music ambiguously straddled a genuine concern for the arts as well as a concern for distinguished

intellectual and cultural stature in the South Indian landscape. Nevertheless, the court had emerged as a major cultural center by the end of the seventeenth century, and its encouragement for standardization and transmission of music played a crucial role in the development of the Karnatic system. Under the patronage of the Nayaka rulers at Tanjore during the seventeenth century, two important Karnatic music treatises were initiated, one of which included the scheme of seventy-two parent rāgas proposed by Venkatamakhin and formed the basis for a new referential system of methodological practice. This was a landmark achievement in the history of the South Indian musical tradition that was followed by even more formalization procedures over the next two centuries. Under Maratha rule after the seventeenth century, the Tanjore court was largely responsible for setting in motion “a process of canon formation” that continued in the twentieth century when the music tradition was resituated in the urban area of Madras (Subramanian 2006: 8; 2008a: 36–48). Most importantly, however, the court’s enthusiasm for individual composers helped to transform existing court music practices to a new form of art music. The compositions of the Musical Trinity, three exemplary eighteenth-century composers from Tanjore who were contemporaries of one another, form the majority of Karnatic music repertoire and the basis for Karnatic music theory today.²⁵

The patronage of the Tanjore court is commonly cited as the reason the South Indian musical tradition was able to be preserved in a form more “pure” than that of North India. Early twentieth-century nationalist agendas often represented the southern tradition as an “uncolonized” and “uncontaminated” version of Indian music and the northern tradition as a “hybridized” version of musical practice tainted by Islamic influence (Subramanian 1999: 149; 2008: 26). Largely founded on the tense social relations between Hindu and Muslim musicians in North India, this line of thought pervaded India’s musical discourse to such an extent that even

practicing musicians from the north agreed that the southern music style was a more accurate representation of the national Indian musical tradition. For example, in an early twentieth-century treatise written by Pandit V. N. Bhaktande, the Hindustani musician criticizes musical practices in North India and describes the northern musical scene as “deplorable... more or less at the mercy of ignorant and narrow-minded professionals” (quoted in Subramanian 1999: 149).²⁶ The nationalist preoccupation with locating an authentic, pure Indian art form became one of the key justifications for repositioning Karnatic music on the concert stage as classical in South India.

Ironically, however, while Mughal rule may have encouraged music in North India to evolve toward a more “hybrid” style of Hindu and Islamic preferences, the South Indian tradition was not without its own collection of outside influences. During the rule of the Vijayanagar Empire between the fourteenth and sixteenth centuries, as mentioned earlier, southern musical practices intermingled with Islamic and Persian influences from the North to such an extent that sixteenth century music practices were virtually irreconcilable with earlier theoretical models. Furthermore, the regional court at Tanjore is known to have encouraged and accommodated a diverse range of musical genres, styles, compositions and languages under Maratha rule. During the eighteenth and nineteenth centuries in particular, the court was ruled by a stream of eclectic Maratha kings, who, according to one nineteenth-century bishop visiting the area, were familiar with the writings of Shakespeare, Fourcroy, and Lavoisier and were enthusiasts for a multilingual community of Telegu, Marathi, Tamil, Sanskrit, Persian, and English curriculums (Heber 1826, cited in Subramanian 2006: 8). Indeed the southern music tradition is a result of the interaction between several different music communities, styles, and languages from within a

heterogeneous music culture and is perhaps not as “pure” as early twentieth-century nationalists wished to portray.

The Urban Relocation

Regional royal courts (such as that of the Tanjore district) were the sites of economic and political power prior to the late 1700s when the British began to organize their South Indian headquarters in major urban centers. When Chennai was declared the capital of the Madras Presidency in 1798, this relocation disrupted a number of economic processes in South Indian society, including the system of royal and aristocratic patronage that had supported musicians, poets, saints and artists for several centuries (Peterson and Soneji 2008: 12).²⁷ The urban setting emerged in South India as a new cultural space for musicians to prosper under patronage from the urban commercial elite, who hired musicians to perform for religious and marital rituals, as well as private social functions. Although urban patronage extended to and from various castes, patronage from the royal courts had laid the foundation for a system of stratification across caste affiliations, delineations that became even more pronounced as the music tradition began to proliferate in the urban areas.²⁸ Typically, the musicians who had served in the royal courts were descendants of a higher caste order, mostly Brahman, as compared to the musicians associated with temple traditions, who were generally descendants of a lower caste order and practitioners of a hereditary musical profession. In the new urban setting of Chennai, Brahmans began to dominate the musical scene and revive a set of traditional music practices that they reconstructed in accordance with the classicist ideologies of larger nationalist movements.

Prior to the urban relocation, South Indian musicians had occupied a shared music culture comprised of three distinct, but overlapping, socio-musical communities: (1) lower-caste, ritual specialists who performed the Hindu temple traditions, including those who danced and sang as

part of their duties, (2) singer-poet-saints who composed songs for the Hindu deities, and (3) professional, upper-caste musicians, mostly Brahman, who served the royal courts and combined knowledge of the Sanskrit scriptures with conventional musical texts (Subramanian 2006: 9). The lines between these musical communities were quite blurred because temple as well as court musicians were often funded by the same royal treasury. As Karnatic vocalist Indira Menon explains, the musicians dedicated to temples were often required to perform before their royal patron, and thus the distinction between temple staff and palace staff was unclear (2005: 40-3).²⁹

While these musical communities may have somewhat overlapped under royal patronage, the music field was much more firmly stratified in the urban realm. As Matthew Allen puts it, the influx of musicians to urban areas rotated the social continuum of performing musical communities “from the horizontal to the vertical” (1998: 26). Nineteenth-century observers such as Abbe Dubois (1897) and C. R. Day (1891) were particularly astounded by the sharp divisions in the South Indian music world which limited access of musical knowledge within hierarchical familial, caste, and kinship networks (Subramanian 1999: 139). These divisions can be partially attributed to the highly selective nature of the oral transmission process which bound a small number of disciples (usually chosen because of caste affiliation or familial ties) to a particular musical lineage and patron. Under the auspices of the royal courts, musicians taught younger artists as long as the students agreed neither to share the knowledge with any other court’s musicians nor serve as a musician for any other royal patron (138). However, stratification of the music field, especially based on caste affiliations, was outwardly realized in the urban landscape as early twentieth-century classicist discourse sought to emphasize a music practice that could appeal to the refined preferences of the conservative urban audience.

The *kaccēri*, or South Indian classical music concert, emerged during the twentieth century to relocate the presentation of South Indian musical traditions to a more modern (and secular) platform informed by urban sensibilities. Most concerts were performed in membership-based cultural clubs known as *sabhās*, institutions which had to balance between bourgeois musical preferences and a strict classicist discourse perpetuated by successful upper-caste Brahman elite males—lawyers, clerks, doctors, accountants, and engineers—who had assumed their self-appointed positions as custodians of the classical arts (Weidman 2006: 14–24). Both middle-class concertgoers and elite classicists, however, were particularly concerned with severing the music tradition’s association with *dēvadāsi* dancers, female performers in the temple ritual forum who had come to be viewed by some British colonialists and urban residents as prostitutes (Allen 1997; Weidman 2003).³⁰ The stigma associated with the temple dance traditions pervaded the South Indian musical field to such an extent that many females were hesitant to undertake musical training and perform on the concert stage for fear that they may be mistook as a *dēvadāsi*. Resituating the music on the urban concert stage initiated a reformation movement to purify and sanitize the music and dance traditions so that “respectable” citizens could practice and preserve the art form, taking it out of the hands of the traditional practitioners who had come to be perceived as “corrupt.” Reformist agendas stressed a secular platform and segregated the performance of music from the performance of dance in order to shed any lingering associations the music may have had with temple or religious ritual.³¹ As Allen (1997, 1998) points out, however, these reformation movements often overlooked earlier contributions from musicians in the *dēvadāsi* lineage and disenfranchised an entire community of hereditary musicians and practitioners.

The identification of a classical South Indian music (or a set of musical practices that were reconstructed as “classical”) indirectly implied the existence of a nonclassical music realm. These notions were not constructed as a clearly defined opposition, but as a hierarchical continuum that shared much of the same musical repertoire. The degree of “classicalness” that a particular composition possessed was often orchestrated through the distinction of whether the music was “pure” or “applied” (Allen 1999; Subramanian 2006). Pure music in this context refers to music performed solely for artistic and aesthetic enjoyment, while applied music refers to that which was performed for a specific purpose, such as the music accompanying ritual, drama, and dance (Weidman 2006: 129–30). Music performed by lower-caste hereditary practitioners as part of temple ritual traditions was relegated to the lowest nonclassical end of the music continuum. Even today when these “applied” music genres are repositioned on the concert stage as art music, they are not given full-blown “classical” status, but deemed as a lighter form of classical music.³²

The most serious, classical end of the music spectrum includes the devotional compositions of the Musical Trinity, three eighteenth-century poet-saint-composers from the Tanjore district who helped to standardize the format of the *kriti*, the most “classical” compositional format in Karnatic music practice.³³ The sentiments of the classical music community can easily be interpreted from their near-idolization of these three saintly composers, who are portrayed as having devoted themselves to the Hindu deities with little or no interest in monetary gain or professional success. It is interesting to note, however, that the three composers of the Musical Trinity were all upper-caste Brahman men. Whether the delineation between classical and nonclassical was intentionally based on caste affiliations is only speculation, but Subramanian notes that “this construction...became a convenient rationale for

assigning [ritual or lower caste performers] and their repertoire a distinctly lower position within the artistic hierarchy” (2006: 18).³⁴

Institutionalization and Standardization

In addition to the search for a pure, conservative Indian art form, nationalist projects were also obsessed with its institutionalization in the grade school and university curriculums.

Musicians and connoisseurs feared that their classical music tradition could be lost in the midst of an emerging cosmopolitan lifestyle. As one twentieth-century Karnatic musician put it:

We are now in an age of transition. Unless we are able to understand and communicate to...the younger and future generations...the why and how of our past traditions and practices, there is every reason for our being nervous about the continuance of our inherited cultures. (Balasubramaniam 1958, quoted in Higgins 1976: 20)

Dissemination of classical music practices became a focal point for many urban residents.

However, early initiatives to establish institutions for the study of classical music in South India were highly ambiguous in nature. For example, one of the first attempts to publicly institutionalize the study of Indian music was the Gayan Samaj, a social organization founded in 1874 which claimed its primary objective was “to renew a taste for our musical science amongst the brethren of the upper class and to raise it up in their estimation” (quoted in Subramanian 1999: 145). By 1884, this organization had become bound to the nationalist agenda, expanding the objectives of the curriculum to include “cultivating the national music of India and...making it...a thing with which everyone should become acquainted” (146). The fact that the Samaj planned to disseminate knowledge only to the upper class citizens and simultaneously make it an

art form with which everyone was acquainted is an indication of the ambivalence in these early twentieth century movements.

While these early attempts at institutionalization may have exerted some influence over Karnatic music practices, the city of Madras forever altered the landscape of the South Indian music field with the establishment of the well-known Madras Music Academy in 1928.³⁵ The increasing number of cultural clubs in the early twentieth century urban realm, which entertained nonclassical theatre performances in addition to classical music concerts, elicited concerns over the standards and quality of performance of classical music. The academy was established to serve as the ultimate arbiter of classical music performance standards and to reconcile the growing disparity between modern-day practices and the classical music theory that had been outlined in the compositions of the Tanjore Trinity. While this endeavor was undertaken by many elite members of the Karnatic music society, the academy began with its own share of ambiguities, especially as academy leaders struggled to highlight ties to an ancient, traditional past while simultaneously creating a modern curriculum that utilized written notation and recording technology. Furthermore, Allen (2008) explains that much of the initial academy discourse was controlled by members of the Madras elite who were non-professional, non-practicing musicians seeking to attribute the inconsistencies in Karnatic music practice to the professional musicians themselves. For example, the agenda of the initial committee meetings was to determine the correct pitch sequence for several disputed rāgas, and the discussions became overtly heated on many occasions when it was revealed that each musician had his own nuanced style of rendering the rāgas (Allen 2008; Subramanian 2006: 84–114).

Some modern scholarship (Allen 2008) questions how effective the academy was in standardizing a unified Karnatic music theory and curriculum, especially since most professional

practicing artists (non-Brahman as well as Brahman) regarded most of the so-called “Experts” Committee meetings as irrelevant talk. For example, as musician Ramanuja Ayyangar privately stated to one of his colleagues about the committee’s standardization efforts in the early 1930s: “They can decide what they want in the morning; I’ll sing the way I want in the evening” (cited in Allen 2008: 100). However, this same musician, when receiving his Sangita Kalanidhi award from the academy in 1938, publicly pronounced during his acceptance speech that it “was the duty of all musicians to co-operate and help in the success of the conference organized by the Academy” (102). Ayyangar’s change in tone suggests that while the Music Academy may not have been successful in enforcing a universal set of musical practices by which all Karnatic artists must abide, the academy was certainly successful in institutionalizing a prestigious performance platform which all professional musicians had to acknowledge, if not support, in order to be considered “classical” in the Madras music arena. The academy still flourishes today, organizing an annual music festival during the music season in December to which musicians from all over India and the world flock to participate.³⁶ Although my research suggests that attending the academy’s December festival is now viewed as an obligatory tradition, even a burden, for some successful practicing artists, the academy’s series of concerts still serve as a high-profile presentation of the Karnatic music world during which students, musicians, connoisseurs, and concertgoers can participate and interact with one another in the framework of an elite classical music gathering.

Performing the Classical

While the Experts Committee was concerned with the institution of a standardized curriculum of Karnatic music theory and practices, the modern concert format became an institution in itself, within which a set of appropriate musician and audience behaviors were

formalized as identifying markers of the “classical.” As previously mentioned, classical music repertoire was often defined by distinguishing itself from applied, nonclassical music genres. Similarly, appropriate classical musician behaviors were determined by their difference from the behavior associated with the nonclassical traditions. For example, overly complicated rhythmic development and excessive percussion accompaniment was associated with the music of the temple ensembles used in Hindu ritual traditions; thus, classical music performance instead focused on the development of lyrical and melodic aspects with downplayed percussion accompaniment (Weidman 2006: 102). On another note, heightened and passionate gesticulation was associated with the *dēvadāsi* and *harikatha* (music theatre) traditions; thus, the classical counterargument was a more disciplined and subdued performance of music onstage. Some members of the early twentieth-century Karnatic music community, such as violinist C. Subrahmanya Ayyar, went as far as publicly chiding those performers who would make “contorted” facial gestures and erratic hand movements when performing on the concert stage. By the late 1930s, too much expressed emotion onstage was “unseemly” and distracted from the music itself, and the ideal classical performance, it seems, ironically became a sort of conservative non-performance (131).

While certain aspects of performance, such as emotive gestures, were downplayed on the classical stage, the quality and virtuosity of musical execution became important considerations in classical concert culture. Classical musicians were projected as professionals who devoted their entire life to perfecting the art of music as opposed to the more functional roles of the performers in the nonclassical music traditions. Audience members expected classical artists to be highly qualified musicians with exceptional technical abilities. Virtuosity became an important part of South Indian classical ideologies, both to distinguish the music from the music

practices of the nonclassical traditions as well as to elevate the music to the same performance standards of classical music in the West.

As the classical concert format began to gain popularity in the early twentieth century among middle class residents in Madras, a set of appropriate concert etiquette for audience members was formalized through discourse perpetuated by the academy and the Madras elite. The classical music audience was unique in that it was drawn from a population of urban residents who viewed music as a leisure activity and who could afford to patronize membership-based organizations known as *sabhās*, which charged fees for concert attendance (Weidman 2006: 80). Classical concert etiquette was not necessarily a natural set of behaviors for these economically elite concert-goers; in fact, it seems that the South Indian public was acculturated to appropriate concert etiquette through the distribution of pamphlets, the printing of advertisements, and the inclusion of satirical cartoons in circulated publications.

For example, Weidman includes a cartoon in her book (2006: 88) from a 1940s issue of *Ananda Vikatan*, a weekly Tamil magazine that began circulating in 1928. The cartoon depicts a *sabhā* secretary forbidding audience members to enter the concert hall late, to behave in a noisy or disruptive manner, or to bring crying children into the concert hall. The line above the images reads: “Well done, *sabhā* secretary!” The concert stage, from its inception in Karnatic music society, had always been likened to a temple as a sacred space in which pure, classical music was performed, but this cartoon illustrates that the concert hall itself was also taking on a sacred, classical quality. Although the classical music concert was not considered a religious event, it was projected as being a profoundly spiritual experience, especially since the majority of the repertoire was devotional in nature. Audience members were expected to behave in a very

disciplined and self-controlled manner, their only participation being to silently lose themselves in the lyrical improvisations.

CHAPTER III

ENTER THE GURU

When I first encountered the *mridaṅgam* artist who was to become my South Indian percussion teacher in Chennai, everything about his persona—the way he carried himself, the way other musicians interacted with him, the way he sat in front of me with a solemnity that expressed decades of acquired knowledge and wisdom—was indicative of his role as a guru in the Karnatic music community. My initial meeting with this senior *vidwan* (artist) was arranged so that we might discuss his childhood experience of learning music in a traditional *gurukula* (lit., “guru-family”) setting.³⁷ Expecting to speak with the artist one-on-one, I was surprised to see that a roomful of younger musicians, each one bowing as he entered the guru’s presence, had gathered to listen to our conversation. Under the critical gaze of the other musicians who were present, I began to inquire about the vidwan’s experience in the gurukula system. It did not take me long, however, to discover what Goffman (1973) might call a “sense of one’s place” and that I was in no way in control of the dialogue during this so-called interview. The guru barely addressed my inquiries about the oral transmission process and, instead, drifted into a carefully-crafted, philosophical discourse that was directed toward the ears of everyone who was present. At the conclusion of our exchange, I was left feeling defeated and perplexed by our discussion, which at the time felt like it had nothing to do with the gurukula system I was researching.

When I approached this highly acclaimed vidwan, I had planned to discuss how his experience in a traditional gurukula setting differed from the current system of instruction he uses with his own disciples. Two of my contacts from Mysore, who also held positions as renowned performers in the South Indian classical community, had arranged my meeting with the senior artist. Most of my contacts were the same age as me or no more than a decade older,

and, for the most part, they treated me as a fellow colleague, even though I was obviously a foreign researcher with an incessant stream of questions. My impression before meeting the guru (which was due in part to the casual nature of the interactions with my other contacts) was that I would be able to speak with him in a similar, informal fashion. I naively assumed that he would code-switch into interviewee mode while interacting with me and transition back into guru mode when interacting with other members of the Karnatic community. During our meeting I found that I had seriously underestimated how much the artist's own social role as a guru pervaded every aspect of his life and was more than disappointed when the guru would not entertain my inquiries.

However, had I possessed the foresight to understand his actions and responses in the context of the South Indian classical music landscape, I would have seen that this artist had actually answered more questions than I had thought to ask. The vidwan had interacted with me the way a guru would typically interact with one of his own disciples. In coolly avoiding my overly specific questions, he was pushing me to find out certain things for myself in the same way that a guru would provide his students with just enough clues to motivate the student to seek knowledge on his own. By meeting with me openly in the presence of his disciples, he was not only trying to display his authority and stature, but was allowing me to experience his musical legacy through his extended "guru-family." Instead of talking about being a guru, the vidwan was "performing" the role of the guru right in front of me, and I was part of this performance without even being aware of my own participation.

Performing the guru is a performance of classicalness in its own right, but this performance relies heavily on the guru's ability to confirm and reinforce his position as an authority figure in the gurukula system. Since the process of transmission from guru to shishya

is a private affair that the majority of the Karnatic music community do not witness, the guru must publicly confirm his position through social and musical processes which directly relate to or are reminiscent of the gurukula process. The Karnatic music concert, for example, is one such space in which the guru can negotiate and perform his status through musical processes which resemble the guru-shishya encounter. In the following chapter, I analyze everyday social and musical interactions between the guru and other members of the South Indian classical music community as performances of the larger ideologies of the gurukula system, and thus classicalness, in Karnatic music society.³⁸

Traditional Gurukulavasam: Living with the Guru

For the Karnatic music community in contemporary urban South India, the guru is the emblem of a purely Indian method of music transmission. This transmission process, known as *gurukulavasam*, is modeled on the system of oral transmission that has been practiced by Brahman priests since Vedic times to preserve ancient Sanskrit scriptures which form the core of Hindu philosophy (Mlecko 1982).³⁹ Traditionally, knowledge was transmitted orally from guru to *shishya*, or disciple, over the course of several years while the shishya loyally served as a member of the guru's household (Chatterjea 1996). Accepting a student was a highly selective process, and, in many cases, acceptance was based on familial or caste relations, confining knowledge within a strict musical lineage. Discipleship was a long, meticulous journey in which the guru transmitted knowledge from memory only after the student had proven he was ready to receive and internalize it.⁴⁰

The most traditional design of the gurukula system— several disciples living with the guru and performing household chores in exchange for access to the guru's knowledge—was a plausible format for music transmission during the age of regional royal court patronage

(Chatterjea 1996; Unnikrishnan 2006). Transmission of music knowledge was perceived as an obligation that a musician must fulfill in exchange for his good fortune under the patronage of the king. Fully funded by the royal courts, the guru could provide training, board, and lodging for several disciples at little or no cost to the student. By the end of the eighteenth century, however, economic prosperity in South India had shifted from the site of regional royal courts to emerging urban areas such as Madras. Musicians and other artisans, no longer receiving stable financial support from the royal and aristocratic courts, began to seek patronage in urban areas, which by the 1800s were filled with English-educated, upper-caste Indian citizens serving in mercantile and bureaucratic posts under British rule. In addition to performing music for weddings and other private celebrations held by these upper and middle-class members of the urban community, teaching music was transformed into a means by which an artist could financially support himself.

