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Hindustani Tala

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- **Principles of Tala and Their Terminology**
- **The *Pakhāvaj***
- **The Tabla**
- **Recent Developments in Indian Rhythm**
- **Sources and Further Reading**

The modern meaning of the word *tāḷa* is twofold: first, the North and South Indian systems of rhythm as a whole; second, a specific metric cycle. Rhythm and meter govern all music involving drums, whether folk, popular, or classical. Since the tala system of meter and rhythm is a complex theoretical concept, its scope may be more easily understood through a study of its practical applications in modern drumming traditions.

Drums have always been an indispensable part of Indian musical traditions. They exist in a vast variety of shapes, sizes, and styles; they are struck with sticks, hands, and fingers, and are played sitting, standing, and dancing. The rest of the world marvels at the depth of this percussive art and wonders at the technical brilliance of players whose fingers and hands ripple over drumheads to produce a rich vocabulary of sounds in rapid, exhilarating bursts.

Hindu religious lore holds that the dance of Shiva, in his role as Nataraja, represents the movement of the universe; in one of his two right arms he holds a small hourglass-shaped drum (*ḍamaru*), which still today can be heard accompanying dancing monkeys and bears and can be found in tourist shops. In his hand, the drum symbolizes the audible space that fills the universe, the sound of creative energy [see V ISUAL S OURCES]. So rhythm and drums are manifestations of basic Hindu beliefs.

Tala as a theoretical concept, found in ancient treatises such as the *Nāṭyaśāstra* of Bharata (c. 200 B.C.- A.D. 200), is a complex issue bound up with sophisticated philosophical musings on the nature of time. In the second century C.E., the word evidently had two specific meanings: the system of rhythm as a whole, and a physical gesture in which the left hand slaps down on the right hand (or the left knee). This movement was just one of eight gestures designed to mark the temporal structure of rhythmic music; others included counts on the finger and waves of the hand. One of the most notable features of any modern performance of North Indian music is the use of such actions to mark the divisions of specific metric cycles, though the practice is not quite so prevalent as in South India, where most of the audience joins in the process.

Writings on music from Vedic times (c. 1500-600 B.C.) commonly expressed time through circular imagery—the wheel of the chariot, the sun, the eye, the cycle

Page Image of human life. In turn, cultural ideas about time manifested themselves, in the musical

phenomenon of metric cycles. By the time Sarngadeva compiled the *San.gītaratnākara* (c. A.D. 1240) no fewer than 120 *deśī* talas had been catalogued. *Deśī* implies these were regional rhythmic patterns organized in cyclic form. The cyclical disposition of time is therefore another link between modern and ancient practices.

In addition to hand gestures and metric cycles, another ancient rhythmic feature that continues in modern practice is the use of syllables as onomatopoeic references to drummed sounds. These syllables (*bol*) function as an oral notation by differentiating among various qualities of sound and can also be written down. Though the syllabic notation of early music treatises does not correspond predictably with modern drumming, at least a sense of historical continuity comes through the ongoing concept of verbal-musical correlation.

Aspects of the ancient system, as reflected in the *tāladaśaprāṇa* 'ten breaths of tala', form the underpinning of the rhythmic system of South India (see below). However, they are invoked only by modern Hindustani music theorists and remain largely meaningless to performers in the North.

In North India, drums both accompany other instruments and play solo. There are many different styles of accompaniment, depending on the nature of the performance: dance, vocal, or instrumental (that is, in which instruments assume the lead melodic role). In a performance, there are different levels of interaction among drummers—from the passive marking of a metric cycle to soloistic interludes and musical tugs of war for rhythmic supremacy. The classical traditions of two drums— the *pakhāvaj* and tabla—serve here to introduce North Indian tala, as both a rhythmic system and a specific metric cycle.

PRINCIPLES OF TALA AND THEIR TERMINOLOGY

The root meaning of the word *tāḷa* is linked to clapping. The gestures developed in ancient times served as a method of indicating the structure of a fixed period of time that would repeat cyclically—a metric cycle. The gestures essentially marked segments of the cycle. The segmentation of the cycle has always remained the primary description of a tala in the Karnatak system of South India, but North Indian (Hindustani) performance, which began to follow different organizational principles in about the 1300s, has departed from this system in a significant way. Over the past few centuries, individual talas in the North gradually became associated with configurative patterns of drumming, to the point that a specific pattern—and not the clap ping structure itself—is the primary description of a tala. Ask any tabla player what the structure of, say, the seven-beat *rūpak tāl* is, and the musician will recite a set of onomatopoeic syllables that correspond to strokes on the drumheads: *tin tin na dhin na dhin na*. The drummer may well indicate its gestural pattern simultaneously—wave on beat 1, 2, 3, clap on beat 4, 5, clap on beat 6, 7—but generally the gestures are dispensable, whereas the drummed pattern is not.

Lay

Lay, another important concept relating to musical time, also has two meanings, which correspond to notions of rhythm and tempo. A musician is said to be *laydār* if he demonstrates exemplary rhythmic command. *Laykārī* denotes a part of a performance dominated by rhythmic play, particularly complex rhythms. Thus *lay* is a fundamental term for rhythm in the Western sense of "timing." In its second meaning, "tempo," the word is usually qualified by one of three terms: slow (*vilambit lay*), medium (*madhya lay*), and fast (*drut lay*). The prefix *ati* 'very' before *vīlambit* or *drut* conveys a greater sense of the extremes of tempo.

Page Image

The tala cycle

Āvartan (sometimes *āvart*) is the term for one cycle of a tala. The root meaning of the word is "rotation." A tala cycle contains a fixed number of beats (*mātrā*). The term *mātrā* also denotes the duration between two beats, in the same way that a quarter-note represents both the beat and a relative duration. Each cycle is segmented into smaller divisions (*vibhāg*), and these divisions may comprise an equal or unequal number of beats. For example, *rūpak tāl* has seven beats, divided unequally into three divisions: three beats plus two beats plus two beats, or 3+2+2.

The first beat of any tala (and therefore the first beat of the first *vibhāg* division) is called *sam*. Subsequent divisions of the tala cycle are called a clap (*tālī*) if the gesture on their first beat is a clap, or empty (*khālī*) if a wave of the hand indicates their first beat. Players tend to equate *tālī* with an accented pattern and *khālī* with an unaccented one, as in poetic meter, but there are far too many examples of drummed patterns whose natural stresses do not correlate with this architecture for this generalization to be valid.

The notational symbols for *sam* and *khālī* are *X* and *O* respectively. Since *sam* is usually considered the first clapped division (*tālī*), subsequent clapped divisions are numbered 2, 3, and so on. This notation can result in confusion when the first beat of the tala is *khālī*, as in seven-beat *rūpak tāl*. The following pattern (*thekā*) for *rūpak tāl* shows the correct notation:

O tin   tin nā

2 dhin nā

3 dhin nā

which is more commonly, but incorrectly, notated with the clap (X) on the first beat, as:

X tin   tin nā

2 dhin nā

3 dhin nā

The pattern for sixteen-beat *tīntāl* more clearly exemplifies the notational convention of *sam, tālī*, and *khālī tīntāl* has four equal divisions of the sixteen beats, marked on beats 1, 5, 9, and 13 with X (clap), 2 (clap), O (wave), 3 (clap).

X dhā dhin dhin dhā

2 dhā dhin dhin dhā

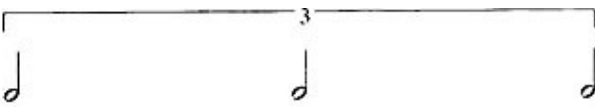O dhā tin   tin   tā

3 tā   dhin dhin dhā

The position of the word *tāl* in Indian tala names is purely conventional: *tīntāl* is a single word, while *rūpak tāl* are two separate words.

Rhythmic divisions

Many terms exist for the rhythmic divisions of a beat, known in Western music as triplets, quadruplets, quintuplets, septuplets, and so on. A ratio of one event (drum stroke) per beat (1/1) is called equal time (*barābar lay*), two events per beat (1/2) is two times (*dūguṇ*), three events is three times (*tīguṇ*), and so on. Cross-rhythms are fractional ratios, and the most common are *paun* (1/0.75), *savāī* (1/1.25), *deṛhī* (1/1.5), *paune do* (1/1.75), and *dhāīguṇ* (1/2.5) (figure 1).

Some musicians prefer to use generic terms to describe rhythmic divisions:

Page Image

paun (1:0.75)

barābar (1:1)

savāī (1:1.25)

deṛhī (1:1.5)

paune do (1:1.75)

dūguṇ (1:2)

ḍhāīguṇ (1:2.5)

tīguṇ (1:3)

cauguṇ (1:4)

pāṇcguṇ (1:5)

cheguṇ (1:6)

sātguṇ (1:7)

FIGU
The r
rhyth
divisi
in

āṭhguṇ (1:8)

Hindustani music.

to triple time and its multiples; *kuāṛī*, to fives; and *viāṛī*, to sevens. Less technical, but equally effective, is the term *jhūlnā* 'swinging' for sevens.

The word for *measure* or *meter* (*chand*) describes rhythmic groupings that appear as a result of a consistent pattern of accents. *Rūpak chand* is the name given to the seven-beat grouping stressing the first, fourth, and sixth events in the pattern, mirroring the internal divisions of *rūpak tāl*. Yet *chand* can be used more broadly for any regularly recurring rhythmic pattern, whether or not it conforms to the pattern of a tala. In general, musicians who have studied theory separately from practice (as in a music school) will know all the technical terms, whereas those less conversant with theory will opt for metaphorical descriptions of rhythm [see I NSTITUTIONAL M USIC E DUCATION: N ORTHERN A REA].