The influx of South Indian artists and musicians to urban areas was a long process that began at the turn of the nineteenth century and took many decades to manifest in its more recent form. Bibliographic accounts from South Indian musicians in the late nineteenth century are riddled with proverbial stories about their gurus who accommodated students in their large, bungalow-style homes outside the hustle-bustle of major cosmopolitan areas such as Madras.⁴¹ By the 1950s, however, most serious performing musicians had relocated to the urban realm in order to more readily access a new form of patronage under the middle and upper class urban audience. The majority of these performers lived inside the city limits in small, modest apartments that they could afford by performing in cultural clubs or by taking on students who compensated them for daily lessons. The new urban setting had a profound effect on the logistics of the gurukula process, especially for the disciple who at one time enjoyed complete

music immersion for several years at the guru's home, but by the mid-twentieth century had to travel back and forth between his own and his guru's residence for music lessons.⁴² Ironically, although the gurukula system underwent a number of logistical transformations within the urban realm, the classical music community still continues to highlight the oral transmission process, even in its contemporary altered form, as a distinctive emblem of classical Indian art music.

Gurukulavasam in Pre-Independence Nationalist Contexts

The oral transmission process must be situated in the context of larger nationalist movements in pre-Independence India to fully understand its importance to the classical South Indian music community. In response to the scientific and rational nature associated with the perceived superiority of European colonial power, a major concern for Indian nationalist movements in the early twentieth century was to project a nation endowed with its own indigenous scientific traditions. More than a century before these nationalist agendas began to surface in colonial India, the presentation of scientific knowledge and reason, as part of a larger "civilizing project" led by imperial European powers, had become one of the most visible markings of Western dominance in the world. As Gyan Prakash argues, science was outwardly showcased by the British as an instrument of progress, modernity, and improvement (1999: 18–22). By the mid-nineteenth century, the presentation of science had become one of the most significant displays of colonial authority in India. Fueled by the self-conscious psychological disposition of the self under colonial rule (Nandy 1983), nationalist movements at the turn of the twentieth century began to emulate the scientific culture of the West by locating bodies of knowledge in ancient Hindu texts and traditions and re-presenting these practices in new, more systematic ways.⁴³ For example, the therapeutic system of *ayurveda*, a body of medicinal knowledge from the ancient Hindu scriptures, was re-presented in the early twentieth century in

printed journals that offered medical advice and served as a platform for scientific discourse on the topic (Prakash 1999: 99–100).

Early twentieth-century movements to standardize a classical music concert format and classroom-based music curriculum in South India were part of this larger nationalist push to project India as a nation endowed with its own indigenous scientific traditions. Representing Karnatic music practices as “classical” music, however, was a complicated process, as I have outlined in the previous chapter. On the one hand, classical Indian music offered many citizens access to an ancient past that somehow had been lost in the urban realm under colonial rule. Repositioning Karnatic music on the concert stage allowed South Indian urban residents a way to publicly patronize their cultural heritage through what was projected as a pristine artistic tradition, uncontaminated by Islamic influence and colonial rule. On the other hand, indigenous music practices needed to be updated, systematized and modernized in order to occupy and maintain an elite social position in Indian society. Notions of classicalness were modeled on the formalized presentation, standardized repertory, and systematic transmission of classical music in the West. Shortly after the founding of the Madras Music Academy in 1928, for example, campaigns emerged among the classical music community in favor of a unified set of classical music theory and repertoire as well as a systematic music curriculum that could be instituted in schools and universities (Subramanian 2006: 93–9).

While open to the incorporation of newer methodologies, early twentieth-century movements to standardize Karnatic music practices were especially concerned with maintaining ties to the ancient, pristine cultural heritage that classical Indian music represented. Some members of the Madras Music Academy favored the institution of a written music notation system for classical Indian music, but the majority opinion was that the benefits of learning

music by rote with a guru could not be achieved in any other format. For nationalist movements, gurukulavasam was not only an ancient practice; it was a highly successful, indigenous accomplishment of systematic transmission and historical preservation. Oral transmission had maintained the knowledge of the ancient Sanskrit Vedas for several millennia, long before imperial British powers had begun their “civilizing project” in the subcontinent.⁴⁴ The gurukula system became an important aspect of the Indian counterargument to the system of written documentation in the West. The success of the oral transmission process at preserving ancient Indian historical knowledge without the use of a written script implied that the Indian population had been, in their own way, a systematic (and thus a “civilized”) group of people for several thousand years before the British had arrived.

As much as the gurukula system was seen as the emblem of Indianness, and thus classicalness, in Karnatic music itself, oral transmission in many ways defied the movements to standardize and modernize classical South Indian music. By the mid-1930s, the Madras Music Academy (MMA) had become the principal arbiter of classical music standards, advocating for universality in Karnatic music theory, techniques, and practices. The academy even proclaimed that it would only endorse music curriculums in schools and universities that followed the syllabus prescribed by their Experts Committee (Subramanian 2006: 99). The gurukula system was problematic for standardization efforts because it was dependent on a guru’s lineage-specific understanding of musical practices as they had been passed down through the generations. Orality, while it represented ties to an ancient Indian past, arguably may have been the reason that music practices had gradually transformed over time and become more idiosyncratic between lineages. Slight differences in practice fueled many heated debates between members of the Madras Music Academy’s Experts Committee as they attempted to reconcile current

practice with a unified body of Karnatic music theory.⁴⁵ By the 1950s, some high-powered authorities, such as the Minister of Information and Broadcasting, were coming forth to publicly argue against oral transmission in favor of newer technologies, even going as far to say that gurukulavasam would eventually ruin Indian music (Weidman 2003: 471).

Negotiating Newer Technologies and Methodologies

The introduction of the gramophone into Indian society in the early 1900s coincided with the nationalist push toward science and modernity. As news of the gramophone's capabilities spread among the classical music community, the oral nature of gurukulavasam began to represent the opposite of all that was scientific and modern (Weidman 2003). Musicians and patrons in Madras ambiguously emphasized Karnatic music's connection to a purely Indian, ancient oral tradition while simultaneously supporting recording technologies (along with written notation) as modern innovations that could help to institute the study of music in grade schools and universities. The possibility of systematic classroom instruction presented an opportunity for disciples to supplement their guru's teachings with printed notation and musical recordings or even to bypass the guru system altogether. Likewise, technology accommodated transmission of musical knowledge in a more precise manner than rote repetition by a human agent, who, according to B. V. Keskar (1957: 38), could never copy sound as faithfully as a gramophone recording. Newer technologies and methodologies in the twentieth century challenged the guru's role in the transmission process, and, thus, in the classical music society as a whole.

Reception of technology among the classical music society was highly ambiguous during most of the twentieth century, with some musicians perceiving it as the future of Indian music and others seeing it as the death of the gurukula system. Some opinions projected that advancements in technology could offer music students access to a variety of options for music

learning. For example, Hindustani musician Sheila Dhar, speaking of the use of technology in North Indian classical music circles, acknowledges that the widespread availability of recorded media allows students “to graze where they will and pick up whatever suits their repertoire and temperament at a particular phase in their career” (1998: 385).⁴⁶ Technology, then, is in some ways beneficial to a music student.

At the same time, however, Dhar laments about the “crumbled” state of the *gharānās*, or music lineages, in North India, claiming that technology had disrupted the strict model of oral transmission that had preserved the Hindustani tradition for so many centuries. Going a step farther, many twentieth-century musicians in South India, such as R. Rangaramanuja Ayyangar, thought that technology had overtaken the oral transmission process altogether and that “ear and rote learning had been laid to rest long ago” (1977: 10, cited in Weidman 2003: 471). While Ayyangar’s opinion reflects important twentieth-century views on the incorporation of technology within the classical music circuit, his proclamations about the death of the *gurukula* system may have been premature. Despite the proliferation of technology throughout Indian society in more recent decades, most recent scholarship on the subject suggests that the *guru* system—albeit in a modified form to fit contemporary lifestyles—is still alive and thriving.⁴⁷

While the widespread availability of technology is a rather recent development in South Indian society, efforts toward the institution of a standardized music curriculum can be seen as early as the latter half of the nineteenth century with the founding of music schools such as the Gayan Samaj in 1874. From one perspective, the benefits of classroom instruction cannot be denied. As Unnikrishnan (2006: 62) outlines, music schools reach a larger population of students than the *gurukula* system possibly ever could. They promote a balanced syllabus of practical as well as theoretical knowledge, and they offer the students exposure to a variety of

teaching methods and music styles. From another perspective, however, it is perhaps only through instruction from a guru, who, unencumbered by the restraints of a school curriculum and time schedule, can offer music training tailored to the specific needs and stages of a student's development. According to my research, the prevailing opinion among practicing musicians today is that classroom instruction will simply never be able to fully replace the merits of the traditional gurukula method.

In an ironic turn of events, some recent scholarship reveals that the gurukula system has not been rendered extinct by modern music schools and university curriculums, but has instead helped to shape more contemporary methods of music learning. Stanley Scott's (1997) research in North India, for example, suggests that the idealized guru-shishya exchange has actually influenced the structure of modern classroom methodologies for the study of Hindustani music. Similarly, Huib Schippers (2007) examines the implementation of Indian music classes in a Western conservatory and describes an instructional style similar to that of the gurukula system, particularly the absence of written notation and the absorption of musical knowledge through rote repetition. These studies suggest that gurukulavasam has become a model for some contemporary institutional approaches which attempt to blend the oral nature of guru to shishya transmission within a systematic curriculum.

While there may be many benefits to studying music in a classroom setting, most of the university music students that I encountered while conducting fieldwork in Mysore also studied privately with gurus outside the walls of the classroom. It seemed that these students were not trying to supplement their guru's teachings with classroom instruction as much as they were trying to supplement the weaknesses of classroom instruction with the gurukula process. One crucial advantage of studying with a guru is that students can begin music learning in their early

formative years much before they enter grade school. Many of my contacts reported that their musical studies began at the age of five or earlier, and the internalization of musical phrases and exercises was initiated long before their grade-school career had begun. Additionally, as I previously mentioned, the gurukula method tailors the pace of musical instruction to the individual student rather than to the syllabus of a semester-long time frame. For example, Regula Qureshi (2009) reveals that she studied a single rāga with her guru for an extended period of time before reaching an acceptable level of competence, whereas a classroom setting may have proceeded with a prescribed course schedule and curriculum regardless of her individual progress. The gurukula method ensures that students have mastered the music material that has already been transmitted before progressing to the next stage of training.

Complete immersion in musical training under a guru is more advantageous than studying in a classroom for another important, but often understated, reason: a guru transmits contextual and sociocultural knowledge in addition to concrete musical material. As Hindustani musician Ashok D. Ranade explains, “a disciple moves in society with his guru...[he] tries to reach to and understand [the] guru’s wider world-view because only that would make [the] guru’s music-view comprehensible” (1998: 119). Much of becoming a classical music performer involves learning how to function in classical music-culture. Technology and textbooks may supplement or speed up the process of acquiring music knowledge, but neither necessarily ensures that a musician will be a competent classical performer. Only by observing the guru’s interactions with other members of the classical music community is the student empowered with an intuition of the social as well as the musical processes within the classical framework.

Finally, the classical music market in South India is a highly exclusive, network-based community in which performances are often arranged based on recommendations from other respected members of the society. A guru is personally invested in his disciple's success, so he shares his professional networks and personal recommendations to ensure the student's future artistic and financial welfare. As Daniel Neuman elaborates: "Whether a musician is considered great, good, or even mediocre, he will (in the absence of anyone else) establish—so to speak—his credentials as a musician on the basis of whom he has studied with and whom is related to" (1990: 44). The guru gains necessary social stature because his musical legacy persists through the successes of up-and-coming musicians, and the student gains necessary public exposure and respect as a performing artist because of his guru's recommendations. The gurukula system, therefore, is more than just an exchange of knowledge and services; it is an exchange of social and cultural capital.

Instead of the gurukula system being overtaken by the existence of modern methodologies and technologies, the benefits of studying with a guru have actually become more defined in the encounter with these new instructional mediums and technologies themselves. Most practicing artists in South India attribute their success solely to having studied under a guru and agree that the intricacies of classical music practice cannot adequately be transmitted through technology or classroom instruction alone. The gurukula system has, however, significantly evolved from its traditional format and been reconfigured under the new circumstances of contemporary life to what T. Viswanathan calls a "modified" gurukula system (cited in Scott 1997). In this modified form, the student does not necessarily live with the guru but receives musical instruction as often as he can in the guru's home, and in many cases compensates the teacher in exchange for music lessons. Also, the new disciple is not restricted

to acquiring musical knowledge from only one source, but can supplement his learning process with recorded media, alternative methods of musical instruction, and performance tips from other artists. Finally, foreign students are now mixed in the gurukula process, many travelling back and forth between India and their home country and using technology to record their lessons and document their progress.⁴⁸ Yet, as much as it has been altered to coincide with contemporary lifestyles, the relationship between guru and shishya is still reminiscent of gurukulavasam in its most archetypical form.

The Modified Gurukula System

The guru occupies a complicated position in the classical music culture of South India. While the most common English translation for guru is “teacher,” the Sanskrit term actually has a number of translations, the most revealing of which is perhaps “dispeller of ignorance.”⁴⁹ Other translations include descriptions such as “heavy” or “weighty,” as in a person who is characterized by his uncommon prestige; still another translation claims that the guru is “one who calls,” as in a person who can recognize the call of the divine will within himself and manifest the call within others. As Joel Mlecko points out, the term means many different things because the guru *is* many different things. The guru is a “teacher, counselor, father-image, mature ideal, hero, source of strength, even divinity integrated into one personality” (1982: 34).

The guru is thought to be a visible embodiment of the knowledge he seeks to impart to a select group of loyal disciples. He is perceived as a sort of demi-god, and, in many cases, is worshipped as an incarnate deity. In more recent years, however, the title has become more flexible among the South Indian classical music community and also refers to exceptionally talented performing artists who may not have very much time to dedicate to teaching. Nevertheless, in all usages of the term, it is assumed that the “guru” embodies the values of

classicalness in his musical as well as his social interactions with other members of the Karnatic music community.

The term “gurukula,” which translates from Sanskrit as “guru-family,” in itself implies the depth of the relationship that a disciple forms with his guru. Students who begin their music studies in a gurukula setting are entering into more than a process of musical transmission. They are entering into a family of musicians who regard the guru as a father-like head of the musical household; furthermore, they are entering into a lineage of gurus whose respect for one another spans the boundaries of time.⁵⁰ Regardless of their background and regardless of their age, according to Neuman (1990), students must enter into the gurukula system as children and submit themselves to the guru completely. As my teacher used to say, a disciple must stand before her guru as if she is standing before a vast mountain of knowledge. It is inappropriate for disciples to question the guru’s methods; instead, students must trust that the guru will provide them with the tools to be successful. In a typical gurukula relationship, it is the guru’s—not the student’s—responsibility to ensure that the student understands the knowledge that is being transmitted. By submitting themselves completely and trusting the guru with a sense of what I call “discipular faith,” the guru, as Scott suggests (1997: 36), also becomes a metaphorical representation of the divine for the disciples.

The lines between the metaphors of “guru as father” and “guru as divine” are often so blurred that they are one and the same. In a traditional Hindu household, as Scott (1997: 36) points out, the metaphors of father and divinity are not entirely distinct from one another: a son may worship his father as he worships a Hindu deity, or a worshipper may be devoted to the Hindu deity as he is devoted to his own father. Likewise, the relationship between a guru and shishya is as slippery as the notions of father and deity in Hindu philosophy, and the position of

the guru as father-deity in the shishya's life is reflected through the guru's teaching methods. For example, after seeing that I was particularly frustrated by a difficult rhythmic phrase during one of my percussion lessons, my guru told me not to worry as it was *his* responsibility to ensure that I was able to play it. As my guru, it was his job to monitor my progress; as his student, I was expected to maintain my discipular faith and trust that his teachings alone would push me toward musical excellence. Interestingly, however, while my guru did make it his personal responsibility to provide me with the tools to succeed, he would also often recite the metaphor that he can lead a horse to water but cannot make it drink.⁵¹ Thus, at some point it was no longer up to the guru's "divine intervention" that I should succeed, but up to my own hard work and dedicated practice. At times, I was often motivated to practice simply because I did not want to face my guru unprepared at our next lesson. Like many other ethnographic accounts from Western scholars as well as Indian musicians, my guru-shishya experience was characterized by a delicate balance of push and pull—a push that shares a body of knowledge and enables the disciple, but a pull that motivates (sometimes quite sternly) the student to figure certain things out for him/herself.

One way to approach the guru-shishya relationship, according to Rolf Groesbeck (2009: 143), is to think of the shishya as an incomplete version of the guru. Gurukulavasam could be seen as a way for the guru to ensure stylistic continuity essentially by recreating a copy of himself. For example, Ravi Shankar reported that he approaches teaching a music student the same way one might approach programming a computer (Slawek 1987). Indeed, the initial musical exercises are analogous to short bits of musical "data" which are transmitted directly to memory through rote repetition and later comprise the foundation of a student's musical vocabulary. The shishya is not necessarily aware of how this data fits into the larger scheme of

the classical music system (this awareness emerges later), nor does the teacher stop to explain these details. Instead, the focus of these initial lessons is for the student to be able to render musical phrases in the same style and precision as the guru. This method of learning can be frustrating at times for the student who is ready to progress before the guru thinks a musical phrase has been perfected; however, these moments of frustration are balanced by moments of elation when the student performs an exercise to the guru's satisfaction. Scott (1997: 48), for example, reports his guru happily exclaiming after a successful lesson: "I have made you into myself!"

In more recent decades, however, it has become common for students to seek musical knowledge from more than one source and assimilate a personal style from a variety of "gurus." In addition to utilizing technology and classroom institutions, it has become standard practice in South India for a shishya to begin musical study with a guru who teaches the foundational aspects of musical knowledge and technique, and then observe or study with other senior artists to learn additional, more advanced music strategies for performance. For example, David Nelson (2000) discusses a two-fold learning process for mridaṅgam artists: first, strict imitation of the guru and, second, observation and imitation of other senior drummers. The initial stages of training, then, function more as preparation for students to be fluent in the language of the music system so that they can accurately interpret and understand the application of the language in musical contexts. As another example, one of my colleagues in Bangalore reported that he had learned the basic techniques of South Indian rhythm from his first guru on mridaṅgam before applying those techniques to his main instrument of *ghaṭam* under his second guru.⁵² Similarly, another mridaṅgam artist reported that his guru would require him to attend Karnatic concerts on a regular basis so that he could accumulate a body of performance knowledge and techniques.

The assimilation of a personal classical style, it seems, is never-ending, as every musician's style is re-negotiated each time he or she observes or takes the stage with another artist.⁵³

Another relatively recent development is that most disciples compensate their gurus financially in exchange for musical instruction. Many ethnomusicologists, such as Weidman (2006) and Qureshi (2009), have directly or indirectly discussed having monetary arrangements with their gurus in India. This seems to have become standard practice as early as the 1960s since Brown (1965: 287) mentions that he was required to compensate the mridangam artists with whom he worked. While our positions as Western researchers may have inevitably influenced our gurus' expectations of remuneration, several of my South Indian colleagues also reported that they compensate their gurus on a regular basis, or, as one contact told me, give to their gurus "some little something, whatever I can give."⁵⁴ Offerings, either through financial gifts or through service, are an important arrangement between guru and shishya because it portrays the student's personal concern for the guru's well-being in exchange for access to a lifetime of musical knowledge (Qureshi 2009: 178). The exchange reinforces the bonds that are formed between guru and shishya, which in the traditional gurukula setting were reinforced by living in the guru's household and tending to daily chores, such as laundry and meals.⁵⁵ In more recent decades, the act of giving has replaced the more traditional act of service and has become a crucial enactment to symbolize the obligations and dedication that disciples have toward their guru.

Performing the Guru

Many musicians can trace their musical lineage (from their guru, to their guru's guru, and so on) until they reach an iconic Karnatic music figure, and it is common for the foremost guru in many lineages to be identified as a member of the Musical Trinity.⁵⁶ However, as previously

mentioned, the title of guru has become quite flexible in recent decades and is often employed as a symbol of prestige. Many professional artists in South India, on the merit of their abilities as performers and their stature within the society, have been declared as gurus in the public eye—by themselves and by other members of the community—even though they may not actually have much time to devote to teaching. For instance, I encountered a mridaṅgam artist who received lessons only once or twice a month from a renowned performer he called his guru.⁵⁷ Likewise, Schippers (2007: 124) cites an “irate” *tablā* player in North India who complained that modern-day gurus are not able to fit students into their busy performance schedules but still expect the students to behave as dedicated disciples did in the nineteenth century.⁵⁸ My point here is that the term “guru” still evokes the iconic image of a self-sacrificing teacher who transmits knowledge to a dedicated group of disciples as they serve his household, but the title is now employed in South Indian classical music society much more loosely and applies to performing musicians with exceptional musical and technical abilities as well.

While it has become acceptable in contemporary Karnatic music society to apply the term “guru” to various types and forms of music teachers, this title would not have been applied to many of these instructors prior to the 1950s. Part of the reason the title is so much more flexible now is that the gurukula system, by making accommodations for contemporary urban lifestyles, is more flexible itself. Another reason, however, is that the term is employed much more loosely by Karnatic music students themselves. Association with a prestigious performer, irrespective of the actual amount of one-on-one instruction, can function as the source of a musician’s credibility in the Karnatic music circuit. Most of the classical South Indian musicians that I encountered during my fieldwork claimed to have more than one guru from whom they received varying degrees of instruction and musical knowledge. Often these musicians would emphasize

their connection to a well-known, top-ranking artist to reassert their own credibility as a performer even if they may not have received an extensive amount of instruction from the so-called guru. One of the mridangam artists I met in Chennai, for example, had studied under four different gurus, but would strategically choose which guru's name to emphasize when he was in the company of other classical music community members. In particular, he often highlighted his association with a rival mridangam artist's guru to elevate his performance stature in the Chennai performance circuit, although I am fairly certain that my contact could not have studied with this guru for more than a few months.⁵⁹

Another one of my contacts had studied under a legendary artist whose music lineage was linked to Tyagaraja. When my contact was nominated to head a department at a prominent music school in Tamil Nadu, he agreed to assume the post without salary if the department would be named after his legendary guru. While this public move did indeed honor his late guru, it also reinforced the artist's stature among the Karnatic community for several reasons. First, by revealing to the public that he had studied with a guru himself and was dedicated enough to honor him after his death, the artist reasserted his credibility as an authentic "classical" musician who had gained musical knowledge through a purely Indian transmission process. Second, in publicly proclaiming the name of his guru, he connected himself through his musical lineage to a member of the Musical Trinity. Finally, because his guru and Tyagaraja were both from Tanjore, he associated himself with the great musical legacy of the Tanjore court, an image that Yoshitaka Terada reveals is often evoked "to connect a contemporary musician symbolically to this place of pristine and sophisticated culture, and thereby to assert the authenticity of his/ her heritage" (2000: 462).

Furthermore, by accepting the head post without salary, the artist was asserting that he was concerned with the preservation of the classical music tradition as opposed to merely being concerned with his daily wage. Although I (along with other Western scholars) tend to use the terms interchangeably in scholarly discourse, the distinction between a “teacher” and a “guru” is crucial in contemporary classical South Indian music society (Kale 1970).⁶⁰ The title of “teacher” implies a less prestigious, more amateur position, while “guru” denotes a degree of professionalism and success among classical musicians. For instance, one of my contacts held a music position in a university in Karnataka, which for him served as a menial day-to-day, teaching post. He felt that his true success was projected only when he assumed the role of a guru in musical and social interactions.⁶¹ The most obvious difference between the two titles is monetary: a teacher works for a wage while the guru is portrayed as a self-sacrificing artist, disinterested in material wealth and dedicated to the proliferation of music knowledge among the most worthy disciples.

Interestingly, however, this distinction between teacher and guru did not hold true in my own experience as I had arranged to pay for my musical instruction. Additionally, my guru had accepted me not necessarily because I was a “worthy” disciple, but because I had been recommended to him by my other contacts. While my guru and I were explicit with one another about our monetary arrangement, money was never discussed in the presence of others. The topic of our payment terms was deliberately omitted from our conversations, and we never handled cash in the presence of other musicians and disciples.⁶² A guru, it seems, cannot risk being portrayed as plagued by the everyday concerns of a bourgeois lifestyle. On the contrary, the guru must project a saint-like persona to the rest of Karnatic music community by living up

to the great legacy of the musical Trinity, particularly Tyagaraja, who, as legend has it, is known to have renounced society and material wealth by refusing to serve in a royal court.

The Guru-Shishya Encounter and Classicalness

Most artists (professional as well as amateur) in the classical performance circuit have studied with a guru at some point in their development as a musician, and will attribute their success solely to having participated in the gurukula system. In fact, the process of transmission from a designated guru to a designated shishya, or disciple, is so familiar to the majority of classical musicians that it pervades much of the Karnatic society's notions of "classicalness," which is not surprising since these notions were constructed with an acute awareness of the transmission process that the guru represents. Some scholars (Scott 1997) have argued that it is the structure of classical music itself that has shaped the methodology of the gurukula system. However, I prefer to think of the relationship between classical music and the gurukula system in the opposite direction. It is not classical music that has shaped the guru-shishya encounter, but the guru-shishya encounter, with which the notions of classicalness are intimately concerned, that has shaped the musical and social interactions in the classical music community.

In the following chapters, I examine how this guru-shishya paradigm pervades some of the most basic socio-musical processes in classical South Indian society. Many musical exchanges, such as the onstage interaction between the primary and secondary melodic artists during a Karnatic music concert, are framed with an underlying ethos of the guru-shishya encounter.⁶³ I begin my music analysis in the fourth chapter by examining the clapping of tāla as a social and musical process indicative of a listener's classical music knowledge. As one of the most foundational music skills that a guru transmits to a shishya, clapping tāla is a way that an audience member can participate in the performance of "classicalness" during a Karnatic music

concert. Then, in the fifth chapter, I shift my focus to the “domain of tāla” as an art form performed by South Indian percussionists during the Karnatic percussion solo. Because melodic elements of music were valued over rhythmic elements when the notions of classicalness were constructed in the early twentieth century, the percussion solo, or *tani āvartanam*, is perhaps one of the most underappreciated portions of a Karnatic music concert. In my analysis of the onstage musical exchanges that I witnessed between two percussion artists during my fieldwork, I reveal how the musical processes in a *tani āvartanam* project the values of classicalness by framing the interactions between the two percussionists as an encounter resonant of the interaction between a guru and shishya.

CHAPTER IV

CLASSICALNESS AND THE DOMAIN OF TĀLA

A Karnatic music concert, or *kaccēri*, is an orchestrated, dramaturgical production of classical music culture, defined as members of the community negotiate and perform their social role, status, as well as their “classicalness,” in contradistinction to a set of perceived nonclassical others. In many ways, Indian classical concert culture is very similar to William Weber’s description of the “peculiarly modern musical institution” of art-music culture in eighteenth-century Europe, a collection of “upper-class people displaying their social status and their musical sophistication while revering great music from the past” (Weber 1992: 1). Performing the “classical” in both societies is much more than the presentation and patronization of a specific repertoire and set of musical practices on the concert stage. It is the enactment of larger cultural values, which, in South India’s case, have been informed by the agendas of early twentieth-century regionalist and nationalist movements. It is the performance of a set of musical as well as social behaviors, which have come to be identified as “classical” and which still pervade the gestures and interactions in the Karnatic music community at large.

In the following chapter I examine the act of clapping *tāla* as a way for audience members to interact and participate with the performance of the classical. Clapping *tāla* has become an important gesture during Karnatic music concerts for audience members to publicly perform their level of classical music knowledge and negotiate their “classicalness” to the rest of the classical music community. The outward gestures of *tāla* imply that the audience member is a sensitive, well-informed listener, known as a *rasika*, who is familiar with the compositions that are being performed onstage.⁶⁴ The majority of audience members at today’s concerts, however, are not familiar enough with either the rhythmic structure or the repertoire of classical Indian

music to know how to clap tāla correctly throughout a concert performance. Even still, it has become such an important performance of classicalness that less informed listeners will continue moving their hand in some sort of tāla-inspired sequence, sometimes imitating one another at fluctuating tempos, regardless of the accuracy of the gestures. In some ways, therefore, clapping tāla has become more a social performance of classicalness among the general classical music audience rather than a device for music composition and interpretation as it was intended.

In my own experience of attending concerts with my guru, many concert attendees assumed that I was able to comprehend the music that was being performed on stage simply because my hand was constantly moving in some sort of tāla pattern. Since the majority of audience members were themselves unsure about the tāla, the precision of my clapping patterns was often irrelevant. What was more important was the fact that I could clap tāla at all. Clapping tāla became a signal to the Karnatic music community at large that I had successfully absorbed, if nothing else, the most basic foundations of classical music knowledge. Additionally, clapping tāla to my guru's solo improvisations was an indication of our social roles to the classical community at large. My ability to clap tāla was visibly-enacted proof that my teacher was, in fact, an insightful, scrupulous guru who had transmitted a set of culturally-specific music skills to a foreign disciple dedicated enough to practice those skills during his concerts.

A classical music concert is not considered a religious affair, but it is projected as being a profoundly spiritual experience. There is a yogic aspect to the act of clapping tāla that I feel has been lost in more recent decades. I suggest in this chapter that clapping tāla was at one point a tool used to achieve a transcendent musical experience. My argument relies heavily on the ritual connections that Lewis Rowell (1992) has revealed between the tāla concept and early Indian

cosmologies, but it also based on my personal experiences of learning how to use tāla to interpret Karnatic music improvisation. While the majority of today's classical music audience does not think about tāla in the same way as someone who has been trained in Karnatic music, I nevertheless discuss tāla in this chapter from the vantage point of a student of classical South Indian rhythm. Many of my analogies from this point forward switch from a discussion of South Indian classical music in general to more specific references to the art of rhythm from a Karnatic percussionist's perspective.

The most intensive part of my Karnatic rhythmic training was “putting the tāla” in exact precision with the rhythmic phrases that were being spoken or played by me and my guru. Clapping tāla while reciting musical phrases is one of the most fundamental skills that any Karnatic musician learns from their gurus.⁶⁵ However, being able to recite and play musical phrases with the tāla is particularly crucial for South Indian percussion artists, who use different subdivisions of tāla as the platform for spontaneous mathematical creativity in their rhythmic improvisations. Percussion students are required to recite the rhythmic phrases while clapping tāla before they ever attempt to play the rhythmic phrases on their instrument. During my very first lesson, for example, my teacher described a four-fold approach which stressed the important role that tāla plays in learning Karnatic rhythmic phrases:

Whatever you play, you must be able to recite. Whatever you recite, you must be able to play. Whatever you recite and play, you must be able to put the tāla. And to whatever you put the tāla, you must memorize. (personal communication, 2008)

As a teaching tool, clapping tāla with spoken recitation of a musical phrase reveals whether a student has fully internalized the rhythmic subdivision of the phrase. Students who can comfortably clap tāla while they recite their improvisations have sufficiently mastered the

musical material, but students who find this process difficult or uncomfortable have not practiced the material enough. As a learning tool, clapping tāla while reciting a musical phrase is a process by which the same human body produces musical material while simultaneously acting as its own metronome. This experience, which David Nelson (2008: 4) characterizes as being both somatic as well as kinesthetic, helps to embed the recited phrases within the student’s music vocabulary.

From another perspective, this same teaching/ learning tool becomes a music interpretation tool during Karnatic concert performances for those audience members who have received some degree of training in Karnatic music. Most Karnatic musicians will argue that listeners cannot fully comprehend and appreciate what is happening onstage unless they understand the music’s relationship to the tāla. The tāla, therefore, becomes a platform against which all music improvisation is interpreted (except in cases where there is no tāla, such as during the ālāp section). It is this understanding of tāla, as a device that facilitates the interpretation of Karnatic music, which is the topic of this chapter.

A Lock in Time

Tāla is most easily recognized as an outward action, a type of “cheironomy” that indicates the demarcation of beats in an Indian metric cycle with finger counts and palm clapping.⁶⁶ However, a brief look into the etymology of the term reveals the complex nature of the concept of tāla in Indian music. The word tāla (“tah-luh”) comes from the Sanskrit root *tal* (pronounced “tuhl”), which roughly translates as “to accomplish,” “to establish,” or “to fix.” In some contexts, *tal* is also interpreted as “to lock.” From the same root, tālā (pronounced “tah-lah”) translates as “surface” or “plane”; depending on the context, it can refer to the sole of the foot, the palm of the hand, the top of a pedestal, or a palm-leaf fan. Tāla, then, denotes an action

applied to or making use of this surface, and can include actions like hand-clapping, the waving of a palm-leaf fan, or even the flapping of an elephant's ears (Rowell 1992: 190).

In musical contexts, tāla serves many purposes and means many different things. It is a rhythmic structure on which the musician or composer “establishes” and “accomplishes” musical phrases. It is a sequence of hand motions which indicates the relationship of the musical material within the rhythmic structure. It is a “locked” or “fixed” counting gauge which performers and audience members can reference to actively interpret the musical material. In more recent decades, it has also become an outward gesture of cultural capital in the classical music community (“classicalness”), a performance that indicates an audience member is familiar with (or is acting to be familiar with) the structure and repertoire of Karnatic classical music.

Most Western scholars have not chosen to pursue a broader understanding of tāla by seeking insight from the ancient Sanskrit treatises and other Indian sources which may address the topic of music and the concept of tāla, such as the *Dattilam* and *Natyasastra* (ca. 200 CE). It is not that there is a lack of interest among the scholarly community in analyzing ancient Indian texts and treatises, especially in the related fields of anthropology and philosophy, but the passages which may address Indian music are often viewed as nonessential to the understanding of other aspects of Indian culture. However, topics which scholars in the West may conceptualize under discrete headings, such as “philosophy,” “religion,” “theatre,” or “music,” were inextricably intertwined in early and medieval India, perhaps all developing from applications within early Indian ritual (Olivelle 1996). The terminology that was codified by early Indian peoples to discuss musical elements, for example, can reveal deeply philosophical insights about early Indian views on the order of the cosmos (Rowell 1979; 1992). It is actually a detriment, therefore, to our understanding of Indian culture that more Indian music scholars have

not utilized these early writings to their full advantage. Close examination of early Indian ideas about music would be applicable beyond the fields of musicology and ethnomusicology.

Rowell's (1992) seminal work is a notable exception to this trend and includes a detailed explanation of how the concept of tāla is analogous to the fundamental lines of Hindu thought. This is perhaps exactly the kind of analysis that Milton Singer (1972) was attempting in his search for the dialectical connection between India's "Little" and "Great" traditions.⁶⁷

Little and Great Implications

In analyzing tāla as the performance of a larger Indian cosmology, most scholars have not extended their discussion much beyond the more obvious comparison of tāla to the Hindu perception of time as cyclical.⁶⁸ The cyclical organization of Indian rhythmic elements has been discussed by a number of musicologists as a microcosmic analogy to the macrocosmic view of time in Hindu thought.⁶⁹ Most scholars employ a two-dimensional image of a circle to illustrate that the first beat of the tāla simultaneously acts as the end of one cycle and the beginning of another.⁷⁰ However, this overly simplistic representation reveals only a very basic, surface-level understanding of early Indian concepts of time. The temporal order of the cosmos, according to early Indian writings on the subject, is cyclical much beyond the durations of days, months, and years. These shorter cycles are positioned within enormously longer scales which span lifetimes, centuries, and even world cycles (Clayton 2000: 20). I will continue to refer to tāla as being "cyclical" throughout this thesis, but the reader should understand that "cyclical" is much more complicated than the image of a repeating cycle or circle. A more accurate visual representation of tāla, based on early Indian concepts of time, might be a theoretically infinite three-dimensional spiral that, when rendered as a flat two-dimensional object, would depict a set of cycles within cycles within cycles.

This metaphor of the cyclical nature of the universe can be found in many different lines of Indian thought. My own teacher in South India often spoke about how life itself is cyclical. On numerous occasions he even connected the concept of *tāla* to his perception of the universe through philosophical similes, such as “the cycle of *tāla* is like the cycle of life” (personal communication, 2008). A similar analogy between the temporal structure of *tāla* and the continuous life cycle is found as early as the eleventh century in a passage by Abhinavagupta (cited in Rowell 1992: 188–93). Abhinavagupta explains that all three phases of the cycle of life—creation, preservation, and destruction—are physically manifested in the gestures and durations of *tāla*. Form is created in music through the division of time into audible units, or *kalā* (pronounced “kuh-lah”), and the different hand gestures of *tāla* divide the stream of time into these units. The musical forms that emerge as a result of these divisions are preserved or maintained in the ongoing stream of time, known as *kāla* (pronounced “kah-luh”). *Kāla* is represented in *tāla* by its theoretically-infinite, cyclical nature. Finally, the musical forms that have emerged are destroyed or dissolved in the spaces between successive units. The space between the claps of the *tāla*, known as *laya* (pronounced “lie-yuh”), represents this process of dissolution during which audible form is momentarily lost until another divisive unit emerges and time is again split into parts.

This analogy, which Abhinavagupta refers to as *kalā-kāla-laya*, is significant because it translates an Indian view of the cosmos into musical terms.⁷¹ Following Abhinavagupta’s explanation a bit further, clapping *tāla* then becomes a yogic practice to balance between all three phases of the creation-preservation-destruction life cycle and achieve *samyā*, which can best be translated as equilibrium. Rowell (1992) explains how *samyā* might be achieved in musical contexts:

Illusion consists of apparent motion and the perception of successive forms; reality [on the other hand] abides in the absence of motion and the knowledge that all forms are nothing other than different aspects of the One. Form is mutable, matter is malleable, and both subsist in illusion. The goal of tāla is to maintain equilibrium during the parade of manifested forms. (189–90)

Thus, in this analogy, music creates an “illusion” of successive rhythmic and melodic forms, while tāla is a way to ground oneself in what Rowell terms “reality,” or the realization that all manifested forms are actually part of the same larger whole. Music can create such a powerful illusion of succession that the only way to maintain balance, to not get overwhelmed by the “parading” forms, is to maintain an awareness of tāla.

In neglecting to analyze the deep connections between India’s “Little” concept of tāla and the “Great” philosophies of early Hindu thought, scholars have perhaps overlooked an analogy that helps to explain the relationship between Indian music processes and tāla. Typically, Western scholarship approaches an explanation of tāla by posing it against the concept of rāga. The melodic aspects of improvisation and composition make use of the specific notes in a particular rāga, and the rhythmic aspects exist within a framework of a particular tāla.⁷² However, the tāla, as discussed by eleventh-century author Abhinavagupta, is a cognitive scale against which listeners can measure, interpret, and control their rhythmical, or (perhaps more accurately) their temporal, music experience. Therefore, instead of comparing tāla to rāga, it would perhaps be more accurate to relate the function of tāla in rhythmic processes to the function of the *sruti* drone in melodic processes. The drone, which serves as a reference point against which the pitches of a rāga sound in varying degrees of consonance and dissonance, seems to better parallel the function of tāla as a fixed gauge to judge musical processes. This is

an important area of inquiry in need of further exploration, if for no other reason, because most South Indian musicians themselves proclaim that listeners must clap tāla in order to understand what is happening musically.⁷³ However, analyzing the dialectic cognitive connection between rhythm and tāla may also prove to inspire new understandings of Indian cultural processes and philosophies as well, with implications that extend far beyond the boundaries of music and cultural analysis.⁷⁴

The Interpretation of Audible Time

Since the days of ancient Vedic ritual in India, music was used as a way to explore concepts about the order of the cosmos, especially abstract notions about the experience of time. Even in Western scholarly discourse, the experience of music has often served as an extended analogy for the temporal experience of the universe (Bergson 1910; Husserl 1964). Music is perhaps the choice for the contemplation of “time consciousness” because, as Susanne Langer notes, music “makes time audible, and its form and continuity sensible” (1953: 110). Some scholars have gone as far as to argue that it is music—and *only* music—that will ever be able to answer our questions about the nature of time (Kramer 1988; Minsky 1982; Rowell 1979). Marvin Minsky (1982), for example, in a whimsical analogy between music and child’s play, argues that music allows humans to interact with and understand the concept of time. Just as a child learns how to understand the concept of space by stacking blocks on top of one another, adults learn to perceive the concept of time by building “large mind-structures out of smaller music-things” (1982: 4–5). Therefore, the perceived temporal order of the cosmos can be reduced, enacted, and controlled through music, which can serve as “working model of time, a controllable tonal universe that can be set in motion, precisely measured, and appropriately restricted” (Rowell 1979: 105).