Page Image

THE PAKHĀVAJ

Few writings in English discuss the *pakhāvaj* 'barrel drum', and most books in Indian languages do little more than provide notations of talas and drumming pieces. Most musicians and scholars assume the instrument to be ancient, and point to two-thousand-year-old Indian temple carvings of figures playing barrel-shaped drums similar in appearance to the *pakhāvaj* (figure 2). The word *pakhāvaj* comes from two Sanskrit terms, *pakśa* 'side' and *āvaja* 'instrument, drum'. The *āvaja* occurs in the thirteenth-century treatise *San.gītaratnākara* (chap. 6, verse 1077), as do "drummed" syllables such as *tā, dīn, thun.*, and *nā*. Yet for India, the general rule should be that nothing is as old as it seems; though ancient and modern drums are superficially similar, there is no way of determining whether they are essentially the same, or if the techniques used in playing them are comparable. The *pakhāvaj* has evolved over time, as have its musical function, repertoire, and technique. It probably crystalized into its current form, in all these respects, within the past four hundred years.

The North Indian *pakhāvaj* (figure 3) shares many traits with its cousin the South Indian *mridangam*. Indeed, an alternative name for *pakhāvaj* is *mridang*. It is a double-headed barrel drum just over 60 centimeters long (no size is standard). The smaller head measures about 18 centimeters in diameter, the larger about 23 centimeters. Each head is made from a circular piece of treated goatskin, partly covered by a second skin that is trimmed away to form a rim around its circumference. Both
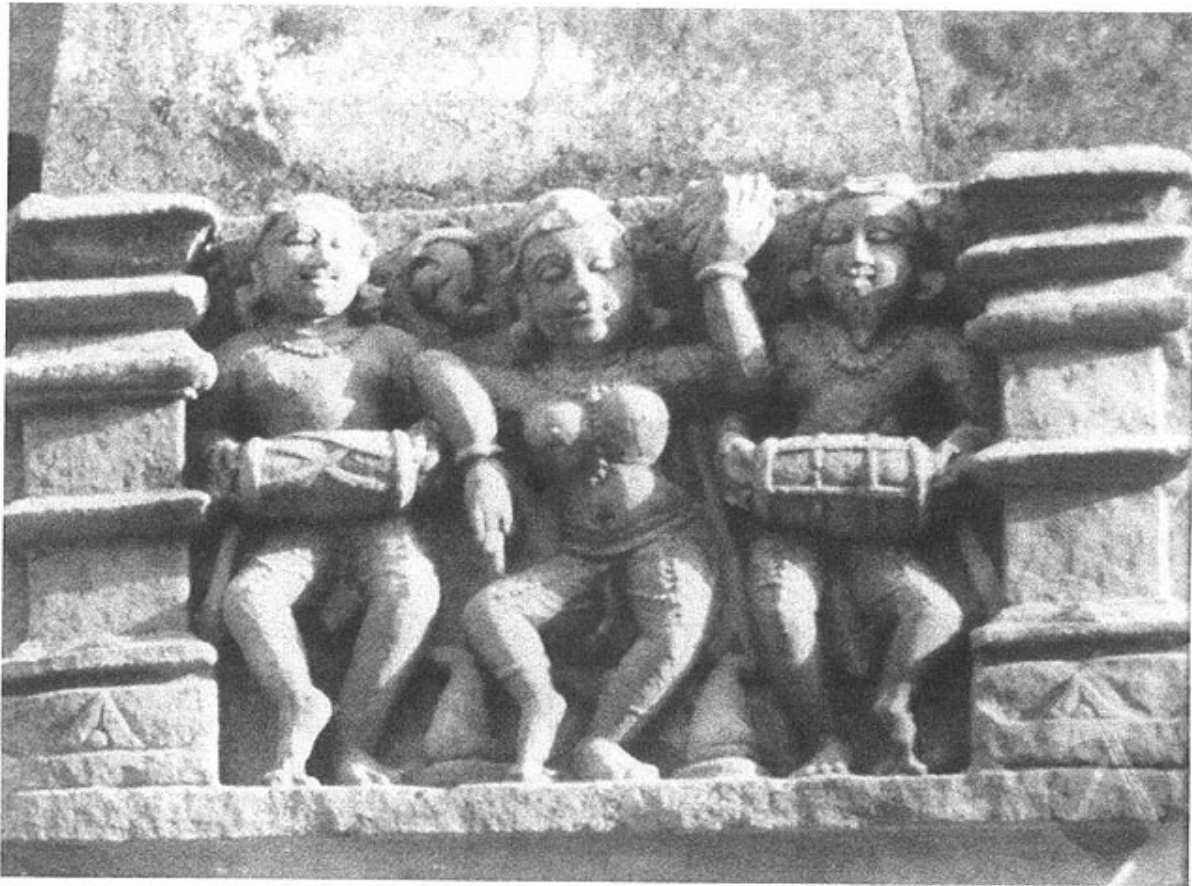
FIGU
Temp
carvi
a dan

accompanied by two musicians playing double-headed barrel drums, Khajuraho. Photo by Gord
Arnold, 1983.

Page Image

FIGU
Detai
from
Danc
Krish
show
drum
playi
pakh
naqq
and
ḍhol
playe
some
unus
with
stick.
Sāga

manuscript of Surdas, Rajasthan, Mewar, mid-1600s. Courtesy Vinod Krishna Kanoria, Patna.

skins are laced to a ring that fits tightly over the neck of the barrel. The heads are then laced together with a long strip of hide. The smaller has a layered black spot (*siyāhī*), about 10 centimeters in diameter, made of paste and iron filings (each maker jealously guards his own recipe). This spot provides pitch and resonance. The drummer can adjust the pitch by altering the tension of the head, either by moving cylindrical wooden wedges under the lacing or by tapping on the ring around the drumhead with a hammer or stone. The *pakhāvaj* is tuned to the tonic pitch Sa (equivalent to *do* in the Western sol-fa system; see H INDUSTANI R AGA) chosen for the performance. It most frequently hovers around C # below middle C. Since tuning two heads connected by the same straps would prove virtually impossible, the drummer prepares the larger head for playing by making a temporary spot from fresh dough (flour and water) and pressing this onto the skin. The drummer can adjust and flatten the size and shape until the required resonance and pitch are achieved.

The player (*pakhāvajī*) sits on the ground. The drum also rests on the ground, and is usually wedged with a rolled-up shawl for stability (though stands do exist). Most commonly the left hand plays the larger head, producing two basic sounds: (1) a low, booming resonance produced by a ricochet of the whole hand, known by the drum syllables *ga* or *ge* (the aspiration and ending vowel can change according to stress or context); or (2) a slap of the hand that sticks to the drumhead, called *kat* or *ke*.

Resonating sounds on the left drumhead are said to be open (*khuiā*) and nonresonating sounds closed (*band*). The right hand produces a greater variety of strokes, which ate of three kinds: (1) *tā* or *ṅ*, which produce the tonic pitch, using either the whole hand or the index finger to ricochet from the rim while another part of the hand or finger touches the drumhead at the edge of the black spot to filter out unwanted harmonics; (2) *din* or *thun.*, a pitch a minor seventh below the tonic (Re in the lower octave), where the four fingers ricochet off the drumhead; and (3) nonresonating

Page Image strokes in which the fingers or palm stick to the drumhead (strokes with the fingers are called *tit, te*, or *ṭe*, and fluttering strokes of the palm, *dere*). Strokes involving both the right hand and the left abound; the most important are *dhā*, produced by *ge* and *tā, dhit* (*ge + tit*), and *dhere* (*ge + dere*).

Drum syllables constitute an oral notation that aids teaching and memory and serves as a mode of performance. Yet a drummer's fluency in using them comes from an intuitive understanding of the contexts in which they are used; there is no one-to-one correlation between a stroke and a syllable: strokes may have many different names, and one name can imply many different strokes. In some contexts, *gā* and *kā* can even represent the right-hand stroke more commonly known as *tā*. Only years of study and practice can clarify this system.

Pakhāvaj talas

The talas most closely associated with the *pakhāvaj* repertoire are those found in the *dhrupad* vocal genre. First is cautāl (occasionally called *cārtāl*), whose rhythmic cycle comprises twelve beats in six equal divisions, with *khālī* counts on the second and fourth divisions. The pattern for *cautāl* is:

```
X dhā    dhā
2 ki   ṭa dhā
3 ti   ṭe ka  tā
O din    tā
O din    tā
4 ga   dī gi   na
```

The feel of the tala is really three sections of four beats, with the second section being a variant of the first. The third section features the most common sequence of syllables, *tiṭe katā gadī gina*, a sequence that functions as a cadential unit in playing *pakhāvaj*. The same phrase, whose two syllables per beat propel the tala forward and round into the next cycle, also occurs in two other common talas: the seven-beat *tīvrā tāl*, which has no *khālī*:

```
X dhā    din    tā
2 ti   ṭe ka  tā
3 ga   dī gi   nā
```
and the ten-beat *śūltāl:*
```
X dhā    dhā
2 ki   ṭa dhā
O ga   dī gi   na
O din    tā
3 ti   ṭe ka  tā
```

The patterns for *tīvrā* and *śūl* talas are clearly related to or even derived from that of *cautāl*, but no single, indisputable version of a pattern emerges. In many versions, the syllables (and sometimes the

structure of the clapping) differ, and in most traditions the pattern also varies with the tempo.