From one perspective, the tāla cycle itself is a concrete, observable presentation of Indian notions of the temporal order of the universe. The tāla can be perceived as both a series of successive events as well as a single, unified entity in itself in the same way that the time of the cosmos can be perceived as both “becoming” and as “being.” It is not surprising that tāla is so deeply connected to Hindu philosophies of time, given that tāla was one of the most crucial tools of early Indian ritual, serving as a temporal platform upon which the entire ritual process—including dance, music, and text recitation—was coordinated (Rowell 1992: 186). From another perspective, however, the purpose of tāla extends beyond a metaphorical representation of time to function as a physical, kinesthetic tool to control the experience of “musical time.” The subjective organization of successive music phrases into a temporal experience can range in tempo from feelings of rapid motion to momentary stasis. Grounded by the fixed temporal scale of tāla by which to judge his experience, the listener realizes that the alternation between motion and stasis is actually an illusion that has been created by his own interpretations of the music. There is no actual motion or passing of time, for all forms that exist are actually changes in the listener’s perception of the musical material.

Clapping tāla, therefore, is the outward, external manifestation of an internal, music-interpretation process. The experience of music, according to Zofia Lissa (1968), is a dialectical process between the listener’s perceptive organization of the sound object and the musical sound itself. In Lissa’s argument, there is no music without a listener. Rather, it is the subject’s ability to perceptively organize the sound object that transforms sound into music (532). Music does not exist on its own but occurs as the end result of an active process of interpretation. Clapping tāla during a classical Indian music concert is a way for audience members to actively participate

as a listener. Tāla serves as a platform, or “base,” as Robert Brown (1965: 4) translates it, against which “audible time” begins to be pieced together as music.⁷⁵

Through the motions of the tāla, classical Indian music is interpreted on several different, often conflicting, temporal levels: as a sequence of motives, within a larger structural framework, judged against the sequential beats of the tāla, situated within the larger structure of the recurring cyclic entity itself. South Indian musicians and fluent listeners actively construct musical forms by alternating or suspending their awareness across multiple temporal hierarchies. Even in moments of spontaneity, artists improvise classical music with an acute awareness of these multiple temporal levels.⁷⁶ It is only fitting, therefore, that Karnatic improvisation should be analyzed and interpreted across many different levels as well: as a sequence of short musical motives, as a collection of longer musical phrases, and as a single musical occurrence which spans one or more cycles of tāla. Actively participating as a listener in the rhythmic interplay across these differing temporal hierarchies is a key component of experiencing the aesthetical intricacies of classical Indian musical processes, and clapping tāla during a classical music concert is an outward indication that the audience member is indeed having this internal experience.

The Domain of Tāla

A recurring theme throughout this chapter is that the concept of tāla encompasses much more than only the rhythmic elements in classical Indian music. More than being the counterpart to rāga in Indian music, tāla is the platform against which rhythm is interpreted (in the same way that the pitches of the rāga are interpreted against the sruti drone), controlling the aspects of musical form, structure, and rhythmic design in Karnatic music. This “domain,” as Rowell (1992: 225) calls it, is transformed into a classical art form by Karnatic percussionists during the

tani āvartanam (also known simply as the *tani*), or the percussion solo in Karnatic music concerts. The South Indian percussionists' art form is a topic that has been avoided in the majority of Western scholarship, perhaps due to a privileging of melodic over rhythmic elements in scholarly music discourse.⁷⁷ Likewise in Karnatic music society, the *tani* ranks as one of the most underappreciated and “least classical” portions of the Karnatic music concert.

Those limited number of scholars who have chosen to analyze the art of Karnatic rhythmic improvisation (Brown 1965; Nelson 1991) have primarily focused on the content and structural composition of rhythmic phrases rather than the improvisational processes of rhythm performed in *tāla*. In the following chapter, I demonstrate that it is not necessarily the content or virtuosity of the rhythmic phrases, but the processes used to construct and link these phrases during performance, that are the focus of aesthetic considerations in the *tani*. My musical analysis develops an approach to understanding the rhythmic processes, what I refer to as “transformations,” that Karnatic percussionists employ during their improvisations. Then, referencing the onstage musical interactions that I witnessed in percussion solos during my fieldwork, I also explore how the musical exchanges between percussion artists onstage are also social performances resonant of the encounter between *guru* and *shishya*.

CHAPTER V

CLASSICALNESS AND THE ART OF KARNATIC RHYTHM

Except for the exemplary dissertations by Robert Brown (1965) and David Nelson (1991), the Karnatic percussion solo, or *tani āvartanam*, has largely been overlooked in Western scholarship.⁷⁸ This is no surprise considering that the percussion solo ranks as one of the most underappreciated portions of a Karnatic music concert and occupies a difficult place in the realm of “classicalness.” At a typical Karnatic music concert, it almost never fails that the majority of audience members will stand up and leave the concert hall as soon as the percussion solo begins. Most concert attendees view the tani, which usually spans anywhere from ten to thirty minutes (or more) in duration, as a welcome intermission during which they may enjoy a cup of coffee, a breath of fresh air, or a trip to the restroom. Those audience members who do stay behind and clap tāla to the percussionist’s extensive rhythmic improvisation are a minute percentage of connoisseurs, usually percussion students or performers themselves.

The lack of appreciation for the South Indian percussionists’ art perhaps stems from the nonclassical associations that are still attributed to percussion instruments as well as the improvisational techniques that South Indian percussionists employ. First, while playing the *mridangam*, a barrel-shaped, double-headed drum which functions as the main percussion instrument in a Karnatic music concert, the musician’s hands are in direct contact with animal hide, not only on the drum heads but also on the hide laces which are used to tune the heads as well. Interestingly, most famous mridangam artists are upper-caste Brahmans, but the drum itself is repaired and manufactured by craftsmen who, although considered highly-skilled professionals, are descendants of a much lower caste that performs the highly inauspicious act of handling the skin of a butchered cow (Brown 1965: 22–47). Despite the prevalent influence of

Western ideas and culinary habits in contemporary South Indian society, nearly all upper-caste classical musicians and audience members are strict vegetarians who view the act of handling any dead animal material as polluting. This “vegetarian mindset” has undoubtedly exerted some influence on the way the classical community perceives South Indian percussion instruments, but the fact that the mridaṅgam is nevertheless performed by upper-caste individuals reveals that the instrument must possess some element of cultural prestige and antique value.⁷⁹

Secondly, the South Indian percussionists’ art has largely been influenced by the improvisational and rhythmic techniques that are used today by lower caste temple musicians, especially those of the *tavil* artists. The *tavil*, a cylindrical-shaped drum that accompanies the *nāgaswaram* (a long oboe) in temple processions, has been relegated to the nonclassical music realm in South India.⁸⁰ The two “fathers” of the modern-day Karnatic percussion style, however, are said to have modeled their techniques on those typically performed by *tavil* musicians, such as the use of intricate fingering patterns in the right hand, extensive incorporation of lower tones in the left hand, and accompaniment patterns that are structured on the melody of the Karnatic compositions. Most of the rhythmic techniques that are performed by contemporary South Indian percussionists during the *kaccēri* can be attributed to the influence of two early twentieth-century mridaṅgam artists: Palghat Mani Iyer (1912–81), who is said to have been strongly influenced by the improvisation techniques used by the *tavil* musicians in the temples of Kerala, and Palani Subramania Pillai (1908–62), who was himself the son of an eminent *tavil* musician. The most evident similarities between the modern-day *tani āvartanam* and the techniques used by *tavil* artists during temple processions are the incorporation of complicated, mathematically-calculated, rhythmic phrases as well as the use of more than one percussion instrument on the classical concert stage.

As notions of classicalness were constructed during the first half of the early twentieth century, the percussionists' art in South India was regarded not only as secondary, but inferior and superfluous, to the melodic exposition of the rāga. For example, music critic E. Krishna Iyer expresses the strong twentieth-century bias against the percussion section in a Karnatic music concert, known as the *tālavadya kaccēri*, in 1933: "One mridaṅgam is a sufficient tāla accompaniment for any concert. Add to this...and you have a regular circus performance...and the heart and soul of Indian music—melody and rāga bhava—[is lost] beyond redemption" (1933: 53). Not only does this statement compare Karnatic percussionists' role in the kaccēri to circus antics, it highlights the pervasive opinion that melodic (and not rhythmic) elements are the "heart and soul" of Indian music. The privileging of melody over rhythm has remained a part of Karnatic music discourse even in recent decades and can perhaps be attributed to the emulation of a similar attitude in the West during the late nineteenth and early twentieth centuries. Influenced by the Western presupposition that the music of "uncivilized" and "primitive" peoples stressed rhythmic over melodic elements, many twentieth-century Indian musicologists perpetuated the stance that "primitive music had more tāla and less rāga" (Subba Rao 1962: 148–9). While recent opinions are slightly more subdued, a strong case can be made that South Indian percussionists' art is underappreciated primarily because the rhythmic elements of Karnatic music were devalued while the notions of classicalness were being constructed in early twentieth-century South India.⁸¹

By emulating Western musical values and privileging melodic over rhythmic elements, the classical South Indian community was actually denying the very basis of form in Indian music. Whereas form in Western classical music is typically related to the organization of pitch elements, such as harmonic progressions, structural patterns in Indian music arise from and

depend solely upon the “domain of tāla” (Rowell 1992: 225). In Indian music, tāla is not just a system of cyclical metric organization; it is a complete science in itself that encompasses all areas of musical duration—rhythmic and metric elements as well as form, structure, and the processes associated with all of these ideas. Music structures may be reinforced (or articulated and clarified) by the elements of pitch, but in no way is the form of Indian music dependent upon pitch elements in the way it is dependent upon the elements of rhythm. The following chapter explores the improvisation in a tani āvartanam, for it is through the creative rhythmic improvisations performed by a skilled Karnatic percussionist that the domain of tāla is best brought to life as a classical art form.

The Tani Āvartanam

The tani āvartanam is typically performed during the latter half of a Karnatic music concert after the melodic soloist has completed an extended improvisational section in either the main concert piece or the *rāgam-tānam-pallavi*.⁸² The aural cue that the percussion solo is about to begin is a rapid succession of pitches or melodic syllables in a style known as *swara kalpana*.⁸³ This section, which repeats a pre-formulated, cross-rhythmical melodic formula three times, signals the end of the melodic improvisation and the beginning of the rhythmic improvisation. Immediately following the third repetition of the melodic artist’s *kalpana* phrases, the percussionists begin their solo. If there is more than one percussionist onstage, then the rhythmic improvisation usually begins with the mridaṅgam, as this drum is considered the primary percussion instrument in Karnatic classical music. After the mridaṅgam artist has had the opportunity to play a solo, the secondary percussionists, playing instruments such as the *kanjira* or *ghaṭam*, are given a chance to improvise.⁸⁴ Once both percussionists have finished their individual displays of virtuosity, they begin to alternate shorter improvisational phrases

with one another, gradually decreasing the duration of the phrases until they are rapidly exchanging one-beat-long (or sometimes even shorter) rhythmic snippets. Finally, as a sort of “grand finale” to the drum solo, the two percussionists join together in one more display of rhythmic virtuosity and play an organized succession of rhythmic phrases (known as a *kōrvai*) with one another.

1. The Kōrvai and Mōrā

The term “kōrvai” translates from Tamil as “the stringing together of ornamental beads.” A kōrvai is a partially improvised, partially pre-composed rhythmic structure that strings together a series of rhythmic motives. Of all the rhythmic processes that are employed by a South Indian percussionist, a kōrvai is the most pre-composed; however, as much as it is preconfigured, the very nature of Karnatic rhythm allows for endless variation and manipulation. A percussionist may manifest the same kōrvai in many different forms. This ambiguity between pre-determined and spontaneous composition in the case of Indian musical improvisation is perhaps best revealed by Ravi Shankar’s paradoxical quote cited in Robert Brown’s dissertation: “You know there is nothing fixed...Though there are certain things fixed” (1965: 298). The format for a kōrvai is very flexible with no definitive rules about how to string the rhythmic phrases together, but typically the total number of pulses is somehow mathematically related to or calculated based on the number of pulses available in the tāla. South Indian percussionists have a vast bank of memorized kōrvais which they may insert or manipulate within their solos at any time.

Robert Brown, the first Western musicologist to specifically analyze the art of mridaṅgam playing in Karnatic music, defines a kōrvai as follows:

[A *kōrvai* generally] consists of a stringing of rather widely spaced sounds in the *tāla* in an interesting cross-rhythmical arrangement. It is the most cross-rhythmical of any of the specific formal types of pattern found in drumming, longer and more intricate than the usual *mōrā*... [I]t is usually arranged in some kind of repetitive triple pattern. Each of its three sections is again most often subdivided into a triple arrangement of phrases. (Brown 1965: 264)

Brown, writing on this topic in the 1960s, is rather vague about the structural format of a *kōrvai*, and more recent studies have attempted to compile a more precise definition of the term. David Nelson (1991: 65-78), for example, in his dissertation on the “mrdangam mind,” creates a set of categorical labels to identify several different structural formats that may constitute a *kōrvai*. His ultimate conclusion is that there are only two requirements for a rhythmic structure to be considered a *kōrvai*: (1) the rhythmic phrase must have at least two parts, and (2) the last part must be repeated three times in a *mōrā* format (explained below).

A *mōrā*, on the other hand, is a rhythmic formula that is repeated three times to signal the end of a phrase. As Nelson (1991: 46) explains, the most basic structure for a *mōrā* is the format “*x y x y x*,” where “*x*” represents a rhythmic motive that is repeated three times and “*y*” represents the space between the motives. Typically it is the *mōrā* format that is used most often while accompanying a melodic artist to signal the transition between the sections of a *kṛiti*.⁸⁵ This may seem confusing in comparison to the *kōrvai*, but the difference is this: *Mōrās* can be very short and succinct, and they are usually used to indicate the end of phrases; whereas a *kōrvai* uses a *mōrā* as the final section of its structure. Furthermore, when a *kōrvai* is repeated three times, it generally indicates the end of an extended section of improvisation, such as the end of the melodic *swalpa kalpana* section or the end of a percussion solo.⁸⁶

During the presentation of a kōrvai onstage, the percussionist is performing (for an elite segment of connoisseurs in the audience) the mathematical sophistication of his rhythmic manipulation and creativity. It is not necessarily the difficulty of the rhythmic phrases themselves, but the intricate way in which the percussionist strings them together, that reflects an artist’s mastery of the “domain” of tāla. There are several techniques that a percussionist may use to link rhythmic phrases in innovative and creative ways. Some of these techniques, which I call “transformations” of a rhythmic phrase, are discussed in more detail later in the chapter. By “transforming” rhythmic phrases using creative mathematical techniques, a percussion artist not only intellectually challenges his audience, but he also demonstrates the cleverness of his rhythmic development and presentation style.

2. The Final Kōrvai

At the end of the tani āvartanam, both percussion artists join together for a grand finale known as the “Final Kōrvai.” The Final Kōrvai is not discussed between the percussion artists or arranged prior to its performance, but is instead a spontaneous linking together of South Indian rhythmic vocabulary. This concluding rhythmic statement is actually determined by the mridaṅgam artist during the moment of creation itself. The secondary percussion artist is expected to follow the Final Kōrvai and, in a manner that seems almost telepathic, play along with the mridaṅgam artist as accurately as possible during the performance. Since the Final Kōrvai (like most other kōrvais) is repeated three times, if the secondary artist fails to deduce the structure of the rhythmic phrases on the first round (as it happens on occasion when the mridaṅgam artist chooses a particularly difficult kōrvai to end the tani), he can join on the second and third repetitions.

To the uninitiated audience member, it may seem as if the Final Kōrvai has been elaborately planned ahead of the concert.⁸⁷ However, as any student of Indian music knows, while the musical material may have been extensively practiced by the artist beforehand, nothing that is performed on stage is ever truly pre-planned. In fact, most artists assert that planning their virtuosic phrases and kōrvais prior to the concert performance would be more a hindrance rather than a benefit. One mridaṅgam artist told me that if he tried to plot his drum solo ahead of time, the mental pre-arrangements would actually cause him to struggle onstage and his solo to sound overly forced. He explained that his improvisations must match the mood of the concert in the moment he is performing; he must consider the musical material that has already been presented, as well as the level of enthusiasm that the audience exhibits (or does not exhibit in some cases). By trying to live up to pre-conceived expectations in his own mind, the mridaṅgam artist claimed that he would not be able to appropriately tailor his drum solo to the occasion. The ability to manipulate an established music vocabulary in the moment of performance is a highly valued skill among classical musicians and connoisseurs.

Instead of planning before the concert, the two percussion artists are able to synchronize with one another during the Final Kōrvai because the secondary percussionist anticipates the rhythmic phrases that are yet to come based on mathematical reasoning and musical intuition. Classical musicians are able to immediately decipher melodic and rhythmic phrases as they are being performed, a skill that is practiced and developed with a guru during the process of rote transmission. In most of the performances I attended during my fieldwork, however, the tani was almost always framed as a playful challenge between the two percussion artists. This challenge was most obvious during the Final Kōrvai, when the secondary percussionists were expected to keep up with whatever the mridaṅgam artist had devised as the finale to the drum

solo. South Indian percussion artists are trained to be able to immediately decode the rhythmic phrases that are being performed onstage, and most of the time secondary artists are able to keep up with the mridaᅅgam artist's improvisations.⁸⁸ Occasionally, however, the mridaᅅgam artist, especially if he were a renowned senior performer in the classical music circuit, would choose to perform an intricately calculated Final Kōrvai that was complicated enough to make the secondary percussionist stumble. In choosing such a difficult kōrvai to end the percussion solo, the mridaᅅgam artist may have been trying to reassert his authority onstage or good-humoredly challenge the proficiency of his colleague's Karnatic rhythmic knowledge. In any case, the tani āvartanam, especially the alternating end section and the Final Kōrvai, is an opportunity to identify the truly authoritative, and thus "classical," percussion artists from those who cannot keep up with the "classical" game.

The Art of Karnatic Rhythm

The mōrā and the kōrvai comprise the majority of the Karnatic percussionist's rhythmic vocabulary, along with rhythmic phrases that can be used as accompaniment and transitional patterns. According to Brown (1965) and Nelson (1991), a *tani āvartanam* is at its core no more than the linking of several mōrās and kōrvais in creative and mathematically interesting ways. As previously mentioned, a South Indian classical percussionist is not necessarily judged based on the difficult and virtuosic nature of the rhythmic phrases themselves, but on the innovative ways in which he strings his phrases together. Most concrete musical material, such as specific rhythmic motives and phrases, is transmitted directly from guru to shishya, but the discernment to combine these fundamental elements in creative and aesthetically pleasing manners comes from years of practical experience and observation of other artists.

I have identified three overlapping but distinct analogies in the discourse that South Indian percussionists used to talk about their rhythmic art.⁸⁹ First, these artists often employ a language metaphor to explain that they recognize musical improvisation as organized units of an Indian rhythmic vocabulary.⁹⁰ It is not uncommon for percussionists to compare their ability to decipher rhythmic phrases to the way in which they differentiate between different syllables of speech. At the same time, Karnatic percussionists also discuss rhythmic phrases in concrete mathematical terminology. It is quite natural for them to oscillate between the analogy of rhythm as language and the quantifiable observation of rhythm as a numerical sum. Interestingly, the term which Karnatic percussionists use to mean subdivision or pulse is the Sanskrit term, *akshara*, which translates as “syllable” (Rowell 1992: 205). Thus, when percussionists discuss how many pulses, or aksharas, are in a particular rhythmic motive or phrase, they are, more accurately, discussing how many “syllables” are in the material. Finally, the rhythmic processes that incorporate these motives and phrases are classified using spatial and geometric analogies. Similar to the way Western musicians use visual analogies to discuss the “shape” of a melody, South Indian percussionists also discuss the “shape” of a rhythm.

It should be no surprise that Karnatic percussion artists use the metaphor of language to describe their art since there exists in Indian music a spoken rhythmic language known as *solkattu*. *Solkattu* is similar to the Indian system of solfege (*sa, ri, ga, ma, pa, dha, ni*) that is used to convey different pitches of a rāga, except that *solkattu* is a verbal representation of the mathematical organization of South Indian rhythm.⁹¹ There is not a standardized system of drum syllables that has been established in India to date. Each percussion artist has developed his method of verbal rhythmic representation, particular to his own preferences, his guru’s influence, and the practices associated with his particular percussion instrument. A wide misconception

about the solkattu system is that there is a one-to-one correlation between the spoken syllables and the strokes that are played on the drum. At one time this may have been the case, especially since the first four strokes that mridaṅgam artists learn actually do correspond to specific spoken syllables (*ta, di, tom, nam*), which are documented as far back as the *Natyasastra* (ca. 200 BCE-200 CE). Even today there is still some overlap and correlation that inevitable occurs between the spoken rhythms and drum strokes, especially in the distinction between high and low drum tones.⁹² Many scholars have observed, however, that solkattu syllables are more commonly chosen based on the ease in which they can be rendered verbally.⁹³ As a general rule, the strokes that are played on the percussion instruments are arranged according to the logic of the hand while solkattu syllables are arranged according to the logic of spoken sound (Nelson 2008).

Because of its adaptability to almost any rhythmic process, I have chosen to use the solkattu system as the primary means for representing my transcriptions throughout the rest of this chapter. An advantage of using this system is that it is a phrase-centered approach to transcription rather than, as with the organization of standard Western notation, a meter-centered approach. Standard Western notation is useful for documenting equally-tempered melodic material in a rhythmic structure that easily lends itself to the structure of the overall meter. However, much of South Indian rhythmic improvisation is not phrased to strictly follow the design of the tāla, especially the more calculated sections of *kōrvais* and *mōrās*. Solkattu, as a sort of cypher notation, groups musical material according to the phrases of the rhythms. The resulting rhythmic structure can then be superimposed on any tāla in any subdivision. The adaptable nature of solkattu notation will become clearer as the reader works through the transcriptions throughout this chapter. In Figure 5.1, I have provided a table of the solkattu phrases to which I have been exposed during my training in South Indian rhythm. The following

chart is in no way an exhaustive list of all the syllables and combinations of syllables that are available for the Karnatic percussionist to speak. Figure 5.1 has been compiled based on the unwritten verbal system that my teachers have passed on to me and may be different from another percussionist’s terminology. It is organized according to the number of aksharas, meaning the number of pulses, in the rhythmic motives themselves and includes a pronunciation guide.

Figure 5.1: Basic Rhythmic Motives Using Solkattu Syllables				
Note: A dash (–) indicates one pulse of silence.				
one syllable: <i>ta, di, tom, nam</i>				
two syllables: <i>ta ka, ki ta, di mi, jo nu</i>				
three syllables: <i>ta ki ta</i>				
four syllables: <i>ta ka di mi, ta ka jo nu, ta ka di ku</i>				
five syllables: <i>ta ka ta ki ta, ta di ki ta tom, ta di gi na tom,</i>				
six syllables: <i>ta ki ta ta ki ta, ta ka di mi ta ka, ta di – gi na tom</i>				
seven syllables: <i>ta ki ta ta ka di mi, ta ka ta di gi na tom, ta – di – gi na tom</i>				
eight syllables: <i>ta ka di mi ta ka jo nu, ta ki ta ta di gi na tom, ta di – gi – na – tom</i>				
nine syllables: <i>ta ka di mi ta di gi na tom, ta – di – gi – na – tom</i>				
Pronunciation Guide:				
<i>ta</i> = “tah”	<i>ka</i> = “kuh”	<i>nu</i> = “nooh”	<i>ki</i> = “kee”	<i>tom</i> = “tom” (rhymes with “home”)
	<i>ta</i> = “tuh”	<i>ku</i> = “kooh”	<i>di</i> = “dee”	<i>nam</i> = “num” (sounds like “numb”)
<i>jo</i> = “joe”	<i>na</i> = “nuh”		<i>mi</i> = “mee”	
			<i>gi</i> = “gee” (with a hard ‘g’)	

Karnatic rhythmic artists are acutely aware of the number of aksharas in their improvisation.⁹⁴ Percussionists will often discuss their rhythmic phrases using mathematical and numerical terminology. For example, a Karnatic artist might identify one kōrvai as a forty-pulse

kōrvai; he might identify another as a 128-pulse kōrvai.⁹⁵ Knowing the number of pulses in a particular mōrā or kōrvai helps the artist to strategically insert the phrase into his improvisation according to the rules of tāla. No matter how many phrases a percussion artist strings together, however, the cross-rhythmical tension that results from improvisation must always resolve on either the *sama* (the first beat of the tāla) or the *idam* (the “place” in the tāla where the musical composition begins). At all times, the percussionist is aware of his place in the tāla and how many pulses must pass before the resolution will arrive. If the percussionist somehow miscalculates the number of pulses in his rhythmic phrases, it is actually more acceptable for him to abandon the mōrā or kōrvai altogether and begin a new one, rather than ending on the wrong beat of the tāla.

Finally, in addition to using language metaphors and mathematical terminology to discuss Karnatic rhythm, South Indian percussionists will commonly discuss their art in visual analogies. Karnatic percussionists often talk about rhythm in terms of “shape” metaphors and geometric references. For musicians trained in Western classical music, discussing the shape of a melody is fairly commonplace, but applying this same visual analogy to rhythm and meter may seem a bit strange to those who have not been trained in Indian classical music. In the Karnatic music tradition, however, when discussing the number of pulses in a rhythmic motive, for example, a South Indian percussionist will talk about how many “sides” the motive has. A three-pulse motive is *tisra*, or “three-sided;” a four-pulse motive is *catusra*, or “four-sided.”

Other visual metaphors compare the structure of Indian rhythmic phrases to familiar shapes and objects. Karnatic rhythmic phrases are categorized according to whether they expand, reduce, or apply a combination of these two processes to a particular rhythmic motive. The resulting “shape” of the phrase is known as *yati*. For example, a rhythmic process that

expands a particular rhythmic motive is said to be in *gopucca yati*, as *gopucca* roughly translates as “cow’s tail” and implies that the phrase, like the shape of a cow’s tail, is small at the beginning and wider at the end. On the other hand, a rhythmic process that reduces a particular rhythmic motive is said to be in *srotovaha yati*, as *srotovaha* translates as “river-mouth,” and implies that the phrase, like the shape of a river’s mouth, is wider at the beginning and smaller toward the end. Figure 5.2 depicts two South Indian rhythmic phrases using solkattu notation, one as an example of *gopucca yati*, and one as an example of *srotovaha yati*. While Figure 5.2 depicts only two *yati* designs, there are at least six different *yatis* which have been identified in Indian literature on classical Indian music, taken from Sanskrit sources such as the *Sangeetha Ratnakara* (ca. fifth century CE). The particular names of the *yatis* are not as important in the context of this thesis as is the awareness that rhythmic phrases are often discussed in spatial and geometric analogies by South Indian musicians.⁹⁶

Figure 5.2: Examples of <i>yati</i> Designs	
<p style="text-align: center;">Example of a phrase in <i>gopucca yati</i></p> <p style="text-align: center;"> <i>ta – di – gi na tom – –</i> <i>ta di – gi na tom – –</i> <i>ta di gi na tom – –</i> <i>di gi na tom – –</i> <i>gi na tom – –</i> <i>na tom – –</i> <i>tom – –</i> </p> <p>This phrase is based on a reduction of the seven-syllable motive “<i>ta – di – gi na tom</i>”, with each reduction spaced by two pulses of silence, “– –”.</p> <p>Total span of this phrase: 42 <i>aksharas</i></p>	<p style="text-align: center;">Example of a phrase in <i>srotovaha yati</i></p> <p style="text-align: center;"> <i>ṭa tom – –</i> <i>ta ki ṭa tom – –</i> <i>di ku ta ki ṭa tom – –</i> <i>ta ka di ku ta ki ṭa tom – –</i> <i>kṭtk* ta ka di ku ta ki</i> </p> <p>This phrase is based on an expansion of the one-syllable motive “<i>ṭa</i>”, with each expansion adding two pulses and being separated by three pulses voiced as “<i>tom – –</i>”. The last line omits the final “<i>ṭa tom – –</i>” for aesthetic reasons, so that if the entire phrase were repeated, it would sound as if the first line emerged seamlessly from the last line.</p> <p>Total span of this phrase: 36 <i>aksharas</i></p> <p>*Note: <i>kṭtk</i> is a double-time phrase which spans two pulses and is pronounced as “kee-tuh-tah-kuh”.</p>

Visual analogies pervade rhythmic discourse in South India to such an extent that many Western scholars choose to depict Karnatic rhythmic elements through notation which highlights the geometric shape of the phrases, similar to the type of notation I have used in Figure 5.2 (Brown 1965; Nelson 1991, 2008; Rowell 1992; Young 1998). The strong focus on the phrasing of the rhythm makes rendering the transcription along with the tāla a bit difficult. Some scholars have chosen to leave it up to the reader to figure out where the tāla fits with the transcription; other scholars use bar lines to indicate the beginning and ending of each cycle of tāla. Still others denote each beat of the tāla by marking the corresponding syllables with symbols, such as an asterisk (Young 1998). In the analysis that follows, I have chosen not to situate rhythmic phrases in tāla when I am trying to stress the spatial design of the musical process. There are certain instances in which additional markings would overcomplicate the point I am trying to make and distract from the geometric beauty of the phrase. However, in examples where the intellectual complexity of the rhythmic phrase cannot be understood unless the tāla is indicated, I have indicated which syllables line up with the beats of tāla.

The following analysis may imply that the tani āvartanam is only composed of a stream of mathematically-calculated rhythmic material. However, there are sections of the drum solo, which are referred to as *sarvalaghu*, in which the mathematical calculations, or *konnaku*, are kept at a minimum (Nelson 1991). During the *sarvalaghu* sections, the percussionist generally plays a repetitive rhythmic phrase that helps to bring attention back to the structure of the tāla. This assists the audience and other performers in reorienting themselves to the tāla platform upon which the percussionist is improvising. The *konnaku* sections (composed of *kōrvais* and *mōrās*), on the other hand, are the most cross-rhythmical portions of the percussion solo and can often sound as if they have been composed without any regard to the structure of the tāla. These

konnaku sections are the most intellectually-challenging sections of a tani āvartanam for the listener to deduce, while the sarvalaghu patterns serve as transitions between the more mathematically-designed konnaku sections. This chapter of the thesis is largely concerned with the rhythmic processes that are presented in the konnaku portions of the tani.

Transformation as Improvisation

Karnatic rhythmic improvisation, especially in the konnaku sections of a tani, recursively builds upon a percussionist's existing rhythmic vocabulary to form new rhythmic structures. The recursive nature of Karnatic rhythmic improvisation becomes evident when an artist's phrases are analyzed across longer durations of the tāla cycle(s). An awareness of the tāla can assist a listener in making sense of rhythmic processes that span longer durations of time, processes that might otherwise be perceived only as a sequence of rhythmic motives instead of a calculated whole. To a certain extent, all music when analyzed across longer durations of meter (hypermeter) can reveal structures that may not have otherwise been recognized. This is the basis of Schenkerian analysis, for example, which reduces large sections of music to reveal underlying scale-degree tonal centers that may be overlooked when analyzing the foreground of individual pitches and shorter motives. However, in the case of classical Indian music, the recognition of larger structural patterns is particularly crucial to understanding and fully appreciating the aesthetics of the musical material (Rowell 1992: 181). The analysis of South Indian rhythmic (and musical) processes requires an approach that can properly address the interaction between improvisational recursive rhythmic structures and the tāla platform. I prefer to use the visual metaphor of a special kind of geometric figure, known as a fractal, to discuss the processes in South Indian rhythmic improvisation.

The term “fractal” was coined by Benoit Mandelbrot (1983) during the 1970s to describe a theoretically-infinite, self-similar geometric pattern with parts that, when magnified to be the same size as the whole, look exactly like or very similar to the whole. Although fractal shapes appear everywhere in nature—ocean currents with waves within waves, wispy clouds with swirls within swirls, even the human vascular system with networks of veins within networks of arteries—they were for several centuries mistaken as anomalies because classical geometry lacked an appropriate vocabulary to discuss the mathematical functions which generate them (Madden 1999: 9).⁹⁷ As it turns out, once a mathematical vocabulary to discuss these fractal shapes was developed by Mandelbrot, the functions used to generate them were found to be quite simple (Diaz-Jerez 1999).⁹⁸ The main difference between basic algebraic equations and fractal functions is that the solution to a fractal equation is repeatedly reworked back into the function itself, creating a potentially infinite looping process known to the mathematical community as recursion or iteration. The cyclical nature of this looping process is a powerful metaphor for many of life’s processes and has more recently been used by philosophers and cognitive psychologists, for example, as an analogy to explain everything from our perception of time (Vrobel et al. 2008) to the neural network processes of our conscious brain and subconscious minds (Mac Cormac and Stamenov 1996).

Beginning in the last decade of the twentieth century, many musicologists and music theorists have found the cyclical nature and self-similarity in visually represented fractal equations to be interesting analogies for the recursive nature of music as well. Several music scholars have used fractals as an analogy in their music analyses. Harlan J. Brothers, for example, compares the nested structure of melodic phrases in Bach’s Cello Suite No. 3 to the well-known Cantor fractal set (2007: 93). Other scholars have chosen to point out that music

depicted fractals aurally long before the concept was discovered in mathematics and depicted visually on computer screens, pointing out that music geniuses such as J. S. Bach, Sibelius, Beethoven, and others were part of this “proto-fractal” group of Western classical music composers (Nash 1994). However, Western music scholars seem to be solely focused on revealing recursive and fractal-like structures in melody and harmony, and few (if any) scholars have applied this same approach to an in-depth analysis of rhythm. Charles Madden (1999) provides a brief mention of how the process might play out in rhythmic processes in his groundbreaking *Fractals in Music*, but the majority of the book exemplifies how one might conceptualize melodic and harmonic designs as complicated mathematical structures.

At some point during my study of South Indian rhythm (though the precise point is difficult to determine), the techniques of improvisation used by Karnatic percussionists during a tani āvartanam began to reveal themselves as recursive mathematical processes that could best be visualized as complex fractal structures. I had been fascinated by fractals when I first learned about them in my high school calculus class and, although I could not articulate it at the time, I had always felt that the infinite, recursive nature of fractal images was a powerful philosophical metaphor for the larger order of the cosmos, especially since, as the title to Michael Barnsley’s book suggests, *Fractals Are Everywhere* (1993). More than ten years later, I (recursively) cycled back to my initial state of fascination with these geometric figures when I realized that I was “speaking fractals” as I clapped tāla and practiced solkattu. The mathematical processes that I was using to apply the same solkattu phrase in new and creative ways in relation to the tāla were in many ways identical to the processes of transformation that the “self-similar” parts of a fractal undergo during iteration (Madden 1999: 19–22; Schroeder 1991: 81–9).

As previously mentioned, a fractal is by definition a geometric figure with parts that are similar to the whole. “Similar,” however, does not necessarily mean that the parts must look exactly like the whole. For example, the parts of a fractal can look like a rotated version of the whole, twisted clockwise ninety degrees. They may look like an upside-down version of the whole, having been reflected across a horizontal axis. The parts could even appear like a skewed version of the whole in which the image has been scaled unproportionately. The main requirement is that the parts maintain the same particular essence of “fractal-ness” (Mandelbrotness, Kochness, etc.) as the whole, but the parts may be transformed through processes (reflection, rotation, skewing, scaling) that can easily be reversed to reveal the original shape of the whole again.

My approach to the analysis of the *tani* conceives Karnatic rhythmic improvisation as a process by which the phrases a percussionist has memorized are “transformed” into many different possible variations. It is important to think of South Indian rhythmic phrases not as fixed compositions but as a range of options within a more or less defined structure. A percussionist does not necessarily play a particular rhythmic phrase the same way every time. In fact, there are several spontaneous mathematical methods that percussionists can use to easily redistribute or re-scale the internal structure of their phrases in the bouts of improvisation. These methods of transformation render a rhythmic phrase in a different order or shape, but in such a way that it is still comprised of the same basic rhythmic motives (perhaps in a different order) as well as the same or a mathematically proportionate number of *aksharas* (pulses) as the original phrase. In the following discussion, I have outlined two of the techniques, redistribution and re-scaling, which a Karnatic percussionist may use to transform a rhythmic idea.⁹⁹

1. Redistribution

The first and perhaps most commonly employed transformation technique, which I refer to as “redistribution,” reorganizes the internal structure of a *mōrā* (or other repetitive rhythmic phrase) so that that it is re-shaped into an expansion or a reduction phrase. The ability to quickly redistribute the pulses in a rhythmic motive or phrase provides the percussion artist with more options to insert into his improvisation. This redistribution procedure, as applied to two different standard *mōrā* formats, is outlined in the following figures. Figure 5.3 depicts the process as applied to a short *mōrā* that only spans fifteen aksharas, while Figure 5.4 shows how the process could be applied to a much longer *mōrā* phrase that spans forty-nine aksharas.

A *mōrā*, as previously explained, is a rhythmic motive or phrase which is repeated three times to signal the end of a section in Karnatic music.¹⁰⁰ As Nelson (1991) explains it, a *mōrā* is typically organized in the format $x y x y x$, where “ x ” is a rhythmic motive and “ y ” is the space between each repetition of the x -motive. While the x -motive must be at least one akshara in length, the y -space can be greater than or equal to zero. Therefore, one of the most basic possible *mōrās* would be something along the lines of “*ta ta ta*” or “*tom tom tom*”. Something quite this simple, however, does not make for a very interesting cross-rhythmical arrangement. Figure 5.3 shows a short *mōrā* phrase based on the repetition of a five-pulse motive and depicts two possible resulting phrases when the *mōrā* is transformed using the redistribution method. It is important to notice that the shape of the *mōrā* may have been transformed, but the number of pulses in each version of the phrase remains the same.

Figure 5.3: Example of Redistribution Applied to Short Mōrā Phrase

Standard Mōrā Format	Redistributed as Expansion Phrase	Redistributed as Reduction Phrase
<p style="text-align: center;"><i>ta ka ta ki ṭa</i> <i>ta ka ta ki ṭa</i> <i>ta ka ta ki ṭa</i></p>	<p style="text-align: center;"><i>ta ki ṭa</i> <i>ta ka ta ki ṭa</i> <i>ta ka ta ka ta ki ṭa</i></p>	<p style="text-align: center;"><i>ta ka ta ka ta ki ṭa</i> <i>ta ka ta ki ṭa</i> <i>ta ki ṭa</i></p>
<p>This mōrā is based on the repetition of a 5-pulse motive “<i>ta ka ta ki ṭa</i>”. $x\text{-motive} = 5$ aksharas $y\text{-space} = 0$</p>	<p>This transformation has redistributed the pulses in a standard 15-pulse mōrā format into an expansion phrase structured as $3 + 5 + 7$.</p>	<p>This transformation has redistributed the pulses in a standard 15-pulse mōrā format into a reduction phrase structured as $7 + 5 + 3$.</p>
<p>Total span of phrase: 15 aksharas</p>	<p>Total span of phrase: 15 aksharas</p>	<p>Total span of phrase: 15 aksharas</p>

While Figure 5.3 depicts a fairly simple example of redistribution, this transformation process can be applied to much longer and more complicated phrases. Figure 5.4 shows how the pulses in a much longer mōrā may be redistributed into an expansion or a reduction design. The x -motive in this example spans fifteen aksharas separated by a y -space of two aksharas. The pulses are redistributed using the same basic math skills that were used to redistribute the pulses in the simple mōrā (Figure 5.3), but this time the phrase spans a total of forty-nine aksharas.

Outlining this transformation process in such written detail may unintentionally imply that the mental calculations involved in redistribution are somewhat difficult and time-consuming. However, this sort of mathematical skill-set is as natural to a Karnatic percussion artist as it is for a speaker to reorder the words in a sentence. By the time the percussion artist is actually playing the redistributed phrase, his mind is already somewhere else, focusing on his next rhythmic process. The listener, however, must sustain his or her attention across the entire rhythmic phrase as it is being performed in order to decode the creative transformation process that the artist is presenting.