The variability of tala and drum-pattern structures raises an important issue about tala in North India as opposed to South India. Karnatak concepts of tala are rigid and highly systematic; all possible rhythmic cycles are derived by calculation from the available structural parameters [see K ARNATAK T ALA]. The Hindustani system is entirely unsystematic and nebulous—which suggests that it arose organically through performance, not as the result of a theoretical scheme.

Another common tala associated with the vocal genre *dhrupad* is the fourteen-beat *dhamār* (the long dashes indicate silence):

Page Image

 X kat dhe ṭe dhe ṭe

 2 dhā —

 O kat te   ṭe

 3 te   ṭe   tā —

Dhamār illustrates how the structure of these patterns can contradict the gestural architecture of the tala. Whereas the tala's divisions suggest 5 + 2 + 3 + 4 (clap, clap, wave, clap), the pattern for *dhamār* is configured as a largely open seven-beat pattern of resonating drum strokes, mirroring itself with a seven-beat closed pattern without resonating strokes.

Thousands of talas exist in theory. Hardly any of these are widely known, and for *pakhāvaj* only the four given above feature with any regularity. Many lesser-known talas carry the names of gods: *brahma tāl* (fourteen beats), *lakshmī tāl* (eighteen), *gaṇeśa tāl* (eighteen). Some configurations are bound to mystical-number symbolism (*brahma tāl* has a clap, a wave, two claps, a wave, three claps, a wave, four claps, a wave; Brahma is the creator of the world, one of the trinity of deities, with Vishnu the preserver and Shiva the destroyer, and some say this pattern expresses the expansion of creation itself). However, players and theorists interpret *pakhāvaj* inconsistently.

Pakhāvaj repertoires

Generically, a *pakhāvaj* composition is called a *paran*. There is no structural consistency among pieces termed *paran*, so clearly the word does not indicate a particular pattern or formula. Other terms for composition include *mukhṛā* and *mohrā*, though there are examples of these two forms in which the drum syllables and phrasal structures are identical to pieces called *paran*. Two features that differentiate *mukhṛā* and *mohrā* from *paran* are their inclusion of a cadential formula (*tīyā*) and their use as a concluding section of a performance.

The following is a *paran* composition in twelve-beat *cautāl*, notated with two events per beat (*dūguṇ*) over two tala cycles:

X dhā — na dhi

2 ti   ṭe kra dhā

3 ti   ṭe ka tā

X nā ti ṭe   tā

2 ti   ṭe kra dhā

3 ti   ṭe ka tā

O ki   ṭa dhā ge

O ti   ṭe dhā ge

```
4 ga   dī  gi   na
O ge   na dhā ge
O ti   ṭe  dhā ge
4 ga   dī  gi   na
```

The composition may be viewed in two halves, with the second repeating a substantial portion of the first. In performance, a drummer would repeat this composition several times; each time, the density of the syllables would increase proportionately from two events per beat to three, four, six, eight, and even further, depending on the initial tempo and the drummer's technical capabilities. With three events per beat, the notation for the beginning of the composition is as given below. Since the rhythmic ratio has been increased to 3:2, the composition will no longer fit two cycles (twenty-four beats), but will last only sixteen beats. Therefore the drummer repeats the piece three times, so its ending coincides with the end of a tala cycle (3 times 16 equals 4 times the twelve-beat cycle).

```
X dhā — na   dhi ki   ṭa
2 ti   ṭe dhā ge ti   ṭe
O dhā ge ti   ṭe  kra dhā
O ka  tā ga  di  ge  na
```
Page Image

This composition challenges the listener's sense of rhythm from the outset, because the natural accents within the patterns, primarily the composite strokes featuring the phoneme /dh/, are now occurring at different points in relation to the beat. The sensation of shifting accents, of one thing accelerating proportionately yet in perfect relation to another, is one of the essential aesthetic underpinnings of Hindustani drumming.

Many *paran*, and all *mukhṛā* and *mohrā*, include a cadential formula called a *tīyā* (Sanskrit *tri* 'three', *tṛtīya* 'third'). The word *tīyā* implies threes and denotes a pattern played three times. The drummer calculates the last syllable of the final statement of the pattern to coincide with an important point in the cycle, most frequently the first beat. The following *mukhṛā* is designed to conclude the *paran* given above. It begins with the same syllables, and for convenience is notated with two events per beat, though as a finale it would ordinarily be played at a much higher density:

```
X dhā  —    na    dhi
2 thun. —   thun. —
3 ti   ṭe   kra   dhet
X ti   ṭe   ka    tā
2 dhā  —    —     —
3 dhā  —    —     —
X dhā
O ki   ṭa   dhā   ge
O nā   ge   ti    ṭe
4 —    tā   gadī  gina
O tiṭe katā gadī  gina
O tiṭe katā gadī  gina
4 tiṭe katā gadī  gina
```

Extended structures also exist, some being *paran* of extraordinary length and complexity. Yet the most common extended structure is the most fascinating because it demonstrates a remarkable capacity to integrate musical and arithmetic ideas. This structure is the *cakkardār*, a term implying something that goes round in circles. A *cakkardār* is a *paran* played three times, calculated to conclude on the first beat of the tala. The chosen *paran* need not include a cadential formula, though most do; so when the drummer plays a *paran* three times, the cadential pattern appears nine times. A multitude of arithmetic solutions exist, but one formula deserves special mention: the *farmāiśī* 'requested' *cakkardār*. In the *farmāiśī* composition, a *paran* that includes a cadential pattern is played three times: the first time, the drummer plays the *tīyā* so that the first of its parts ends on beat 1 of the tala cycle; the second time, the second part of the *tīyā* ends on beat 1; the third and final time, the third and concluding part of the *tīyā* ends on beat 1. The following is an example. Here, each statement of the *paran* lasts thirty-nine beats, including a seven-beat cadential pattern (*kat—*, *tā—*, *kra dhet*, *— tā*, *tiṭe katā*, *gadī gina*, *dhā—*). The *cakkardār* is thus 117 beats (39 times 3). A two-beat gap (in parentheses) that separates the statements must be added in for a total of 39 + 2 + 39 + 2 + 39 = 121 beats: precisely ten cycles of the twelve-beat *cautāl*, plus one for the first beat of the next cycle.

Page Image

X	dhira	kiṭa	tak	dhi
2	dhi	ṭa	dhi	ṭa
3	kat	—	dhet	tat
X	—	tā	tiṭe	katā
2	tā	dhet	—	tā
3	kra	dhet	—	tā
X	dhā	—	kat	—
2	—	tā	tiṭe	katā
3	kat	—	tā	—
X	tiṭe	katā	gadī	gina
2	—	—)		
O	ki	ṭa	kat	—
O	tira	kiṭa	tak	tā
4	—	tā	kra	dhet
O	gadī	gina	dhet	—
O	kat	—	tā	—
4	tiṭe	katā	gadī	gina
O	tā	—	kra	dhet
O	gadī	gina	dhā	—
4	kra	dhet	—	tā
O	dhā	—	(—	—

The whole thirty-nine-beat pattern (shown above) is played three times.

A *farmāiśī cakkardār* may begin not just on the first beat of the tala, but anywhere in the cycle. Traditionally, drummers have been expected to demonstrate command over these formulas. If a patron makes a specific request (*farmāiś*) for a *cakradār* beginning on the third beat of *cautāl*, the drummer will immediately oblige.

Pakhāvaj accompaniment

Traditionally the *pakhāvaj* has always accompanied compositions in the vocal or instrumental genre *dhrupad*. However, even well into the late 1800s, the *pakhāvaj* was widely used to accompany compositions in another vocal genre, *khyāl*, and in *kathak* dance. Now its exposure in India is more restricted because of the popularity of the tabla, which is used for every genre except *dhrupad*.

In the performance of a *dhrupad*, a singer (or the player of a *bin* 'stick zither') introduces a composition following an extended, unaccompanied, and unmetered section known as the *ālāp*. This composition is nearly always in ten-beat *cautāl*; subsequent compositions are frequently in different talas. It is common for the singer to clap the tala throughout the performance, and this action can help the audience follow the metrical cycle, since the drummer may not spend much time playing the drum pattern. During the statement of the vocal composition, the drummer is expected to play *paran*. The effect is one of growing excitement and power as the drummed patterns ripple beneath the slow and stately melodic framework.

After presenting the composition in full (perhaps with several parts), the soloist embarks on textual variation and elaboration. The general rule is that as the performance progresses, these variations become faster, longer, and more rhythmically indicate. The drummer's role is to mirror the soloist's rhythms with appropriately improvised patterns. A good accompanist will enhance the overall sensation of continuity and growth; an overzealous accompanist may dominate and distract.

Between improvisational sections, the drummer often relies on sequences of rapidly drummed syllables drawn from compositions called *relā* (or *paṛāl*). These are usually short fragments, designed to provide variation. The *relā* sequence below, notated as a cycle of *cautāl*, is normally played at a much greater speed and density:

X	dhā—	kiṭa	taki	ṭata
2	taki	ṭata	kā—	kiṭa
3	kā—	kiṭa	taka	dhuma
O	kā—	kiṭa	dhuma	kiṭa
O	dhuma	kiṭa	taki	ṭata
4	tiṭe	katā	gadī	gina

By constantly spinning variations, the drummer can show off his technique and keep the excitement simmering before launching into the next series of variations with the singer.