Figure 5.4: Example of Redistribution Applied to Longer Mōrā Phrase

Standard Mōrā Format	Redistributed as Expansion Phrase	Redistributed as Reduction Phrase
<p><i>ta di gi na tom</i> <i>ta di gi na tom</i> <i>ta di gi na tom</i></p> <p>--</p> <p><i>ta di gi na tom</i> <i>ta di gi na tom</i> <i>ta di gi na tom</i></p> <p>--</p> <p><i>ta di gi na tom</i> <i>ta di gi na tom</i> <i>ta di gi na tom</i></p>	<p><i>gi na tom</i> <i>gi na tom</i> <i>gi na tom</i></p> <p>--</p> <p><i>ta di gi na tom</i> <i>ta di gi na tom</i> <i>ta di gi na tom</i></p> <p>--</p> <p><i>ta – di – gi na tom</i> <i>ta – di – gi na tom</i> <i>ta – di – gi na tom</i></p>	<p><i>ta – di – gi na tom</i> <i>ta – di – gi na tom</i> <i>ta – di – gi na tom</i></p> <p>--</p> <p><i>ta di gi na tom</i> <i>ta di gi na tom</i> <i>ta di gi na tom</i></p> <p>--</p> <p><i>gi na tom</i> <i>gi na tom</i> <i>gi na tom</i></p>
<p>This mōrā is based on three repetitions of a 15-pulse phrase with each repetition separated by 2 pulses. <i>x</i>-motive = 15 aksharas <i>y</i>-space = 2</p> <p>Total span of phrase = 49 aksharas</p>	<p>This rendition of has redistributed the pulses in the previous format so that the mōrā is now an expanding phrase.</p> <p>Total span of phrase = 49 aksharas</p>	<p>This rendition of has redistributed the pulses in the previous format so that the mōrā is now a reduction phrase.</p> <p>Total span of phrase = 49 aksharas</p>

2. Re-scaling

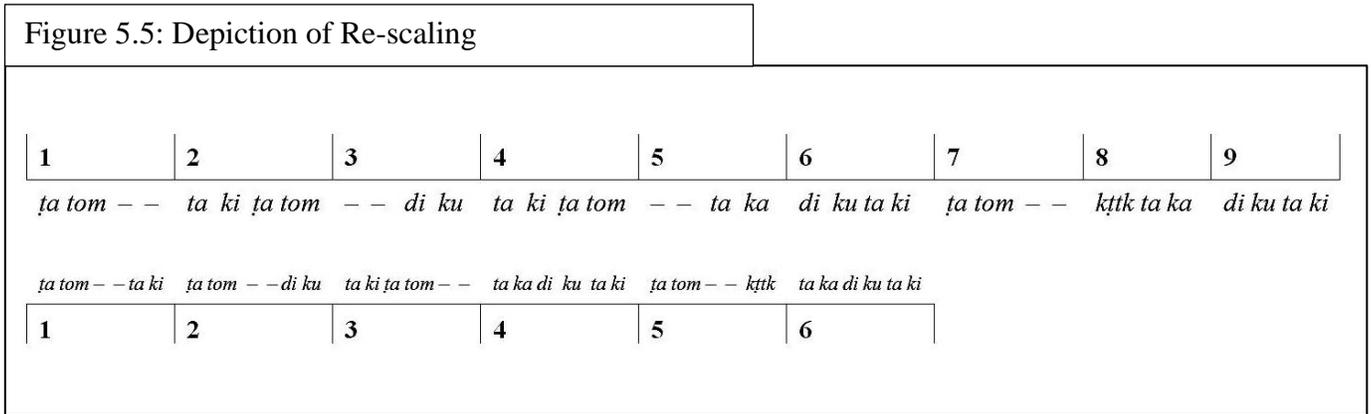
Another method of rhythmic transformation, which I refer to as “re-scaling,” maintains the order within a rhythmic motive or phrase, but re-scales the idea to span a longer or shorter duration of the tāla. An example of this concept of re-scaling is exhibited in nested Chinese boxes or Russian dolls, small collectible items with which most people are familiar (Schroeder 1991: 81). The largest box or doll opens up to reveal a smaller version of the same object; then, the smaller version opens up to reveal an even smaller version of the same item. This process typically continues for three to five instances, each time revealing a smaller version of the same

item inside the larger box or doll. The purpose of this description is to offer a concrete, visual analogy to a similar process in music. Karnatic percussionists do not necessarily nest re-scaled versions of the same rhythmic phrase within one another (sometimes this happens on its own due to the recursive properties of music itself), but they will often present re-scaled versions of the same rhythmic phrase one right after the other. The listener is then manipulated into feeling that the rhythmic phrase has somehow been inflated or compressed.

Re-scaling is a mathematical transformation process which is performed by changing the subdivision, or *gati*, of the *tāla* while at the same time maintaining the original proportions of the rhythmic motives within the phrase that is being re-scaled. Western music is most commonly divided in either a duple-based (eighth and sixteenth notes) or a triple-based (triplets or sixlets) subdivision. However, in Indian music—especially Karnatic music—it is not uncommon for percussionists (and some virtuosic melodic artists) to subdivide the claps of the *tāla* into quintuplets or septuplets during certain sections of improvisation. In order to fully comprehend the mathematical implications of dividing the *tāla* into different subdivisions, consider the following scenario in *Adi tāla*.¹⁰¹ If each beat of the *tāla* is divided into four sixteenth notes, since there are eight beats in one cycle of *Adi tāla*, then the cycle would consist of a total of thirty-two *aksharas* (pulses). However, if each beat of the *tāla* is divided into quintuplets, then a cycle of the same *tāla* would consist of forty *aksharas*.

The math may seem simple so far, but it becomes much more complicated when an actual rhythmic phrase is applied to the *tāla*. For example, the thirty-six-pulse expansion (*srotovaha yati*) phrase from Figure 5.2 would span nine beats (or one and one-eighth cycles) of *Adi tāla* subdivided into sixteenth notes. In *Adi tāla* subdivided into sixlets, however, the same phrase would span only six beats of the *tāla*, or three-fourths of a cycle. Although it is the same

rhythmic phrase with the same number of pulses, altering the subdivision (gati) of the tāla increases or decreases the number of beats of the tāla that it would take to complete the rhythmic phrase. Figure 5.5 depicts how the tāla would line up differently with the same rhythmic phrase depending on the gati. The phrase was depicted in Figure 5.2 in the shape of the srotovaha yati (expansion) design, but the phrase has been depicted in Figure 5.5 in a linear format so that it can be lined up against a ruler-type scale indicating the numerical span of the tāla beats. The upper version of the phrase is set against the tāla with a four-pulse subdivision, while the lower version depicts the same phrase, only this time set against the tāla with each beat divided into six pulses.



The aural impression that results from shifting the gati in a tāla is similar to the visual impression that results from zooming in and zooming out of a webpage or electronic document on a computer screen using the magnification-view tool. In a typical tani āvartanam, the Karnatic percussion artist will “play” with the gati several times throughout his solo. This type of manipulation is not only performed on long rhythmic phrases, such as kōrvais, but also on shorter rhythmic motives that might even be nested within the kōrvai. It is only through an awareness of the tāla that a listener would be able to fully appreciate the mathematical precision of the creative process behind the aural illusion. Without a cognitive scale (tāla) against which to compare the two experiences of the same rhythm, it may seem as if the percussionist merely

played the same rhythmic phrase back-to-back in two different tempos. Listeners who can clap the tāla throughout the performance know that it is not that the tempo has changed, but that the mathematical relationship between the tāla and the rhythmic phrase has changed.

I have outlined only two transformation processes that percussionists may use to build upon their bank of rhythmic phrases in increasingly more and more recursive manners. There are a number of other techniques a percussionist may employ, such as reordering or reorganizing the motives within a rhythmic phrase, displacing a phrase's relationship to the tāla by shifting it over a certain number of subdivisions, or even blending one or more processes together to create what might best be termed as a "combination transformation." Using these transformation processes, even the most limited rhythmic vocabulary becomes a potentially endless bank of improvisational material as long as the artist is able to present it in mathematically creative ways in relation to the tāla. For the scope of the following discussion, it is not necessary to outline the details of every possible transformation process available to the Karnatic percussionist. Rather, I wish to demonstrate that Karnatic rhythmic improvisation is based on the recursive transformation of a particular performer's bank of rhythmic knowledge at any given point in time and that the aesthetic considerations in a tani are focused on the creative application of these transformation processes.

Teachable Moments in the Tani

In many ways, the organization of the tani resembles the structure of a typical South Indian percussion lesson, especially toward the end of the percussion solo when the percussionists begin alternating shorter and shorter phrases with one another. This section of the solo, known as *koraippu*, could be called "trading cycles" as it is during the *koraippu* section that the artists will alternate phrases which span a full cycle of the tāla, then a half cycle of the tāla,

then a quarter cycle, then a eighth cycle, and so on, until they are exchanging very rapid, short rhythmic bits that span only one or two subdivisions of the tāla beat.¹⁰² Typically the mridangam artist begins these trade-offs, to which the other artists must respond. The percussionists are not required to repeat the previous artists' rhythmic phrases exactly as they were performed, but will instead playfully challenge one another by responding to the others' phrases in their own unique and creative way. Playing off of one another's improvisation in this way, the "game" that results is a type of "one-upmanship" to see who can manipulate the span of tāla in the most creative way.

The musical exchanges during the koraippu section are similar to the rote-learning exchanges that occur between a guru and shishya during a percussion lesson, except that "trading cycles" is not strictly imitative and the exchange occurs between two or more percussionists, usually all playing different instruments and playfully trying to out-do one another. The "leader" of the *tālavadya kaccēri* (the percussion ensemble in a Karnatic music concert) is typically the mridangam artist, for this instrument is considered to be the primary accompanying percussion instrument in South Indian classical music. In recent decades, the mridangam artist's authority-by-default has been challenged as more and more artists are becoming virtuosos on the so-called secondary percussion instruments, such as kanjira, ghaṭam, and morsing.¹⁰³ Nevertheless, even in concert settings in which the secondary percussionist is a renowned virtuoso, the mridangam player still typically plays his solo before the other artists and acts as the initiator of the alternation phrases, to which the other artists must respond.¹⁰⁴ Furthermore, the mridangam artist determines the Final Kōrvai, which all other percussionists onstage must decipher and perform along with the main percussionist as the grand finale to the drum solo after the excitement of the koraippu section.

The fact that a percussion solo resembles a typical South Indian percussion lesson should not be too surprising considering that, as Brown (1965) and Nelson (1991) have confirmed, a South Indian percussion lesson is basically a tani in its most paradigm form. A percussion solo is really no more than the linking together of a percussionist's rhythmic vocabulary, most of which is comprised of phrases in the kōrvai and mōrā formats that a percussionist learns during his lessons. The aesthetic focus of the percussionist's efforts during a tani, however, is what Nelson (1991: 78) refers to as the "treatment" of these rhythmic phrases—the creative processes used to apply an artist's existing rhythmic vocabulary in new ways—and not necessarily the rhythmic material itself. According to most of the percussionists with whom I interacted, the best way to learn new creative rhythmic processes to apply their rhythmic vocabulary is to observe and interact with other percussionists.

A crucial part of a South Indian percussionist's development as a classical musician, therefore, is the observation of more senior artists. As discussed in the third chapter, Nelson (2000) reveals that mridaṅgam artists learn the art of South Indian rhythm in a two-fold process: first, by strict imitation of the guru and, second, through observation and imitation of other senior artists. As one mridaṅgam artist told me, there is not a single playing style with which he can identify himself; rather, all South Indian percussion artists are a melting-pot of several different styles, an amalgamation of all the little tricks-of-the-trade that they have picked up from a variety of artists during their careers. Percussionists do not only pick up these tricks through the observation and imitation of other artists, but also through the direct musical interaction with various other performers during the tani āvartanam.

1. An Onstage Rhythmic Lesson

During my fieldwork I was introduced to a mridaṅgam artist who is known for re-scaling his kōrvais in many different gatis (subdivisions of the beat) one right after the other during his drum solos. His approach to improvisation uses this re-scaling technique so much that some percussionists claim that they can predict, based on the gatis the artist has already performed, what he is going to play next. Furthermore, he has perfected this skill to such an extent that he can supposedly play all of his rhythmic phrases in any subdivision of the tāla, a difficult feat for any percussionist and a skill that requires hours upon hours of individual practice and repetition. Being able to alternate between gatis so quickly gives this artist an advantage over other percussionists during the tani, and when he is in a particularly spirited mood onstage, this mridaṅgam vidwan incorporates this rescaling technique in a way that could baffle even the brightest of percussionists.

At one of the concerts I attended, this artist had devised a Final Kōrvai that incorporated this re-scaling technique in an unconventional way. The secondary percussionist, a much younger but still highly successful ghaṭam player, was not able to grasp the entire Final Kōrvai even on its third repetition (although he managed to perform in front of the audience as if he knew what was being played the whole time). Not being able to keep up with the Final Kōrvai could have potentially negated any performance capital that the secondary percussionist might have gained throughout the duration of the concert. In situations where the Final Korvai is particularly difficult for secondary artists to decipher, these percussionists will fake their way through the ending to the drum solo—continuing to perform even if what they are playing is wrong—before they will reveal to the audience that they have gotten “lost in the game.” At this particular concert, the ghaṭam player’s performance was so convincing that most audience

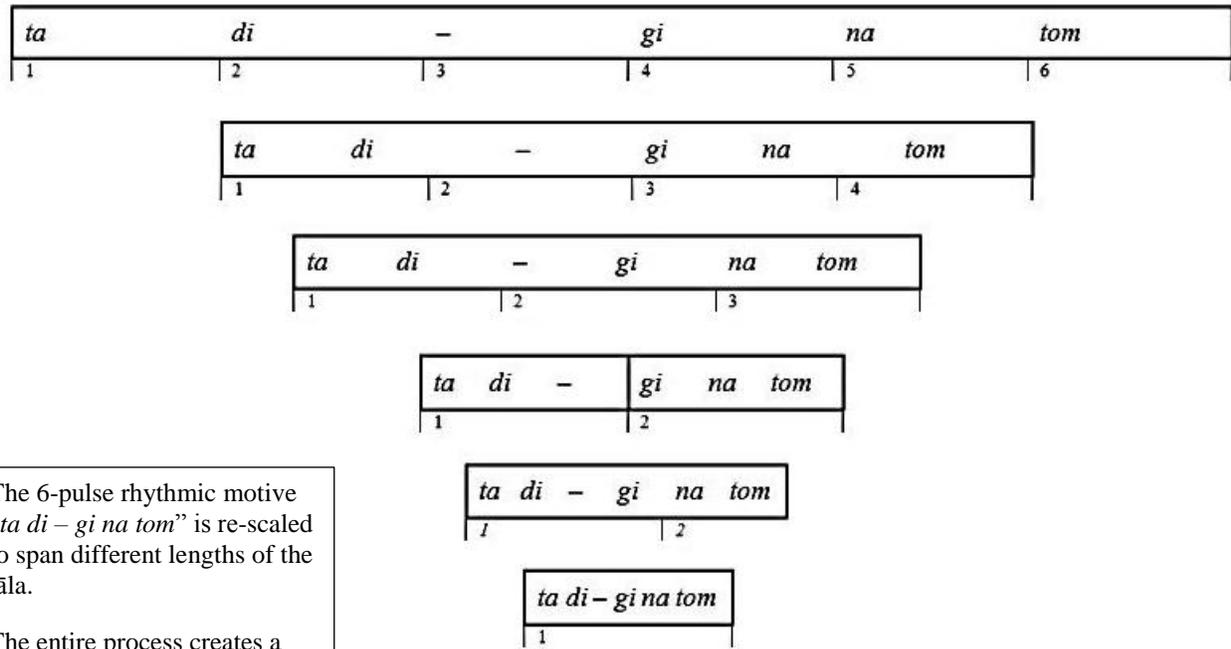
members probably did not notice he had made several mistakes during the *kōrvai*, as even I did not notice the extent of his misinterpretations until much later when I was micro-analyzing a video recording of the solo.

When I began to attempt a transcription of this particular *kōrvai*, I finally realized why the *ghaṭam* player had so much trouble with it. The *mridaṅgam* artist had applied an interesting transformation technique which reduced a six-pulse rhythmic motive in an unconventional way. Typically when an artist reduces a rhythmic motive into a *gopucca yati* design (Figure 5.2), the reduction is accomplished by removing a section of the motive each time it is repeated. For example, in Figure 5.2, the seven-pulse motive is reduced by removing one pulse each time. In this *korvai*, however, the *gopucca yati* was created by re-scaling a six-pulse rhythmic motive (*ta di – gi na tom*) several times, so that each time the motive was played, it spanned a slightly shorter duration of the *tāla*. The following Figure 5.6 depicts this rhythmic transformation process, which is atypical because it utilizes the re-scaling technique on the motives within a rhythmic phrase, rather than on the entire rhythmic phrase itself. The length of the *tāla* that each repetition of the motive spans is indicated with a ruler-like “*tāla* scale.”

Figure 5.6 does not include the necessary subdivisions that would be required to perform this phrase accurately with the *tāla*.¹⁰⁵ The transcription also does not include the second half of the *kōrvai* because it consisted of a fairly standard *mōrā* format with which any percussionist would be familiar. It depicts only the first half of the *kōrvai* because it was this rhythmic phrase which caused the secondary percussionist, a talented performer more than capable of keeping up with the majority of *mridaṅgam* artists, to falter several times during the performance. In this phrase, a rhythmic motive with six *aksharas*—one of the most fundamental rhythmic motives that any percussionist learns when they first begin studying Karnatic music—is transformed

through an unconventional application of the re-scaling technique. It was the way in which the mridaᅅgam artist manipulated the rhythmic motive that was difficult for the ghaᅇam player to follow and not the rhythmic motive itself.

Figure 5.6: Reduction Phrase Created By Re-Scaling a Rhythmic Motive



The 6-pulse rhythmic motive “*ta di – gi na tom*” is re-scaled to span different lengths of the tāla.

The entire process creates a reduction phrase.

Why would the mridaᅅgam artist deliberately choose such a difficult Final Kōrvai and cause the secondary artist to fumble in the grand finale to the percussion solo? Some may speculate that the senior artist was reasserting his authority and reinforcing his status as the primary percussion performer onstage. For the most part, the mridaᅅgam artist’s authority as the primary percussionist is implied by the structure of the tani itself; the mridaᅅgam player begins the percussion solo, leads the alternating phrases toward the end, and chooses the Final Korvai. However, as mentioned earlier, many artists who play so-called secondary classical percussion instruments (ghaᅇam and kanjira in particular) have gained some credibility in the performance

circuit and are beginning to push back against the mridaᅇgam's role as the primary percussion instrument in Karnatic music concerts. For example, the secondary artist may try to steal the spotlight during the tani by playing a particularly virtuosic solo or (even more suggestive) applying some of the mridaᅇgam artist's techniques in new and more creative ways. As much as secondary percussionists are beginning to emerge as virtuosic performers in classical music society, however, this push-back has not significantly altered the format of Karnatic music concerts, and the mridaᅇgam artist still reigns by default as the more authoritative percussion accompanist.

With that said, there were a number of exchanges between the percussionists throughout this particular concert which suggested the senior artist felt as if the young ghaᅇam player needed to be reminded of his place as a secondary percussionist onstage. This tension was expressed through gestures that were subtle enough to not disturb the concert performance, but just obvious enough for perceptive audience members (especially other South Indian percussionists or music students) to notice. For example, when the time for the tani āvartanam arrived, the senior percussionist played two full-length mridaᅇgam solos before allowing the ghaᅇam player to begin his solo. Typically when there are multiple percussionists onstage, the mridaᅇgam artist begins the tani, but does not play an unusually lengthy solo before allowing the secondary percussionist an opportunity to play. At another point during the tani, the senior percussionist motioned for the ghaᅇam player to clap tāla during his mridaᅇgam solo even though the melodic artists were already clapping tāla for him. Typically percussionists of equal stature do not clap tāla for one another during the tani but leave this task to a disciple or a melodic artist. In the context of classical performance politics, these small gestures, which probably went unnoticed by the

majority of audience members, reasserted the mridaᅇgam artist's role as the more authoritative of the two instrumentalists.

While there was indeed some tension between the percussionists brought on by the fact that the ghaᅇam player is just as much a virtuosic performer as the mridaᅇgam artist, the senior percussionist was also using the tani as an opportunity to perform his role as an authoritative figure in classical music society by performing his role as a guru in the gurukula system. At many points during the percussion solo, it felt as if the mridaᅇgam artist were treating the tani as an onstage percussion lesson in front of the Karnatic music community at large. I do not mean that the mridaᅇgam artist interrupted the concert by stopping to speak with the ghaᅇam player or critique the young artist's techniques. Instead, this onstage "lesson" was much more subtle, using the tani itself as a teachable moment in the context of performance. For example, each time the secondary percussionist began his solos, the senior percussionist would interject within the initial few phrases of the ghaᅇam player's improvisation and encourage the younger artist to develop a specific rhythmic motive. At other moments, the mridaᅇgam artist would interject into the ghaᅇam player's solo and challenge him to perform his rhythmic phrases in a different gati. Using the tani as a platform to assume his role as a guru in front of the classical music community at large, the mridaᅇgam artist's interjections served as a way to enact the process of the transmission during the concert.

However, this sort of interjection into another percussionist's solo is highly atypical, and it would even be considered rude in most circumstances. Interested in the secondary percussionist's impression of the mridaᅇgam artist's displays of authority onstage, I spoke with the ghaᅇam player after the concert to gather his thoughts about this performance experience. His responses were perhaps influenced by the politics of his younger, and thus less experienced,

position in the classical performance circuit, but he reported that he had interpreted the senior artist's actions as "encouragement" (or, perhaps more accurately, motivation) rather than "competition." His impression, therefore, was not that the mridaᅇgam artist was necessarily trying to reassert his status in the Karnatic music community; after all, his status was already implied as this senior artist is one of the most highly respected mridaᅇgam performers in South India today. Instead, the ghaᅇam player felt as if this great vidwan was motivating him to become a better performer. The interjections were perhaps not challenges as much as they were unspoken stylistic suggestions from the senior artist, transmitted to the ghaᅇam player through the performance of music itself.

Comparing the performance the Final Korvai to the social processes at work during the tani as a whole, the difficult nature of the phrase could be interpreted as another way the mridaᅇgam artist reasserted his status as a classical music authority figure and as a guru in the Karnatic music community. However, as the ghaᅇam player reminded me, being challenged onstage is a natural part of a Karnatic percussionist's development as a musician. These artists gain much of their rhythmic knowledge from observation, imitation, and interaction with other percussionists. Perhaps the ghaᅇam player's mistakes were not the result of a deliberate attempt to reassert the mridaᅇgam artist's status as much as they were the manifestation of the process of learning an unconventional rhythmic technique from the other artist in that moment onstage. This particular performance of the Final Korvai could therefore be interpreted as a momentary crystallization of the transmission process in contemporary South Indian society, manifested in what Goffman (1974) might call a "strip" of action.

CHAPTER VI

THE FRACTAL FRAME

The advantage of blending fractal geometry within an approach to the study of music is that fractal imagery translates abstract concepts into a concrete visualization. In my analysis of the tani āvartanam, fractal geometry served as an analogy to highlight improvisation as a process rather than a presentation of rhythmic phrases. Karnatic percussionists build new music-structures by recursively transforming their existing body of rhythmic knowledge. The image of a fractal is a particularly useful way to visualize this approach to improvisation because it represents a potentially infinite process that builds upon itself with itself and that has been momentarily rendered as a geometric structure. Along a similar line of thought, Karnatic improvisation as it is performed during a kaccēri represents the place in which this ever-emerging musical process has been momentarily actualized as musical form.

As John Blacking (1969) suggested nearly half a century ago, the analysis of music can lend insight into larger social and cultural processes as music “depicts the reality of life through the medium of sound” (16). Many scholars, for example, have argued that music depicts the temporal order of the universe through audible units of time. I extend this discourse by suggesting that music can offer inspiration for new analytical models toward the study of culture as well. As Ingrid Monson writes: “The musical image, it seems, has much to offer in reorganizing our thinking [about cultural analysis] in nonlinear and multiple directions (1996: 215).” The fractal-like structure embedded within Karnatic rhythmic improvisation can be viewed as a model for a process-oriented approach to the study of culture. In this concluding chapter to the thesis, I discuss how the fractal is a fruitful analogy toward the analysis of social

and cultural processes. An in-depth application of the fractal metaphor in performance studies is outside the scope of this thesis; however, I would like to speculate how my understanding of “transformations” in fractal geometry can serve as a useful analogy for the relocation of the gurukula system within many other social and musical processes in South Indian classical music society.

The Fractal Metaphor in Cultural Analyses

Using the fractal image as a metaphor for social and cultural processes is not a completely new idea. Many anthropologists have used fractal imagery in their analyses, and some have highlighted attributes of fractal geometry that I may not have emphasized during my analysis of the improvisational processes in a *tani*. Scholars interested in globalization studies have used the fractal as a metaphor for social and cultural phenomena on the macro-level. Arjun Appadurai (1996) suggests that culture, as an entity with global influences and repercussions, must be seen as a complex, overlapping, disjunctive process. He argues that scholars would benefit from conceptualizing cultural systems as fractal-like, process-oriented structures rather than localized, boundary-oriented forms (46). Similarly, Wai Chee Dimock (2001, 2006) advocates for the study of culture across what she calls “deep time.” Pointing out that cultural processes unfold across different durations of time, she suggests that “different investigative contexts might need different time frames, with no single one serving as an all-purpose metric” (2001: 758).¹⁰⁶ Both of these scholars use the analogy of the fractal image to argue that the socio-cultural analyses should be situated across many different temporal and spatial levels.

Perhaps due to their theoretical orientations in globalization studies, both scholars focus on cultural processes in macro-level contexts and do not delve as deeply within a more localized, micro-level. On the one hand, their efforts to view social and cultural phenomena in the context

of larger networks is beneficial toward an understanding of an ever-emerging global society. On the other hand, however, applying a fractal analogy to the study of culture does not necessitate that localized processes receive less scholarly consideration. In fractal geometry, there is no hierarchy or distinction between the so-called “micro” and “macro” as all images are simply different iterations of the same process. Scholars should negotiate in both directions during their analyses: zooming into the micro-processes of a cultural occurrence as well as zooming out of the occurrence and situating it within larger networks of relationships.

Other scholars have applied the image of the fractal as a metaphor for a hermeneutical approach to the study of culture. Roy Wagner (1991), for example, criticizes the notions of “individual” and “society,” arguing that these concepts are arbitrary analytical perspectives imposed upon the study of culture by scholars themselves. An individual does not stand in relation to an aggregate of society nor does society stand as an aggregate in relation to an individual as much as they are one in the same—neither part nor sum, but both at once, existing only as an entity of relationships. The fractal is a useful metaphor for Wagner because it renders what seem like binary conceptualizations of cultural processes—part vs. whole, unit vs. aggregate, singular vs. plural—simultaneously within the same image.

An aspect to fractal geometry that I did not address in this thesis, due to my focus on the processes of transformation, is the concept of fractal dimension or of fractal boundary. Fractals are understood by mathematicians to exist between standard Euclidean dimensions, meaning that they are not standard zero-, one-, two-, or three-dimensional objects. The well-known fractal called the Koch curve, for example, has a fractal dimension of 1.26, meaning that the image is more than a line (one-dimensional object with only length) but not quite a surface (two-dimensional object with length and width). Likewise, the fractal generally referred to as the

Cantor Set (or Cantor Comb) has a dimensionality of 0.63, meaning that it is more than a point (zero-dimensional object) but not quite a line (one-dimensional object). The mathematical calculations used to identify a fractal's dimensionality are not as relevant to this discussion as is the realization that fractals exist in between the standard dimensional values of zero, one, two, or three. Thus, the boundaries between what we perceive as points, lines, surfaces, or volumes are blurred in a fractal image, oscillating and interacting with one another.

This idea of existing in between the clearly demarcated boundaries of dimensionality has a number of profound implications that can be translated into an approach toward the study of culture. Appadurai (1996) uses the fractal dimension as a metaphor to discuss how the units of cultural analysis possess no clearly defined Euclidean boundaries or structures. In other words, the objects of our cultural analyses are not clearly circumscribed units, bounded within particular locations, times, or societies, but are as ambiguous as the dimensionality of a fractal image. Taking this argument a step farther, the boundaries do not actually exist but have been imposed upon the culture by its agents (Bourdieu 1989). Earlier in this thesis I discussed that the notions of classical and nonclassical are not intrinsic to South Indian society, but have been imposed on the Indian music field as a way to differentiate between different socio-musical groups and practices. It is through these differentiations, what Goffman (1974) might call "frameworks," that social and cultural processes reveal themselves for scholarly analysis, but it is through this analogy of the fractal dimension that one is reminded these distinctions are highly malleable, the result of an ongoing dialectic process between interpretation and actualization.¹⁰⁷

The Fractal Analogy Applied to Performance

Performance (as in Schechner's [1993] "broad spectrum of performance") has served as the primary platform for my inquiry into the social, cultural, and musical processes in Karnatic

music society.¹⁰⁸ Much of my analytical approach has applied the concepts of “frame” and “framework” as outlined by Goffman (1974).¹⁰⁹ A framework can be understood as a perspective or an orientation from which to comprehend experience; activities, gestures, behaviors, and other performances are interpreted by schematically organizing them within frameworks. As Goffman words it, frameworks provide “a lore of understanding...[that] allows its user to locate, perceive, identify, and label a seemingly infinite number of concrete occurrences” (1974: 21). They provide the background understanding to translate what might otherwise be a meaningless “strip” of activity into a meaningful performance. Different frameworks are employed to make sense of different performances, and performances can often be understood within more than one framework.

To clarify my usage of the term, I understand a framework to be the organizational premise used to interpret an occurrence (or performance). The framework includes both the larger events and contexts within which the occurrence is situated as well as the inner-workings, or the micro-level performances, that are embedded internally within the performance. A frame, on the other hand, is only one level of this nested (or perhaps more accurately, fractal-like) structure. Translating these concepts into a visual analogy, the framework could be thought of as an entire fractal function, whereas a frame could be thought of as one iterated image of the fractal. This notion of framework may initially seem as a fabricated understanding of culture that has been imposed upon a performance, but, as Goffman (1974: 247) explains, it is not an arbitrary tool applied to interpret any number of activities. The structure of a framework is indicated or implied by the performance itself as much as it is imposed by the agent given his or her understanding of the social and cultural processes at work. Frameworks are the arrival point of this dialectical process, a blurred fractal boundary so to speak, between interpretation and the

occurrence itself. Like the image of a fractal function, frameworks should not be thought of as clearly-defined Euclidean forms (Appadurai 1996), but as oscillating shapes existing between dimensions, constantly under negotiation by the agent.

If this analytical approach sounds necessarily paradoxical, it is because the interpretation of performance is itself a paradox. Performances are interpreted through their relationship to other social and cultural processes, but these same performances can also serve as frames of reference for other occurrences. Taking an example from my analysis of Karnatic music society, the gurukula system can be understood within the framework of “classicalness.” Looking in one direction, the performance of transmission from guru to shishya is situated within a larger nationalist discourse concerned with maintaining ties with an ancient Indian past. Looking in the other direction, a number of social interactions are embedded within the processes of the gurukula system, resonating the values of the classical music community and defining the roles of guru and shishya. At the same time, however, the gurukula system can be translated or “transformed” across frameworks, so to speak, to serve as a frame of reference for other performative activities. In my analysis of the *tani āvartanam*, for example, I revealed that the musical interactions between the two percussionists onstage in many ways resembled the interaction between a guru and shishya even though the performers were not themselves involved in a mutual gurukula relationship. Among many other social processes at work, the gurukula system served as a model, or frame, from which to understand the musical interactions in the *tani āvartanam*.

In the same way that I have applied aspects of fractal geometry to help explain Karnatic improvisation as the transformation of an existing body of rhythmic knowledge, this concept of “transformation” can be used as an analogy for the reinscription of the gurukula system across

many different spheres of Karnatic music society. Although I am using the image of a fractal to communicate my understanding of the reapplication and relocation of the gurukula system in Karnatic music society, this approach is just as much inspired by my understanding of transformational processes as they revealed themselves to me in audible musical form through the rhythmic techniques of the tani. The fractal serves a useful analogy for visualization purposes, but music itself can render abstract ideas in an aural format that can perhaps not always be translated into a visual form. I believe it is possible to move away from spatial representations and translate audible experience directly into an approach toward the analysis of culture.¹¹⁰ Perhaps this latter option is more along the lines of the type of inspiration that Monson (1996) had in mind when suggesting we extract models for the analysis of culture from music itself. Nevertheless, in this discussion I maintain using the fractal analogy as a bridge, or as a “fractal frame,” between my understanding of the structure of Karnatic music and my conceptualization of the structure of the gurukula system in Karnatic music society.

As Schechner (2006: 233) might put it, the performance of the gurukula process is a “twice-behaved behavior” that has been transformed to appear in many other social and musical processes in South Indian life. Across spatial boundaries, the gurukula process has been relocated from the guru’s home to appear in the public realm, in the interactions between musicians and audience members during the kaccēri. Across temporal boundaries, it has been reformatted from the process of living and serving the guru for several years to be a modified version of classical music instruction that is compatible with contemporary lifestyles. Across social boundaries, it has been transformed from a way of transmitting music knowledge to also serve as a means of perpetuating a classicist-nationalist discourse. The only difference between traditional gurukulavasam (living with the guru) and its appearances within other processes of

South Indian society is the constitution of the audience and performers—not the form of the frame, which still relies on the image of an authoritative figure transmitting a body of knowledge to another, typically less authoritative, character within the framework of classicalness in Karnatic music society.

GLOSSARY

akshara: “syllable”; a component of tāla; refers to an individual pulse or beat

anupallavi: “continuation of the sprouting”; the second section of a kriti

bhakti: devotion

charanam: “foot”; the third, or last, section of a kriti

catusra: “four-sided”; refers to the family of four-pulse rhythms

fractal: a theoretically-infinite, self-similar geometric pattern with parts that, when magnified to be the same size as the whole, look exactly like or very similar to the whole

gati: subdivision; a component of tāla; refers to the number of pulses in each beat of the tāla

gharānā: refers to music lineages in North India

ghaṭam: a South Indian percussion instrument that looks like a clay pot that is held in the performer’s lap; typically considered a secondary percussion instrument in classical concert performance

gopucca yati: “cow’s tail”; refers to a rhythmic reduction phrase

guru: lit. “dispeller of ignorance”; teacher, preceptor

gurukula: “guru-family”

gurukulavasam: traditional system of instruction from guru to disciple in which the disciple lives with the guru

kaccēri: Karnatic music concert

kanakku: “calculations”; the calculated, cross-rhythmical sections of a Karnatic percussion solo

kanjira: a small South Indian frame drum with a lizard-skin head; typically considered a secondary percussion instrument in classical concert performances

konnakkol: solkattu performed in a concert setting

koraippu: “reduction”; the section of the tani āvartanam in which drummers trade progressively shorter and shorter groups of phrases

kōrvai: “stringing together of ornamental beads”; a rhythmic design composed of two sections, the second section being a mōrā

kriti: a three part compositional format that is the main genre in Karnatic music repertoire

mōrā: a concluding rhythmic figure that is repeated three times; according to Nelson (1991), it is structured in an “ $x y x y x$ ” format, where x is the rhythmic motive repeated three times and y is the space between each repetition

morsing: Jew’s harp; an idiophone used to accompany Karnatic music; considered a secondary percussion instrument in classical concert settings, used less frequently than kanjira or ghaṭam

mridaṅgam: a barrel-shaped, double-headed drum that functions as the primary percussion instrument in Karnatic music

nāgaswaram: a long oboe performed in temple ensembles

pallavi: “spouting”; the first section of a kriti

rasika: sensitive, informed listener

sabha: membership-based cultural clubs in South India

sarvalaghu: rhythmic patterns during the Karnatic percussion solo that help to reorient the listener to the tāla

shishya: student or disciple

solkattu: the system of spoken Karnatic rhythmic syllables that is performed while clapping tāla; similar to the system of Indian solfege used for the rāga

srotovaha yati: “river’s mouth”; refers to a rhythmic expansion phrase

swara kalpana: a form of melodic improvisation that uses the Indian solfege syllables of the rāga (*sa, ri, ga, ma, pa, dha, ni*)

tablā: the pair of drums used to accompany Hindustani music

tālavadya kaccēri: the group of percussion instruments used to accompany the melodic artists in a Karnatic music concert

tavil: a barrel-shaped, double-headed drum that accompanies the nāgaswaram in temple processions; it is played with a stick in the left hand and hard thimbles on the fingers of the right hand; sometimes it is used as a secondary percussion instrument in classical concert performances

tani āvartanam: the percussion solo in a Karnatic music concert

tisra: “three-sided”; refers to the family of three-pulse rhythms

vidwan: artist; a title that is typically reserved for professional musicians who are known to have exceptional music technique and performance skills

yati: design; refers to the shape of a musical phrase

NOTES

¹ See Allen (1998); Peterson and Soneji (2008); Subramanian (2006, 2008); Weidman (2006).

² Furthermore, as Allen (1997; 1998), Weidman (2006), and others have revealed, the delineation between classical and nonclassical also conveniently segregated the music community based on caste affiliation, as the music used to accompany ritual and theatre traditions was typically performed by members of lower caste.

³ Modeled on the system of transmission used to preserve the ancient Vedic scriptures, a system of transmission from guru to shishya is speculated to have been used in the South Indian music field for several centuries, if not millennia. One of the first documented attempts to develop a teaching methodology that would facilitate transmission of the music dates back to Purandaradasa (1484–1564), considered the “grandfather” of Karnatic music, who fixed a set of musical exercises and graduated compositions now considered the basic music training for musicians (Subramanian 2006: 34). More definitive documentation of the gurukula system as we know it today emerges in the eighteenth century with the Trinity of Tanjore composers (Tyagaraja, Muttswami Dikshitar, and Syama Sastri), who transmitted their musical compositions directly to their own disciples.

⁴ By “indexical” I am employing the Piercean notion of “index,” which, according to Thomas Turino (2008: 8), is a way that people connect a sign with what it stands for by experiencing the sign and the object together. An example of an index of fire is smoke; an index of a storm is lightning. I am saying that the Karnatic music concert is itself an index of the classical in South Indian society.

⁵ Schechner (1993: 5) writes about his experience of converting to Hinduism in Kerala and taking the Hindu name of Jayaganesh: “As I, a 58-year-old man, write these words, I wonder at the secret spectacle of my Keralan incarnation: a New York man of 42, dressed Indian-style, fretting as only an atheist Jew can over his hypocritical conversion, moving through a crowded temple courtyard—what was this Jayaganesh doing if not performing himself performing his Hinduism?”

⁶ As Sally Moore (1978: 52–3) suggests, culture is constantly being reworked through regularization processes and processes of situational adjustment.

⁷ In addition to drawing on performance theory as proposed by Richard Schechner ([1977] 2003, 1993, 2002), I also draw on the writings by Erving Goffman ([1959] 1973, 1974) and Victor Turner (1979, 1986).

⁸ As Turner (1979: 60-93) argues, culture must be studied as a process. John Blacking also advocates that culture should be studied as a process and suggests that music provides a particularly useful model for the study of process (1969: 16).

⁹ The mridangam is a barrel-shaped, double-headed drum that functions as the primary percussion instrument in Karnatic music concerts. Its role is discussed in much more detail in the fifth chapter.

¹⁰ Students often must request several times to study with a guru, who will delay or refuse musical instruction many times before finally agreeing to a meeting. One of my colleagues revealed that it had taken nearly two weeks of requests, attending concerts, and visiting the guru's home before he was finally accepted as student.

¹¹ Sometimes there was another student present during my lessons to clap tāla and recite the rhythmic phrases with me, but my guru's wife was always present when there was no one else in the room with me and my guru.

¹² Some notable examples include: Latha Ramachar, who is based out of Bangalore and is one of the few (if not the only) female kanjira performing artists; Sukanya Ramgopal, who is also based out of Bangalore and is one of India's topmost female ghaṭam artists; and the young Rajna Swaminathan, who is based out of Maryland and is one of the world's few female mridangam artists.

¹³ Regardless of whether he is an accompaniment artist or the lead melodic voice, a South Indian musician must be able to immediately decode the musical material that the other musicians improvise on stage so that he may respond with an appropriate musical phrase.

¹⁴ As explained in further detail in the fourth chapter, clapping tāla can be thought of as the external performance of an internal participatory listening process, indicating whether or not the listener is able to comprehend the rhythmic improvisation that is being performed by the artist onstage.

¹⁵ For example, see Allen (1998); Peterson and Soneji (2008); Subramanian (2000, 2006); Weidman (2006).

¹⁶ The population of the European colonists in the Fort and its European suburb (White Town), which was documented as less than two hundred in 1750, had swelled to over two thousand European persons by the end of the eighteenth century (Neild 1979: 223).

¹⁷ Many nineteenth century travelers, such as Viscount Valentia (1809) and James Wathen (1814), commented on the "soiree" culture in early nineteenth century Madras in which European and Indian elites met regularly and publicly together (cited in Washbrook 2004: 485–6).

¹⁸ Chatterjee (1993) suggests that social institutions and practices under colonial rule are divided into two domains: (1) the material, or "outer," domain of economy, science, politics, and state affairs, where the West had already proven its superiority, and (2) the spiritual, or "inner," domain consisting of the markers of cultural identity, such as religion, the arts, and music.

¹⁹ Under the heading of “cultural performances,” Singer (1972: 70–1) includes activities such as plays, concerts, and lectures, which might usually in the West be referred to as performances, as well as prayers, ritual readings, rite and ceremonies, and festivals, which typically might be categorized as religious in the West. Singer finds that his Indian colleagues “thought of their culture as encapsulated in these discrete performances, which they could exhibit to visitors and to themselves” (71).

²⁰ Ultimately, Singer (1972: 67–80) determines that Sanskritic Hinduism could be the closest thing to an all India “Great” tradition because it represents a sort of common Indian ethos and is culturally continuous with the “Little” traditions across various regions and castes. While Singer is perhaps the best known for his use of the terminology “Great” and “Little” in reference to the traditions of India, he was applying terminology that had previously been coined by Robert Redfield and himself (1954).

²¹ Musicologists date the emergence of Karnatic music as a distinct style independent of North Indian music by the late 13th and 14th centuries (see Pandit V.N. Bhatkhande, Pandit V. N. Ratanjankar and Dr. V. Raghavan, as cited in Subramanian 1999: 134).

²² “Karnataka” was the name given to the area in South India that had been ruled by the Vijayanagar Empire between the fourteenth and sixteenth centuries.

²³ Another major historical moment is the emergence of sixteenth century composer Purandaradasa, who is now known as the grandfather of Karnatic music and was among the first to develop a teaching methodology with vocal exercises and graduated compositions to facilitate transmission between generations.

²⁴ Also spelled “Tanjuvur,” Tanjore is a district in what is now the state of Tamil Nadu.

²⁵ The composers of the Musical Trinity from Tanjore are: Tyagaraja (1767–1847), Syama Sastri (1762–1827), and Muttasvami Dikshitar (1776–1835).

²⁶ Bhaktande’s perception represents the opinions of conservative Hindu “music revivalists” in early twentieth-century North India, who specifically targeted the communities of hereditary Muslim musicians and dancers during nationalist movements early in the century (Qureshi 1999; Allen 1997).

²⁷ Although the city is now known as “Chennai,” “Madras” is used in certain areas of historical discussion as this was the name given to the city under British colonial rule. “Madras” is a short form of the indigenous “Madrassetnam,” which was the site that the British East Indies company had chosen for settlement in the seventeenth century.

²⁸ For more extensive writings on this phenomenon, see Allen (1997, 1998); Peterson and Soneji (2008); Subramanian (1999, 2006, 2008); Terada (2000); Weidman (2006).