Page Image

ga- ṇa nā- tha ga- ṇa- pa- ti ga- ṇe- śa lam- bo- da- ra so- haiṅ

bhu- jā cā- ra e- ka dan- ta can- dra-ma la- lā- ṭa rā- je

brah- mā viś- nū ma-he- śa tā- la de dhu- ru- pa- da gā- veṅ

a- ti vi- ci- tra ga- ṇa nā- tha ā- ja mi- ra-dan- ga baj- jā- veṅ

FIGU...
A Ga...
para...

Pakhāvaj traditions

The *pakhāvaj* has a booming, majestic sound that inspires awe. It is easy to see why, according to legend, the instrument was used to tame wild elephants in the court. Part of its mystique may also stem from the tradition of beginning solo performances on it with the recitation of special *paran*, which mix drum syllables with Sanskrit prayers and other invocations. First, the drummer recites the *paran*, then he plays a representation of it on his drum, reiterating the rhythm and drawing on syllables that most closely match the syllabic content of the text. Figure 4 presents the opening phrases of a *paran* to Shiva's son Ganesh, the elephant-headed god who symbolizes knowledge, wisdom, and good fortune. A Ganesh *paran* is thus a particularly appropriate invocation before an artistic presentation.

gaṇa nātha gaṇapati gaṇeśa lambodara sohain.

bhujā cāra eka danta candrama lalāṭa rāje

brahmā viśnū maheśa tāla de dhrupada gāven.

ati vicitra gaṇa nātha āja miradanga bajjāven.

Ganesh, the protector, leader, and lord of the Gaṇas [the army of Shiva], large-bellied, presents a grand sight,

with four aims, one tooth, and the moon on his forehead.

Brahma, Vishnu, and Mahesh, keeping tala, are singing *dhrupad*.

Today the lord of the Gaṇas is playing the *mridang* in a strangely wondrous way.

Little information exists on the family or teaching lineages of *pakhāvaj* players. Traditionally the regions of eastern Uttar Pradesh (Ayodhya, Banaras) and Bihar (Darbhanga), and the old court cities of Madhya Pradesh and Maharashtra, have had larger concentrations of these musicians, many of whom come from drumming families. Major North Indian players of the twentieth century have included Purushottam Das (from Rajasthan, but based in Delhi), Ram Shankar Das "Pagal Das" ("Mad Das," from Ayodhya), and Raja Chatrapati Singh of Bijna (near Jhansi in Uttar Pradesh).

Purushottam Das has been acclaimed for the beauty of his sound and the quality of his accompaniments for *dhrupad* singing. "Pagal Das" has written about the, *pakhāvaj*, and has upheld the mystical tradition of the drum and its supernatural power; he has claimed to have cured severe stammering by feeding individuals with dough taken from a drum on which he has played special, magical *paran* that unlock the tongue—a story that has probably appeared many times throughout history. Raja Chatrapati Singh (figure 5), an aristocrat and brilliant mathematician, has been productive

Page Image

FIGU
Raja
Chat
Singh
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in rediscovering rare talas; he has repeatedly presented performances in which the most complicated arithmetic formulas unfold in some of the most unusual tala structures. In one performance, he

progressed from the twelve-beat *cautāl* through thirteen-, fourteen-, fifteen-, sixteen-, seventeen-, and eighteen-beat tales, playing special *paran* and *cakkardār* in each before effecting a metric modulation that allowed him to start over again at a faster tempo. Raja Chatrapati Singh has contributed greatly to the expansion of the modern *pakhāvaj* repertoire.

Most modern *pakhāvaj* players trace at least part of their musical inheritance to one of two nineteenth-century figures: Nana Panse of Maharashtra and the legendary Kudau Singh Maharaj (?1815-1910) of Uttar Pradesh. Kudau Singh earned acclaim by performing at the courts of North India, including important occasions like the coronation of Wajid Ali Shah of Lucknow (1847). He is said to have defeated all other *pakhāvaj* players in musical battle, to have tamed rogue elephants, to have been awarded an elephant and one thousand rupees for his recitation of a Ganesh *paran*, and to have received the princely sum of 12,000 rupees for composing a *paran* that pleased a patron: the "twelve thousand" (*bārah hazārī*) *paran*, which musicians still know and play.

THE TABLA

Evolution of the tabla

According to a popular legend, the poet-musician Amir Khusrau (1253-1325) invented the tabla by cutting a *pakhāvaj* in half to form the two-piece instrument that has become the most popular and widespread symbol of North Indian percussion. Yet pictorial evidence for the tabla emerges only from about 1745 onward, and the structure of the drums seems to change frequently until the early 1800s, when something recognizable as the modern instrument appeared. The *Muraqqa'-i Dihlī* 'Delhi Album', a contemporary view of musical life, genres, musicians, and instruments at the court of Emperor Muhammad Shah written in 1738, makes no mention of the tabla. The oldest hereditary lineage of tabla players traces its ancestry to Sudhar Khan Dharhi of Delhi, who probably flourished in the middle third of the 1700s. We can therefore assume with some degree of certainty that the tabla itself emerged in the early 1740s [see M USICAL I NSTRUMENTS: N ORTHERN A REA].
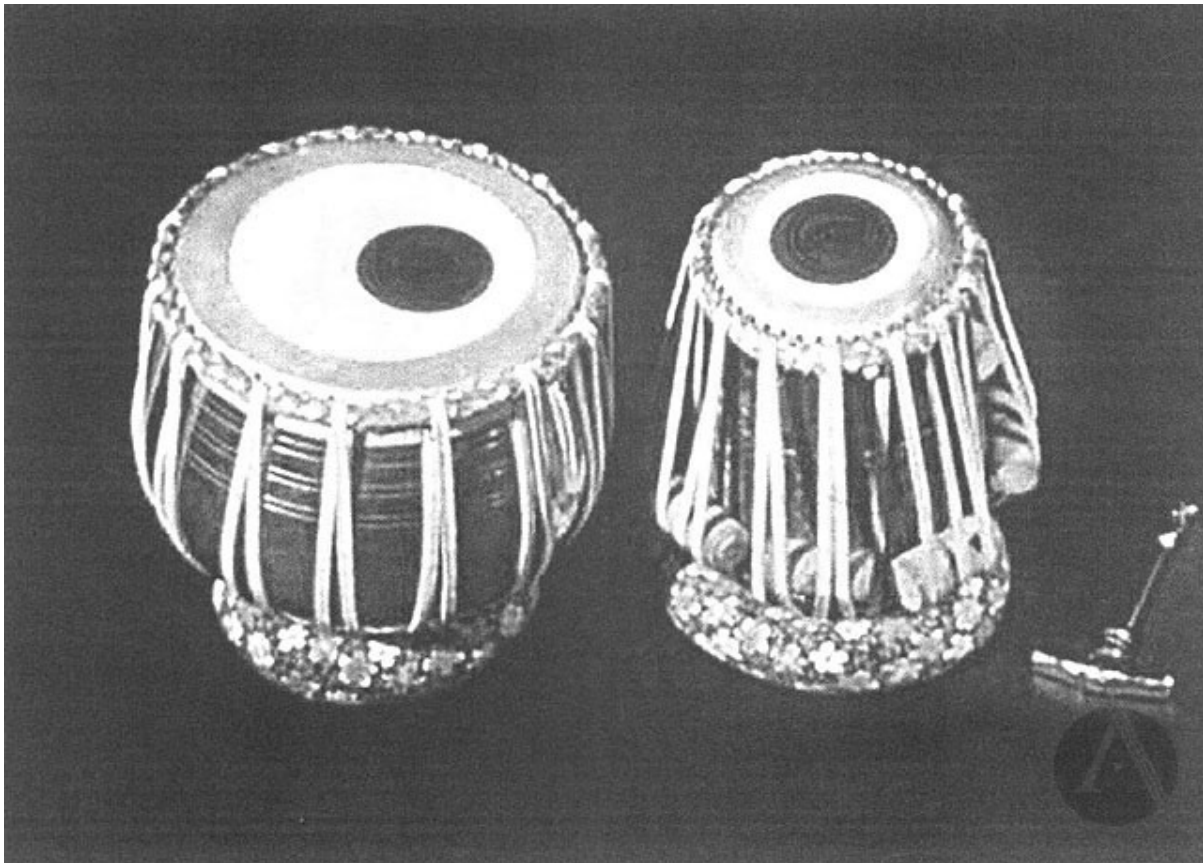
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The term *tablā* derives from an Arabic word for drum, *ṯabl*. It consists of two drums, known most commonly as the right (*dāhinā*) and left (*bāyān*.) drums (figure 6). The right drum has a slightly flared, closed cylindrical body carved from a single block of wood, the narrower end of which is partly hollowed. Its organological relationship to the *pakhāvaj* is undeniable, and it looks to all intents and purposes as if a *pakhāvaj* has indeed been chopped in half. The left drum is quite distinct, being a modified hemispherical kettledrum, commonly made of copper or brass. One can still find left drums made of clay, and this hints at their possible origin in the *naqqārā*, two shallow hemispherical clay kettledrums played with sticks (see figure 3). Rather than dough, the left drum has a permanent black spot (*siyāhī*) placed off center. The left drum, unlike the right, is not tuned precisely, but is adjusted to produce a low, resonating boom.

Whereas the *pakhāvaj* was played mainly by high-caste Hindus and sometimes even by the nobility, the tabla has had a more common identity. If Sudhar Khan Dharhi was indeed a member of the first tabla-playing family, then our clue to the drum's low status comes from the word *ḍhaṛhī* itself, denoting a type of low-class Muslim minstrel. In general, the minstrel was closely associated with female dancers, called nautch girls (*nāc*) by the British. This term is misleading, since the British rulers tended to group prostitutes with high-class courtesans, who had considerable skills in the arts of music, dance, and poetry. The British ethos profoundly affected the emerging middle classes, particularly in the latter half of the 1800s, when the

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1825

English language and a Western education marked an important road to success. Tabla players were regarded as social pariahs—a stigma difficult to shake off. Even today, the tabla has some distasteful connotations in more puritanical social circles.

Traditionally, most tabla players have been Muslims from hereditary occupational specialist families of low social status. Since about the 1870s, the quasi-caste term Mīrāsī has replaced the term Ḍharhī. The Hindu Kathak caste from eastern Uttar Pradesh (particularly Banaras), members of which have traditionally shared the same occupation as the Mīrāsī, has provided the only non-Muslim hereditary clan of tabla players. The *Ma'dan al-Mūsīqī* 'Mine of Music' of Hakim Muhammad Karam Imam (late

1850s) lists the names of many early players who appeared at the Lucknow court. It is highly likely that the repertoire and playing of the tabla have always been strongly influenced by those of the *naqqārā* 'kettledrum', the *pakhāvaj,* and a cylindrical drum known as the *ḍholak* (figure 7), which can all be seen providing accompaniment to vocal and instrumental music in paintings from the 1700s and 1800s.

For much of its early history, the tabla primarily accompanied *kathak* dance and courtesans' songs, particularly *ṭhumrī* and associated genres. Many photographs show players standing to play drums tied about their waists, or bound in cloth (figure 8). By the late 1800s, the tabla was becoming the principal percussive accompaniment for *khyāl* and for the sitar and sarod traditions. Yet the *pakhāvaj* and the *ḍholak* completely disappeared from these genres only at the turn of the twentieth century. Since then, the tabla has reigned supreme and has steadily risen in social prestige, first because it has taken on a greater role in the modern instrumental ensemble, and second because increasing numbers of nonhereditary high-caste Hindu musicians have become eminent performers on it.

FIGU
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instruments bound about them, accompanying female dancers, 1860s. Photo reproduced by

permission of the British Library, Oriental and India Office Collections.

Page Image

Sound and technique

Essentially, the range of sounds that can be made on the *pakhāvaj* can be produced on the heads of the tabla. There are two major differences in the playing traditions: first, lighter finger strokes predominate on the tabla, whereas on the *pakhāvaj*, heavier two- and three-finger strokes and full-handed strokes are more common; second, the left tabla drum can be made to produce a much wider range of sounds.

On the left head of the *pakhāvaj*, one basic resonant sound is possible, and no variation in pitch can be effected because of the use of fresh dough. So the sound *ge* is produced with all four fingers and the palm bouncing off the head. The left tabla drum has no dough, and thus the wrist can rest on the skin, apply pressure, and slide around to vary the pitch before and/or after the finger has struck the skin. (The black spot's being off center lets the player move his wrist in a greater range.) In addition, more rapid sequences of strokes are possible because individual fingers strike alternately; when combined with the possibility of adding inflection to the drum's resonance, a wide range of pitch and stress contours can be achieved. The results can be as subtle as the sound of the human voice.

The quintessential tabla sound is *tā* (or *nā*) on the right drum. A similar sound is played on the *pakhāvaj* with the full hand, yet on the tabla it is produced with the index finger ricocheting off the rim. It is characterized by a sharp crack. A more refined version of the same pitch, one that explores a different set of harmonics, is played by the same finger on the inner portion of the head between the rim and the black spot. The difference is an important one in the tabla aesthetic: tabla players differentiate between strokes played on the rim (*kinār* or *cān.ṭī*) and in the middle (*sūr* or *maidān*; an alternative nomenclature exists for all recognized parts of the drums). The predominance of, or preference for, one or the other can be a distinguishing stylistic trait.

Tabla talas

Sixteen-beat tītāl

The most commonly occurring tala in Hindustani music is *tīntāl*, comprising sixteen beats divided into four equal divisions. The usual version of the drumming pattern—called *ṭhekā* in tabla playing—that appears in books on Indian music is given in the subsection on the tala cycle. In that version, the syllable *dhā* dominates. Yet most musicians, when asked to recite the pattern, will say:

X nā dhin dhin nā
2 nā dhin dhin nā
O nā tin   tin   nā
3 nā dhin dhin nā

Some musicians will use the *dhā* version in slow tempo and the *nā* version (or some combination of the two) in fast tempo. Regardless, the *dhā* version more accurately reflects the way drummers think of the pattern because it clearly identifies the drum stroke *ge* on the left drum, identified by the phoneme /dh/. But the *ṭhekā* seems to contradict the clap-wave (*tālī-khālī*) structure of the tala: on beat 9, the gesture is the unstressed wave while the syllable is the emphatic *dhā*, and on beat 13, where the stressed clap returns, the syllable is the less emphatic *tā* (*nā*). It has been suggested that despite the sometimes conflicting theoretical-gestural structure of the tala, the drumming reflects four balanced phrases that feature a three-beat upbeat to a stressed downbeat. So instead of thinking in terms of *DHĀ dhin dhin dhā* (on beats 1 to 4), as many theorists would have us do, we should

really think of the phrases as *dhin dhin dhā DHĀ* (beats 2 to 5). The "empty" wave on beat 9 thus becomes more

Page Image an anticipatory signal, indicating that the next grouping (beats 10 through 13) is unstressed. The logic of this phrasing makes sense to the listener too, because Indian musicians tell audiences and students to listen for the return of the *ge* stroke on beat 14 as a means of locating where the music is with respect to the tala cycle. (The left drum stroke *ge* in combination with the right drum stroke *tin* results in *dhin*.) Beat 14 then becomes linked to the next stressed beat, the all-important beat 1.

Looking once again at the *tīntāl* pattern, we see an immediate difference between its simple drum-syllable vocabulary and the more complex *pakhāvaj* talas.

X	dhā	dhin	dhin	dhā
2	dhā	dhin	dhin	dhā
O	dhā	tin	tin	tā
3	tā	dhin	dhin	dhā

Apart from the inclusion or omission of the left drum, only two strokes are used: *tā*, played on rhe rim, and *tin* (otherwise known as *tā* or *nā*), on the inner drumhead. This fact, plus the phrasal structure of the pattern, suggest that the origins of *tīntāl* lie in patterns found in folk or semiclassical genres whose aesthetic is based far more strongly on what might best be termed a groove. Indeed, nineteenth-century music manuals refer to *tīntāl* as *qawwālī tāl*. (The term *tīntāl*—sometimes called *tritāl*—appears to date from the second half of the nineteenth century.) The Sufi vocal genre qawwali, known for its rhythmic grooves, influenced the classical *khyāl*. *Khyāl* compositions from the 1700s feature what we know now as *tīntāl*. The earliest compositions for sitar, the *masītkhānī gat* from the mid-1700s, are configured in sixteen beats. *Tīntāl* therefore probably emerged in the early to mid-1700s. It has always dominated instrumental music and fast-tempo *khyāl*, just as it has dominated performance on tabla. Until the current generation, tabla players only rarely performed solo in any pattern other than *tīntāl*.

Other talas

If *khyāl* was influenced by the light-classical music of qawwalis, then it was also undoubtedly influenced by, and was largely an imitation of, the classical *dhrupad*. Therefore, not surprisingly, *khyāl* adopted twelve-beat *cautāl*, the gestural structure of the characteristic *dhrupad* tala, for its own slow compositions. Yet since performers of *dhrupad* were almost certainly disinclined to share their tradition with outsiders, *khyāl* singers and their accompanists needed to develop a modified accompaniment, one that would function like that of its *pakhāvaj* counterpart while being distinct from it. The result was twelve-beat *ektāl*, a pattern that almost entirely contradicts the gestural structure of *cautāl*, because its inherent phrase and stress structures do not coincide with those of its parent. Some musicians substitute the syllable *tin* for *tū*.

X	dhin	dhin		
2	tū	nā		
3	dhā	ge	tira	kiṭa
O	dhā	ge	tira	kiṭa
O	kat	tā		
4	dhin	nā		

The pattern is better understood as two six-beat phrases, the second of which in large part mirrors

the first (some musicians substitute the syllable *tin* for *tū*):

X dhin   dhin
O kat   tā
O dhā ge tira kiṭa
3 dhā ge tira kiṭa
2 tū   nā
4 dhin   nā

In medium and fast speeds, the pattern has an almost dancelike quality, a kind of

Page Image cross-rhythmic groove, whose origins may once again have been rooted in folk and semiclassical drumming patterns. That groove is now only implicit in fast-tempo versions, yet the extremes of fast and slow tempos encountered in twentieth-century musical performance were probably rare or nonexistent in previous centuries. In some modern styles of *khyāl*, to present one cycle of twelve-beat *ektāl* can take almost a minute. In other words, slow-tempo *ektāl* has been slowed down greatly during the twentieth century.