²⁹ Interestingly, the Tamil word for temple, *kovil*, literally translates as “king’s abode,” revealing the intimate link between regional temples and palaces (Menon 2005: 40).

³⁰ Dēvadāsi translates as female servant (*dāsi*) of God (*Dēva*). Dēvadāsis were female Hindu ritual practitioners who underwent training in dance and music as part of religious-artistic service in the Hindu temples to which they were wed. They were considered ever-auspicious women because being married to God meant they would never be widows (Allen 1997: 65).

³¹ Rukmini Devi led the movement to reform South India's dance tradition for presentation on the concert stage, particularly by downplaying the provocative, passionate movements that were meant as a metaphor of the dancer's devotion to God. The dance style was renamed as *bharatnatyam* (meaning the style of dance as laid down by Bharata) to distance itself from its association with the dēvadāsi traditions. Interestingly, classical music and dance are still typically performed separately although both art forms underwent an extreme reformation process. For more detailed analysis of the reformation movements that affected the South Indian classical dance style, see Allen (1997); Chatterjea (1996); Menon (1999: 40–55); O'Shea (1998); and Singer (1972: 170–85).

³² Compositions typically performed in applied setting include the *padam*, *javalli*, and *bhajan* genres (Allen 1998: 27–9).

³³ A *kriti* is a South Indian compositional format composed of three sections: *pallavi* (meaning “sprouting”), *anupallavi* (meaning “continuation of the sprouting”), and *charanam* (literally, “feet”). The word *kriti* was taken from the Indo-Aryan root meaning “to create.” For a further explanation of the *kriti* format, see Allen and Viswanathan (2004).

³⁴ Some scholars argue that the representation of Karnatic music as classical also segregated artists according to gender as a result of the derogatory view that urban elites had embraced toward the *dēvadāsi* tradition (Allen 1997; Subramanian 1999; Weidman 2006).

³⁵ Interestingly, the music academy in Chennai is still known as the Madras Music Academy, as the city was known when the institution was founded.

³⁶ For a more detailed analysis of Karnatic music's development from the Tanjore court to the Madras Academy, see Subramanian (2006). For a detailed discussion of the Experts Committee's agenda in the academy's early years, see Allen (2008).

³⁷ *Vidwan* can be translated as “artist.” The title is typically reserved for professional musicians who are known to have exceptional music technique and performance skills, and the term implies a sense of stature amongst the rest of the musician community. My teacher insisted that people refer to him as “mridaṅgam vidwan” instead of a “mridaṅgam player” or “mridaṅgist,” although he occasionally allowed the title of “artist.”

³⁸ Richard Schechner's definition of the “broad spectrum” of performance “includes performative behavior, not just the performing arts, as a subject for serious scholarly study” (1993: 21). I also rely on interdisciplinary theories of performance as put forth by other scholars such as Richard Bauman (1975, regarding performance of the verbal arts) and Erving Goffman (1973, regarding performance of social interactions).

³⁹ *Gurukulavasam* literally translates from Sanskrit as “living with the guru.”

⁴⁰ In recent decades, a number of Western researchers have written about their experiences studying music in India under a guru. Daniel Neuman’s (1990) work is one of the most well-known on the organization of musical lineages in North India. Stephen Slawek (1987, 1991) writes about learning *sitar* from the great Pandit Ravi Shankar. Rolf Groesbeck (1999, 2009) discusses his experiences studying temple music with a preceptor in Kerala. Regula Qureshi (2009) talks about learning Hindustani music and touches on some aspects of the guru-shishya tradition in North India. Also, many writers include short descriptions of their guru-shishya experiences in larger projects on Indian music (Allen and Viswanathan 2004; Weidman 2006, 2008; selections from Peterson and Soneji 2008).

⁴¹ For example, Weidman (2006: 247–50) includes a bibliographic account by musician and composer Mysore Vasudevachar, who describes the experience of going to live with his guru in the rural area of Tiruvaiyar during the last decades of the nineteenth century.

⁴² There are different forms of this arrangement, including cases where the student was allowed to stay at the guru’s home for longer periods of time, especially if he had travelled from a long distance to study. I am generalizing here only to make the point that the gurukula system had been transformed when it was relocated in the urban sphere.

⁴³ Nandy (1983) argues that colonized Indian citizens saw their salvation in becoming more like the British.

⁴⁴ Dating the origins of the Sanskrit Vedas and other Hindu scriptures is a difficult and controversial issue, but most scholars agree that the Vedas originated at least by 1500 BCE (if not earlier).

⁴⁵ Historical documentation of the agendas and outcomes of these early committee meetings can be found in the academy’s annual journal, *Journal of the Music Academy of Madras (JMAM)*, available online at <http://www.musicacademymadras.in>. Also, Allen (2008) includes a lengthy analysis of some of these initial Experts Committee meetings.

⁴⁶ *Gharānā* is the North Indian term referring to the musical “lineages” that are formed in transmission from guru to shishya. While Dhar’s article is concerned with the situation of musical transmission in modern-day North Indian society, her observations can be applied to modern-day South Indian contexts as well.

⁴⁷ Scholars who have written about the gurukula system either from their own experience or from a theoretical point of view include: Ananya Chatterjea (1996); Rolf Groesbeck (2009); Daniel Neuman (1977, 1990); Regula Qureshi (2009); Stanley Scott (1997); Stephen Slawek (1987, 1991); T. Unnikrishnan (2006); and Amanda Weidman (2003, 2006).

⁴⁸ For example, my experience as a foreign disciple has been outlined in the first chapter of this thesis.

⁴⁹ *Gu* translates from Sanskrit as “ignorance” and *ru* translates as “dispeller.” According to Mlecko (1982: 33), the guru is the dispeller of all ignorance, not just the ignorance pertaining to dancing, music, and other skills.

⁵⁰ Disciples are not necessarily the guru’s biological children, although this was the norm at one point in time and is still quite common (especially in North India).

⁵¹ The idea of the guru “*showing* the way” rather than “*leading* the way” is an ancient metaphor from the era of Bharat and the *Natyasastra*.

⁵² *Ghaṭam* is a South Indian percussion instrument that looks like a clay pot which is held in the player’s lap.

⁵³ Interestingly, a few decades ago the emulation of many different artists would have been taboo in gurukulavasam, as one of my older contacts explained that he used to have to sneak to other artists’ concerts behind his guru’s back and was often reprimanded when his guru discovered his infidelity from another musician. Weidman (2006: 248) documents a similar story in her examination of Mysore Vasudevachar’s bibliographic account. The early twentieth-century musician and composer reports sneaking out to attend a concert by his guru’s rival and being immediately reprimanded upon his return home.

⁵⁴ For a student who cannot afford to compensate his guru while learning music, it is an unwritten rule that he should see to the guru’s financial welfare after becoming a professional performer.

⁵⁵ Mysore Vasudevachar (1955: 39) reports having to wash his guru’s laundry and dishes, collect drinking water for the family, make his guru’s bed, prepare his guru’s pooja utensils, and even massage his guru’s legs at night (cited in Weidman 2006: 240).

⁵⁶ In fact, most musicians find a way to connect themselves to the Musical Trinity even if their lineage does not directly stem from one of three Tanjore composers.

⁵⁷ One of my most profound encounters was an amateur musician who studied online video recordings of concert performances by an artist whom he claimed was his “guru” although he had never actually taken a lesson with the musician in real life; he had, however, seen the artist perform and interacted with him many times. While this instance is atypical, it displays an interesting juxtaposition of modern technology and traditional terminology.

⁵⁸ According to Schippers (2007: 124) documentation of the personal communication in 1998, the *tablā* player stated: “Many gurus live in the twenty-first century, jet-setting around with their electronic toys, but they expect their students to live in the nineteenth century.” *Tablā* is a set composed of two small kettle-shaped drums that are used to accompany Hindustani music.

⁵⁹ This “name-dropping” game can get a little dangerous, and performers must always be aware of their audience when discussing these matters. For example, my contact had not studied as

extensively as his rival had studied with this particular guru. If my contact had emphasized his ties to this guru in the presence of his rival, the exchange would have become less than cordial.

⁶⁰ In the presence of the Karnatic music community in South India, I would never refer to my guru as a “teacher.” I (along with other ethnomusicologists, such as Amanda Weidman and Regula Qureshi) use the terms interchangeably in scholarly discourse to avoid repetition of the same term over and over.

⁶¹ My contact actually expressed resentment toward his university position, but out of obligation to his family legacy (his father had also been a professor, well-known and revered within the community) chose to continue serving as a professor and performing concerts on the side instead of travelling as a fulltime Karnatic performer.

⁶² Weidman (2006: 3) reports that her guru strove to project a similar image, refusing to accept payment for her performances directly and asking that the compensator give the money to her shishya.

⁶³ The secondary melodic artist typically repeats the main artist’s melodies, slightly delayed, as musical support to the primary artist’s improvisation. The secondary artist never overshadows the primary artist, but imitates the improvisations in a way that supports and encourages the primary artist.

⁶⁴ *Rasika* best translates as “one who can taste the *rasa* (lit. “juice,” aesthetic potential)” inherent in the music (Allen and Viswanathan 2004: 59).

⁶⁵ *Tāla* is also used in North Indian music, but it is much more crucial in South Indian music performances. In a typical Karnatic concert, there is almost always someone onstage (or a strategically placed disciple in the front row) who will clap *tāla* for the performing musicians.

⁶⁶ Cheironomy is defined in Oxford Music Online as the doctrine of hand signs. Usually the term refers to hand signals performed by an ensemble leader to indicate pitch and melodic aspects. Although the term has been applied to *tāla* by some authors (Rowell 1992), it is perhaps not the most accurate terminology for the indication of the Indian metric system.

⁶⁷ As mentioned in Chapter 2 of this thesis, Singer (1972: 70–1) proposed that the “concrete observable units of Indian culture” (Little Traditions) could represent the performance of a much larger Indian cosmology (Great Tradition).

⁶⁸ At this point it is necessary to warn the reader against only viewing Karnatic music-structure as cyclical in relation to the linear-dominated understanding of Western music. As Clayton points out, whether it is a line, a circle, a cycle, a wave, a measuring stick, or otherwise, the metaphor is used to “clarify, mediate, and communicate subjective musical experience” (2000: 19). It is indeed possible to view Indian music linearly and Western music cyclically. The metaphor of the cycle serves the purpose of this paper by relating musical structure to a subjective experience reminiscent of larger cultural phenomena.

⁶⁹ Scholars include Deva (1974), Rowell (1981), Jairazbhoy (1982) and others cited in Clayton (2000: 15–23).

⁷⁰ For example, Deva (1974, cited in Clayton 2000: 15), Chaudhary (1997, cited in Clayton 2000: 20) and Nelson (1991) use the image of a circle to convey the organization of tāla.

⁷¹ For clarity, *kalā-kāla-laya* is pronounced as “kuh-lah-kah-luh-lie-yuh”.

⁷² Exceptions include Brown (1965), Nelson (1991), Clayton (2000), and Rowell (1992).

⁷³ There have been some scholars who have studied tāla more in-depth. Robert Brown (1965) addresses some issues, but ends up mainly focusing on the different sounds that a mridaṅgam can make and the particular rhythmic material he learned in his mridaṅgam lessons. David Nelson (1991) includes a lengthy section about the organization and theory of tāla in his dissertation; once he begins transcribing the drum solos in the middle and end of his work, however, he focuses more on rhythm specifically and does not necessarily situate the rhythms in the larger context of tāla.

⁷⁴ Ingrid Monson, for example, writes: “The musical image, it seems, has much to offer in reorganizing our thinking [about cultural processes] in nonlinear and multiple directions” (1996: 215).

⁷⁵ Speaking about Karnatic music melodies and phrases without situating the rhythm in tāla (except in cases when there is no tāla, such as the *ālāp* and *tānam* sections) is like speaking about the drum patterns in an Ewe Agbekor ensemble without situating them in relation to the twelve-beat West African bell pattern.

⁷⁶ A Karnatic percussionist, for example, knows the total number of subdivisions or pulses in his rhythmic improvisation, how many claps of tāla it will take to complete his improvisation, and the number of tāla cycles that the improvisation will span.

⁷⁷ Since the 1960s, there has been a conscious shift among Western scholars to focus more on the aspects of rhythm in music analysis. However, Karnatic rhythmic improvisation remains one of the most under-theorized and overlooked aspects in Karnatic music scholarship.

⁷⁸ There are many works on the mridaṅgam player’s art that have been written in India. Two notable examples are: (1) *Mirudanga Padamurai* (“Mrdanga Lessons”) by Mailattur Sami Ayyar, and (2) *Bharata Sabda Vadya Pradayini* (“Indian Sound Instrument Presentation”), written by tavil player K. Muniswami. According to Brown (1965: 292), both texts have been transliterated by Jon Higgins (1939–84), renowned former scholar and teacher of Karnatic music at Wesleyan University.

⁷⁹ Brown (1965: 57–8) explains that the ancestor of the modern-day mridaṅgam is mentioned in many sacred Hindu texts, including the *Rgveda*. According to his research, it seems that drums of barrel shape have occupied a position of prestige in the Indian music world for at least two thousand years. I include this footnote to highlight the disparity of indigenous opinions about the

mridangam when it is situated on the classical concert stage. Perhaps the strict vegetarian mindset about a musician's contact with animal skin is a more recent development that came as a result of the construction of classical and nonclassical identities in the early twentieth century.

⁸⁰ The *tavil* is a cylindrical-shaped drum that accompanies the *nāgaswaram* in temple processions. It is played with a stick and the left hand and hard “thimbles” on the fingers of the right hand (Brown 1965: 14; 54).

⁸¹ For example, a slightly more subdued South Indian opinion cited in recent scholarship claims that rhythmic instrumentation beyond mridangam accompaniment “interferes with the music” (cited in Weidman 2006: 102). The speaker was specifically referring to the performance of *konnakol*, or the spoken South Indian rhythmic language, during a Karnatic concert.

⁸² The *rāgam-tānam-pallavi* is an improvisational format which expounds upon the *pallavi* section of a kriti. It begins with an exposition of the *rāga* (*rāgam*) in unmetered, free-form *ālāp* style. The player then continues the exposition of the *rāga* in an unmetered, but more rhythmical style of improvisation that is not yet situated in *tāla*. Finally, the *pallavi* begins and marks the beginning of the *tāla*.

⁸³ Swara kalpana is an improvisational format that presents the pitches of the *rāga* using short, staccato, often rapid succession of Indian solfege syllables.

⁸⁴ Kanjira is a single-headed, small frame drum used as a secondary percussion instrument in Karnatic music. Ghaṭam is a clay pot that is also used as secondary percussion accompaniment. Less frequently is the *morsing*, or Jew's harp, used as an accompanying percussion instrument.

⁸⁵ The kriti has three sections: *pallavi*, *anupallavi*, and *charanam*. The *mōrā* typically signals the transition between one section to the next (especially between *pallavi* and *anupallavi*).

⁸⁶ For more information on the structure of *kōrvais* and *mōrās* with examples, the reader is asked to consult Nelson (1991).

⁸⁷ Another section which may seem pre-planned is the swara kalpana section, which also ends in a sort of *kōrvai*, although the *kōrvai* in the kalpana section is melodic as well as rhythmic.

⁸⁸ A useful analogy might be the acquired skill of “perfect pitch,” in which a listener is able to immediately decode which pitch a melodic artist is playing. South Indian percussionists might have something that one could call “perfect rhythm” because they are able to mentally transcribe rhythmic phrases so quickly.

⁸⁹ The following section uses a lot of Karnatic music terminology. The foreign terms are defined as they are presented, but if there is any confusion, the reader is asked to consult the Glossary section at the end of this thesis.

⁹⁰ I am not trying to imply here that the rhythmic motives and phrases necessarily correspond to a specific object as words correspond to certain items, idea, or concepts. The language analogy

is used insofar as it explains how the seemingly endless stream of rhythmic phrases is comprehended sets of smaller units.

⁹¹ When solkattu is performed during a concert, it is known as konnakol.

⁹² Low drum tones are typically vocalized using syllables such as “tom” or “din,” while high drum tones are vocalized with syllables such as “tak” or “dhi.” Again, although the vocalization is meant to imitate the tone of the drum, there is not a one-to-one correspondence between the spoken syllables and the drum strokes.

⁹³ David Nelson’s (2008) publication is a do-it-yourself manual that explains how the solkattu syllables are applied to specific rhythmic phrases. Other sources that may be useful in learning the art of solkattu are Lisa Young’s (1998) thesis on konnakol, Todd Isler’s (2005) manual on “ta-ka-dim-mi”-ing, and T. H. Vikku Vinayakram’s DVD set (2008) on the language and technique of Karnatic percussion.

⁹⁴ By “pulse” here I mean the smallest subdivision of the beats of the tāla at the time. The beats of the tāla are typically subdivided into two, three, or four pulses per beat; however, it is not uncommon for Indian musicians to subdivide the beats of the tāla, into five, six, seven, eight, or nine pulses per beat.

⁹⁵ Also useful to the performer is knowing whether a kōrvai is based on a multiple of four, three, five, seven or nine.

⁹⁶ For a brief description of all six yatis, see Nelson (1991: 81). For more in-depth explanation of yati, consult almost any treatise on Indian music.

⁹⁷ Although mathematics lacked a proper vocabulary to discuss fractal figures prior to the 1970s, Pickover (2009) reveals that the concept of recursion and fractal structures was discovered long before Mandelbrot’s time, beginning as early as the seventeenth century with Gottfried Leibniz. Some scholars (Eglash 1999: 204) imply that an awareness of fractal-like structures may have been sparked even earlier when ancient Greek mathematicians were pondering the nature of infinity (see the story by Zeno of Elea about the footrace between Achilles and a tortoise).

⁹⁸ For example, the equation used to render the well-known Mandelbrot set is $z^n + c$, for any integer $n > 2$.

⁹⁹ The following discussion is in no way an exhaustive list of all the rhythmic transformation methods available to a Karnatic percussionist.

¹⁰⁰ For more clarification on the topic of mōrā and more in-depth analysis of the different kinds of mōrā formats that exist, consult Nelson (1999).

¹⁰¹ Adi tāla is an eight beat tāla structure, organized as 4 + 2 + 2. It is the most commonly used tāla in Karnatic music, equivalent to the frequent use of 4/4 meter in Western music.

¹⁰² Percussionists can begin the koraippu section by trading any length of tāla. They could just as easily begin by trading four cycles of tāla (then two, then one, then half, and so on), or by trading a half cycle (then a quarter, then an eighth, and so on). Also, when the tāla is not easily divisible by two, the math involved in this trading game can become much more interesting.

¹⁰³ A prime example is the late kanjira virtuoso G. Harishankar (1958-2002), whose unparalleled kanjira technique awarded him the prestigious Sangeeta Natak Academy Award in 2001. To date, he is the only kanjira player to have received this award, the highest national honor for musicians in India.

¹⁰⁴ Interestingly, there seems to be an internal hierarchy within the *tālavadya kacceri* that is largely taken for granted in terms of which instrument performs before another. From what I have observed, the hierarchy seems to be: mridangam followed by kanjira or ghaṭam, and, depending on the instrumentation of the ensemble, followed by konnakol (performance of the vocal drum syllables) or morsing, and, in some cases, followed by tavil (although tavil, due to its associations with temple and ritual contexts, is not used on the classical concert stage very often). In cases where all the instruments are present, the exact order in which these instruments will perform is often based on the stature of the percussionists themselves.

¹⁰⁵ For those readers who are inclined to figure out how to clap tāla to this phrase, each repetition of the motive divides the beats of the tāla in different gatis. The first repetition is played with only one pulse per beat of the tāla. The second repetition is played with three pulses per two beats of the tāla. The third repetition is played with two pulses per beat of the tāla. The fourth is played with three pulses per beat. The fifth is played with four pulses per beat. And the sixth is played with six pulses per beat of the tāla. Mathematically astute readers will notice that the gati which is required is the inverse of the number of beats that the motive spans. The rhythmic motive begins by spanning six beats of the tāla, then four, then three, then two, then one and half, then one (6-4-3-2-1.5-1). The gati begins by dividing the pulse of the tāla into one pulse per beat, then one and a half (three for every two), then two, then three, then four, then six (1-1.5-2-3-4-6). This inverse proportion between the gati and the number of tāla beats is based on basic mathematical skills; however, I point out the relationship here to emphasize the compositional beauty of this particular phrase.

¹⁰⁶ Dimock's concept of "deep time" draws from David Christian's (1991) concept of "big history."

¹⁰⁷ By "actualization" I am citing Schechner's ([1977] 2003) use of the term, referring to the crystallization of cultural process, or what actually takes place, during performance.

¹⁰⁸ I was influenced by Singer's (1972) approach to examine Karnatic music culture as a collection of analyzable units of performative activity.

¹⁰⁹ As Goffman (1974: 10) notes, he originally takes the concept of "frame" from Gregory Bateson (1972).

¹¹⁰ Several scholars have already looked to audible music experience to grasp the nature of time in the universe. Examples including Langer (1953), Kramer (1986, 1988), Minsky (1982), Rowell (1978, 1979, 1981, 1992).

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