Though all talas can be played on tabla, those specifically associated with the instrument are modified versions of *tīntāl* and *ektāl*. The tabla's equivalent of the *pakhāvaj* ten-beat *śūltāl* is *jhaptāl*:

X dhin nā 2 dhin dhin nā
O tin   nā 3 dhin dhin nā

Jhaptāl is clearly indebted to *tīntāl* and has the same four structural divisions. Seven-beat *rūpak tāl* (cited above) is also modeled on the drum strokes of *tīntāl* and is the tabla's answer to *tīvrā*.

For playing the tabla, only one version of the seven-, ten-, and twelve-beat cycles is available; yet this is not true for fourteen- and sixteen-beat talas, each of which has several versions. These structures seem to have arisen in response to the genre each accompanies. *Tīntāl* itself is associated both with medium and fast compositions in *khyāl* and with instrumental compositions such as *masītkẖānī*, *razākẖānī*, and *firozkẖānī gat*. Yet *tīntāl* is not played with slow *khyāl* in sixteen beats, except in *tīntāl* performances by the school of Jaipur and Alladiya Khan; these were probably per formed faster a century ago. Instead, *tilvāṛā* is used: its structure is the same as for *tīntāl*, and its syllables draw on both *tīntāl* and *ektāl*:

X dhā tira kiṭa dhin dhin
2 dhā dhā ge   tin   tin
O tā   tira kiṭa dhin dhin
3 dhā dhā ge   dhin dhin

Two versions of *tīntāl* accompany the *ṭhumrī* vocal genre: first, *panjābī tāl* (sometimes called *sitārkẖānī* when used with instrumental compositions influenced by *ṭhumrī*):

X dhā ge dhin —nā dhā
2 dhā ge dhin —nā dhā
O dhā ge tin   —nā tā
3 tā   ge dhin —nā dhā

Page Image and second, *cancār tāl*:

```
X dhā —    dhin —
2 dhā dhā tin    —
O tā   —    tin    —
3 dhā dhā dhin —
```

Three fourteen-beat talas are commonly used in playing tabla. Slow *khyāl* is accompanied by *jhūmrā*:

```
X dhin — dhā tira kiṭa
2 dhin dhin   dhā ge   tira kiṭa
O tin   — tā    tira kiṭa
3 dhin dhin   dhā ge   tira kiṭa
```

Faster *khyāl* compositions resort to *āṛācautāl*, an extended version of *ektāl* (hence the reference to the *pakhāvaj* equivalent, *cautāl*):

```
X dhin       tira kiṭa 2 dhin nā
O tū          nā         3 kat   tā
O tira kiṭa dhin       4 nā     dhin
O dhin       nā
```

And in *ṭhumrī*, the fourteen-beat tala *dīpcandī* is employed. Confusingly, it is sometimes also called *cān.car*, being just a compressed version of its sixteen-beat counterpart:

```
X dhā dhin —
2 dhā dhā  tin    —
O tā    tin   —
3 dhā dhā  dhin —
```

Dādrā has a six-beat cycle used for a style of *ṭhumrī* set specifically in this tala. It too is indebted to the syllables of *tīntāl*:

```
X dhā dhin nā
O dhā tin   nā
```

Dādrā is sometimes used for lighter and more popular genres, such as ghazal, *gīt*, and film songs. Even more common here, though, is the eight-beat *kaharvā*. Many drum-pattern types come under the general rubric of *kaharvā*, and all represent essentially a different kind of groove. The most common pattern of stresses for *kaharvā tāl* is 3 + 3 + 2, with heavier accents on the first and third subgroups:

```
X dhā dhin nā    tin
O nā  ka   dhin nā
```

Tabla repertoires

Theme and variations

When one thinks of Hindustani music, one often thinks of improvisation, but many musicians in North India claim their performances contain little improvisation. This is true of most solo tabla playing. Performers have great autonomy in the choice of

Page Image repertoire. They may well decide on the spur of the moment to improvise on some

material in a way not previously thought of, but most of what is played will have been preconceived and thoroughly practiced. This is true even of tiny flourishes inserted before the first beat of the tala (*mukhṛā*): though they appear to be improvised, their consistency and frequent repetition suggests they are mostly memorized patterns. Theme-and-variation compositions offer the player an opportunity to improvise on a rhythmic phrase of strokes; but equally the player may have rehearsed hundreds of variations, and may simply choose from what is already prepared.

There are many types of theme-and-variation compositions, but most fundamental to the training of rabla players is *qā'ida* (Hindi *kāydā*), from an Arabic word meaning "rules" or "system." All tabla students begin with this composition; it continues as a staple of training at all levels, and in most styles of playing it features prominently in solo performance. In its simplest form, *qā'ida* is a phrase that reflects itself, as in this well-known piece from Delhi:

 dhā dhā ti ṭe dhā dhā tī nā

 tā tā   ti ṭe dhā dhā dhī nā

The pattern is elementary and square, employing few syllables: *dhā*, the indispensable right-left combination of *tā* and *ge; ti ṭe*, the middle and index fingers playing crisp, dry strokes on the center of the right drum's black spot; *tī* (*tū* in some styles), the low-pitched ricochet on the right drum. Correlations are clear between voiced strokes (*dhā, dhī*) and unvoiced (*tā, tī*), and whereas the first phrase moves from voiced to unvoiced, its reflection moves back from unvoiced to voiced. The swing between these polarities is important—from phrases dominated by open, resonating strokes on the left drum to phrases with closed, nonresonating strokes. In a general sense, they reflect the swing from the first beat of the tala to the wave (on beat 9) of the *tīntāl* cycle, whose foursquare metric arrangement is ideal for the presentation and development of the rhythmic phrases of the *qā'ida*. The original model for *qā'ida* may well have been a form called *laggī*, commonly used when accompanying *ṭhumrī* and other light vocal styles, and bearing traits similar to those of the *qā'ida* as given above.

Qā'ida probably first appeared during the 1800s, and was almost certainly a short theme like the one above. The twentieth century has seen an expansion of the *qā'ida* concept to ever larger and more complex themes, some with multiple layers in a variety of stroke densities. Even so, the best-known classical models developed in the early years of the twentieth century, like the following, which was composed by the famous Delhi tabla player Natthu Khan (1875-1940):

X dhā ti ṭe   dhā ti   ṭe dhā dhā

2 ti   ṭe dhā ge   tī   nā ke   nā

O tā   ti ṭe   tā   ti   ṭe dhā dhā

3 ti   ṭe dhā ge   dhī nā ge   nā

Doubled in density from two events per beat to four, this *qā'ida* might simply be played twice per tala cycle; yet it would be more commonly expanded into four phrases, matching the four-division structure of *tīntāl*:

X dhāti ṭedhā tiṭe dhādhā tiṭe dhāge dhīnā gena

2 dhāti ṭedhā tiṭe dhādhā tiṭe dhāge tīnā kena

O tāti ṭetā   tiṭe tātā   tiṭe tāke   tīnā kena

3 dhāti ṭedhā tiṭe dhādhā tiṭe dhāge dhīnā gena

Page Image

With these patterns established as the fundamental structure, the tabla player begins to expand (

prastār or *vistār*) into variations. The rules for improvisation are rarely explicit; students just copy their masters, much as infants copy their parents' speech, learning to be independent as they gain competence. However, three facts are clear: (1) only syllables used in the theme are permissible in the variations; (2) at the end of the first half of the fundamental structure, a fragment of the original phrase must conclude the variation (minimally this might be *tiṭe dhāge tīnā kena*); (3) whatever is played in the first half must be reflected in the second with the appropriate open-closed (resonating-nonresonating) transformations of strokes. Numerous aesthetic and technical considerations distinguish a good variation from a bad one. Improvisation on a *qā'ida* is a skill that takes time to develop.

Some of Natthu Khan's own variations were quite simple:

 dhā— —dhā tiṭe dhādhā tiṭe dhāge dhīnā genā

However, other strategies may involve the permutation (*palṭā* literally 'inverted') of segments of the phrase, the substitution of syllables (like replacing *dhādhā* with *tiṭe*), and the repetition of small segments (*bal*). The following is an example of the latter technique:

 X dhāti ṭedhā tiṭe dhādhā tiṭe —dhā tiṭe dhādhā
 2 tiṭe —dhā   tiṭe dhādhā tiṭe dhāge tīnā kena
 O tāti ṭetā   tiṭe tātā   tiṭe —tā   tiṭe tātā
 3 tiṭe —dhā   tiṭe dhādhā tiṭe dhāge dhīnā gena

In performance, a tabla player may present just a few variations or a great many, but averaging eight to twelve. The sequence would conclude with a cadential formula (*tihāī*) constructed out of phrases from the *qā'ida*. The *tihāī* is to the tabla what the *tīyā* is to the *pakhāvaj*: a thrice-repeated phrase, designed to end on the first beat of the tala.

Similar techniques pervade the remaining theme-and-variation compositions, including a slow introduction that frequently opens a performance (peshkār) and different forms of what is most commonly called *relā*. In some styles of drumming, *relā* comprises sequences of rapid strokes, like *tira kiṭa taka* and *dhira dhira giṛa naga*, which are designed to be played at lightning speeds. In other styles, the composition is more subtle: the basic structure (*ṭhā* literally 'place, station') is a simple rhythmic idea, maintained as an outline in the *relā* as the drummer uses rapid strokes to fill the gaps. This realization is evident in the simple Lucknow *relā* in figure 9.

Outline (*ṭhā*)   Elaboration   FIGU

dhā tit dhā dhi	dhā – ti ra ki ṭa ta ka
na dhin dhā tit	ki ṭa ta ka dhin ga na ga
dhī na dhā dhī	dhin – ti ra ki ṭa ta ka
na dhin dhā tit	ki ṭa ta ka dhin ga na ga

Relā
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outli
ṭhā)

dhā – – – dhin – ti ra

dhā – ti ra ki ṭa ta ka

dhā – – – dhin – ti ra

dhā – ti ra ki ṭa ta ka

subsequently filled in with rapidly drummed strokes.

Page Image

Fixed compositions

In Indian artistic traditions, knowledge can be considered wealth. It can function quite literally as wealth when a bride's family gives sets of compositions to the groom's family as part of a dowry (the dowry system, though ruled illegal in 1961, is still practiced). Those compositions may represent the knowledge of a tradition going back several generations, and musicians would not give them away lightly. Examples of dowries in the past have included fifty *gat* or one hundred *paran*.

If the fixed *pakhāvaj* composition par excellence is the *paran*, then for the tabla it is the *gat* 'movement, gait'. Just as the word *paran* can signify any number of structures, so too can gat. The modern gat is both fixed and extended; the earliest examples are simple two-part phrases, which almost certainly influenced the *qā'ida*'s development into a more complex and extended form around 1900. Certain types of simple *gat* must once have been patterns designed for variation, and would probably be mistaken for *qā'ida* nowadays. In some remaining styles of *gat*, variation is possible, but these usually mix two types of composition, as in *gat-qā'ida*.

The following are three compositional strategies involving *gat*.

- The varied two-part *gat*. The composition from Lucknow shown below bears a striking resemblance to the *paran* given above in the section on *pakhāvaj* repertoire. In alternative versions of this *gat*, the phrase *dhī ne dhī nā ge na* is replaced with *ka tā ga dī gi na*, making it even closer to the *pakhāvaj* model. Here, the second half of the composition reflects the first half, with slight variation at the beginning of the repetition.

X dhā — —	ge nā ga ta ki ṭa	ge nā ga
2 dhā tra ka dhi ki ṭa	dhī ne dhī nā ge na
O nā gi na	nā gi na ta ki ṭa	ge nā ga
3 dhā tra ka dhi ki ṭa	dhī ne dhī nā ge na

- The four-part *gat*. In this style, each phrase concludes in an identical manner. In this Lucknow composition, the second line offers a permutation of the first, whereas the other lines ate unrelated. Alternative approaches may include the setting of one or more lines in different densities of syllables:

X giṛa	naga	tiṭe	tiṭe	giṛa naga dhīn.ga naga
2 tiṭe	giṛa	naga	tiṭe	giṛa naga dhin.ga naga
O dhā—	giṛa	naga	dhā—	giṛa naga dhīn.ga naga
3 dhira	dhira	dhira	dhira	giṛa naga dhīn.ga naga

- *Akāl gat*. *Akāl*, literally 'untimely, premature', signifies a *gat* that ends before the first beat of the tala. In common practice, *dhā* is never the final syllable; rather, kat or *dīn* feature prominently, as in this *gat* from Lucknow:

Page Image

X dha —	— dīn.	— ga	dīn. —
2 nā gi	na nā	gi na	dhi ne
O ta ki	ṭa dhā	ti ṭe	dhi ne
3 dhā dhā	ghe ge	nā ga	tā —
X tin na	tā tin	na tā	tin ne
2 tin ne	nā rā	— na	dhi ne
O ta ki	ṭa dhā	ti ṭe	nā nā
3 kiṭa taka	dhira dhira	kiṭa taka	dīn. —

The phrase structure is less bound to the divisions of the tala (*vibhāg*) than in the other kinds of *gat* encountered above, and though some repetition occurs, the general logic seems to be to add segments that simply sound good and work technically. This additive style is sometimes called the progressive *gat*, and phrases may be made to finish before, on, or even after the first beat of the tala. These are technical showpieces, played rapidly; connoisseurs earnestly anticipate and appreciate them.

Borrowings

It has already been seen that many fixed compositions for tabla owe their origins to *pakhāvaj* pieces. Including *pakhāvaj* strokes (such as *tiṭe katā gadī gena, dhāge tiṭe gadī gena*, and even *dhuma kiṭa*) in tabla pieces is a prime indicator of borrowing. Some compositions are direct translations, and others were merely inspired by *pakhāvaj* repertoire and technique. Yet it is entirely possible that successful tabla compositions found their way back into *pakhāvaj* practice. In general, any tabla piece modeled on a *pakhāvaj* paran without a cadential formula is termed a. *gat* (or the term *paran*

might even be retained in some traditions), while one modeled on a *paran* with a cadential formula is termed a *ṭukṛā*. The following is a short example of the latter:

X dhiṭe dhiṭe　　dhāge tiṭe kradhā tiṭe　dhāge tiṭe

2 dhāge nadhā gadī gena　nāge tiṭe　　katā katā

O katā —dhā　　dīntā katā dhā— katā　katā —dhā

3 dīntā katā　　dhā katā　katā `— dhā dīntā katā

X dhā

Kathak dance repertoire has been a rich source of material for the tabla. *Paran* and *ṭukṛā* abound in dance, often with elaborate cadential formulas, some of which are designed to accompany the dancer as she or he pirouettes nine times, or three times nine. The logic of *kathak* syllables is really the logic of the *pakhāvaj*, not of the tabla; owing to a number of sociocultural differences among regions of North India, some tabla traditions adapted *pakhāvaj* and *kathak* ideas more readily than others.

The tabla tradition has always been most flexible and adaptable, absorbing not only *pakhāvaj* and *kathak*-dance elements, but also the techniques and repertoire of the two other drums used formerly in classical and semiclassical performance: the *ḍholak* 'cylindrical drum' and the *naqqārā* 'kettledrums'. The main reason for the demise of these drums has been the phenomenal rise of the tabla. Traces of their patterns of strokes permeate modern performance on the tabla: the *dhātiṭe* element of *qā'ida* originates in the *ḍholak* tradition, as do *ghege nāga* and *nāgina nāgina* strokes, used frequently in *gat; naqqārā* practice gave rise to the *dhīnā genā* and *tīnā kenā* elements in *qā'ida*, and to the *giṛa naga* strokes found in *gat*. Where the *ḍholak* and the *naqqārā* once dominated (essentially Delhi and western Uttar Pradesh), the combined influences of these drums resulted in a rich body of *qā'ida*, featuring the *dhātiṭe* plus *dhīnā genā* syllables. The *pakhāvaj* dominated in eastern Uttar Pradesh, giving rise to a greater body of *paran*-inspired fixed compositions. Some centers, such

Page Image as Lucknow (widely known for its *kathak* tradition), felt strong influences from both directions, and the result was an unusually rich repertoire of tabla *gat* that show strong influences from all three drums.

Tabla accompaniment

Being multifaceted, the tabla is naturally ubiquitous in North India. It accompanies all kinds of music from folk to classical, including dance, instrumental, and vocal genres. The only tradition from which it is absent is the *dhrnpad*, a vocal genre. The role of the tabla changes greatly in each genre it accompanies.

Vocal music

In *khyāl*, the tabla plays the part of timekeeper. The soloist grants little opportunity for rhythmic exchange, and only with the presentation of a fast composition would a tabla player have two or three tala cycles to present a short, fixed composition. Yet there is an art to vocal accompaniment that eludes many, and it lies in the subtlety of presenting the drumming pattern and the ability to fill small gaps with fitting flourishes of strokes that maintain the mood and momentum created by the singer.

The same is true for *ṭhumrī*, though here, near the end of a piece, the tabla player has a chance to play short, composed sequences (*laggī*) at high speed. Whatever the tala of a composition, the final section shifts into moderately fast *tīntāl*.

Dance

Opportunities for short tabla solos abound in modern *kathak* (allowing for the dancer's changing costumes, taking brief breaks, and other such interruptions), yet in this context the tabla player mainly shadows the dancer. Most of a dance performance comprises set pieces, such as *paran* and *ṭukr.ā*: often, the dancer first recites the dance syllables (*bol* literally *paṛhant* 'reading'), and then dances this rhythm. The drummer will offer the drumming pattern as an accompaniment to the recitation, to verify the rhythmic character of the dance and ensure that it fits with the tala; then the drummer will accompany the dancer's movements with the syllables of the piece.

In expressive dance, which enacts a story or creates a caricature, the role of the tabla is often mote subtle: the drummer uses many rhythmic devices to accompany different movements (such as the characteristic walks of the Hindu deities Radha or Krishna), or to suggest programmatic effects (such as running water, thunder, a stone being thrown, a pot breaking).

Instrumental music

Much evidence suggests that even in the early 1900s the role of the tabla in instrumental accompaniment resembled that in vocal music. Yet as the tabla has gained social prestige and musical importance, so has its role expanded from mere timekeeper to contributor in the creative process. This change came with Allauddin Khan, who began a kind of ritualized exchange of question-answer (*savāl-javāb*) between soloist and accompanist: whatever the soloist played rhythmically, the accompanist would be expected to mimic, and the segments would progress from long to short, finally merging in a frenetic, melodic-percussive joint conclusion (figure 10). Allauddin's son Ali Akbar Khan and his disciple Ravi Shankar continued this trend. Shankar developed a style of presentation that, during the raga, allowed the accompanist to perform several solo segments, each lasting only a few cycles. This style of performance, alternating between focus on the drummer and focus on the soloist, is now the norm.

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epitomizes the modern tendency toward greater rapport between soloist and accompanist. Photo courtesy Ali Akbar College of Music, San Rafael, California.

Tabla-playing traditions

The first family to specialize in tabla playing was that of Sudhar Khan Dharhi of Delhi, probably beginning in the 1740s. Sudhar Khan belonged to an endogamous clan of lower-class Shia Muslims who had converted from Hinduism to Islam at some indeterminate point in the past—a strategy aimed at social mobility and patronage from wealthy Muslim courts. Delhi was a thriving cultural center in the early 1700s, and the reign of Emperor Muhammad Shah (1719-1748) had seen lavish court patronage of music, even after the sack of the city in 1739. Yet Delhi around 1750 was in economic turmoil, and many musicians began turning toward local courts, such as Jhajjar to the west of Delhi and Faizabad-Lucknow to the east. Evidence suggests that Shia Muslims from the Delhi tabla-playing clan migrated to these centers in the 1760s or 1770s.

The court of Nawab Asaf ud-Daula moved, on his accession in. 1775, from Faizabad to Lucknow. Until his death (1797), Lucknow witnessed massive investment in the arts and architecture. In this climate, Bakhshu Khan Dharhi established himself as one of the greatest tabla players of his age and the head of a breakaway lineage. During the first half of the 1700s, tabla players who had previously migrated to Jhajjar moved to Lucknow, so abundant were the opportunities for patronage.

Around that time, both the Delhi and Lucknow families spawned new traditions of tabla playing. Each taught Sunni Muslim students: in Lucknow, Bakhshu Khan and his son Mammu Khan taught Haji Vilayat Ali Khan of Farrukhabad, a village in western Uttar Pradesh; in Delhi, Sudhar Khan's great-grandson Shitab Khan taught the brothers Kallu and Miru Khan of Ajrara, a village near Meerut and Delhi. Ram Sahai, a Hindu from Banaras, learned from the Jhajjar lineage in Lucknow. A further lineage, seemingly unconnected to any of these, developed in Lahore (in the Punjab), probably as a Muslim branch of a Hindu *pakhāvaj* tradition.

Each drumming tradition developed its own distinct style of playing (*bāj*). The Delhi style, inspired by the *naqqārā* and the *ḍholak*, featured delicate fingerstrokes, ideal for the presentation and development of theme-and-variation compositions. Delhi *gat* tended to avoid *pakhāvaj*-style strokes, and favored playing on the rim. The Ajrara style was similar, though its players had a greater tendency to use the ring finger on the right tabla drum to supplement Delhi's use of the index and middle fingers. As for repertoire, many traditional Ajrara compositions are set in triple time. Lucknow and Farrukhabad pieces featured a strong mix of rim and inner-drumhead

Page Image syllables and were well known for the variety and complexity of their *gat*. Haji Vilayat Ali Khan was particularly famous as a composer, and many of his compositions survive. The Banaras and Punjab styles owed much of their technique and repertoire to the *pakhāvaj*; later, however, the Punjab tradition appears to have adopted some features of the Delhi style.

There has been a tendency to think of tabla styles as either Western (*pachvān.*, that is, Delhi and Ajrara) or Eastern (*pūrab*, that is, Lucknow, Farrukhabad, and Banaras). This categorization is misleading, since it fails to differentiate style beyond a general tendency either to avoid or include *pakhāvaj* technique and repertoire. Furthermore, the name Purab is commonly used to denote another tradition stemming from Munir Khan (?1870s-1938), who was said to have learned to play the tabla from Ajrara drummers. Purab is also sometimes called Laliyana (another village near Meerut), continuing the trend of naming traditions after their founders' ancestral homes.

Around 1900, tabla players began calling their traditions *gharānā* 'family, clan'. *Khyāl* singers first used the term in the late 1800s to identify their families as having common traits: distinct and unique

musical styles, family cores of at least three generations, charismatic and famous personalities, and a living authority as leader (*khalīfa*). Tabla players, realizing their families had the same basic ingredients, adopted this strategy to help raise drummers' social prestige by emulating the social organization of solo singers. Within the world of classical musicians, being associated with a *gharānā* conveys a sense of prestige, since it implies a long musical pedigree.

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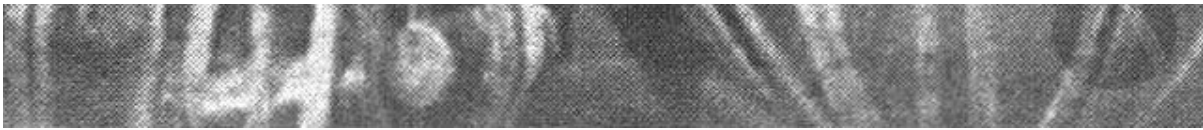
The twentieth century has seen many great tabla players rise to prominence. In 1926, Abid Husain Khan of Lucknow (1867-1936) became the first professor of tabla at the Bhatkhande Music College of Lucknow. His contemporary was the great tabla player Natthu Khan of Delhi (1875-1940). Ahmad Jan Thirakva (?1880s-1976) achieved an unprecedented level of fame for his technical prowess and compositional skills (figure 11); he was known, too, for his rivalry with Habibuddin Khan of Ajrara (1899-1972). Alla Rakha of Lahore (Punjab *gharānā*, b. 1919) and Kishan Maharaj of Banaras (Banaras *gharānā*, b. 1923) have been notable for their extraordinary rhythmic inventiveness. Yet as the century has progressed, more and more nonhereditary musicians have established themselves, now easily outnumbering the hereditary musicians within the tabla *gharānā* system.

RECENT DEVELOPMENTS IN INDIAN RHYTHM

New talas

The sixteen-beat *tīntāl* has long dominated Hindustani music, especially in performance on tabla. However, in recent decades influential musicians, particularly Ravi Shankar and Ali Akbar Khan, have stimulated an interest in alternative talas, an interest that has filtered through to the solo tabla repertoire. Most material designed to be played in alternative talas derives from preexisting *tīntāl* models. For instance,

Page Image the varied two-part *gat* notated above in *tīntā* is easily transformed into a ten-beat *jhaptāl* by the addition of a single phrase (in parentheses below) and the repetition of the phrase *dhā tra ka, dhi ki ṭa*:

X dhā — —   ge nā ga

2 ta ki ṭa   ge nā ga   dhā tra ka

O dhi ki ṭa   dhī ne dhī

3 nā ge na   nā gi na   nā gi na

X ta ki ṭa   ge nā ga

2 dhā tra ka dhi ki ṭa   (ghin — ñ

O rā — na)   dhā tra ka

3 dhi ki ṭa   dhī ne dhī nā ge na

Similar additions and subtractions can result in all manner of possibilities, and there are few restrictions, since musicians appear to pay little regard to maintaining the divisional structure (*vibhāg*) of a tala; rather, they consider a tala primarily a number of beats, not a subdivided structure.

Around 1900, musicians showed considerable interest in searching out older, complex talas. The personal notebooks of Abid Husain Khan bear this out. Masit Khan of Farrukhabad modeled his own invention, *nasruk tāl*, on an older, rare *pakhāvaj* tala called *nishorūk*. He kept neither the drum syllables nor the structural division, just the target of nine beats. *Nishorūk tāl*:

X dhin   na   ki ṭa ta ka

2 dhu ma ki ṭa ta ki ṭa ta

3 kā

became *nasruk tāl*:

```
X  dhī          nā
O  dhī na       kat
2  dhī— —kra dh̄ nā
3  dhā ge       dhī nā kat tā
```

Fractional talas are a twentieth-century novelty. Latif Ahmad Khan of Delhi (1941-1990) created a tala of five and a quarter beats. The logic for its construction was a division of three beats, a division of three half-beats, and a final division of three quarter-beats. In his Hindi textbook on the tabla, entitled *Tāl Prakāsh*, Bhagvat: Sharan Sharma notated *kalāvatī tāl* (1981); this structure was apparently created to match a *gat* in nine and a half beats composed by the Bombay All India Radio sirarist Baburao Kulkarni:

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X  dhī — nā —
2  dhī — dhī —    nā —
O  tī —   nā —
3  dhī nā dhin tira kiṭa
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The final division features *dhī nā dhin* as eighth notes and *tira kiṭa* as sixteenth notes.

There are no limits to creativity in inventing talas. Players increasingly produce imaginative new formulas and dig up obscure talas no one else has managed to find.

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New trends in drumming

Paralleling the movement toward different and more complex talas is a general movement toward increasingly complex rhythmic play (*laykārī*). The solos of Ahmad Jan Thirakva, arguably the greatest tabla player of the twentieth century, exhibit an almost complete absence of complex rhythmic divisions; his playing is foursquare, with phrases that rarely defy the divisional structure of *tīntāl*. Such an approach would be unusual nowadays, since the aesthetic of drumming has shifted to complex rhythms, often at the expense of compositional integrity. Where substance and rhythmic complexity combine (for instance in the playing of Alla Rakha), the result can be as mind-boggling as it is exhilarating.

Alla Rakha's son, the modern superstar Zakir Hussain (b. 1951), has been largely responsible for experimentation with jazz and pop fusion, as with the group Shakti. The percussionist Trilok Gurtu has created his own worldbeat-jazz fusion drumming approach, involving the tabla as a component of his sound. Jerry Leake has scored compositions for drum set based on tabla drumming. The tabla has also found its way into contemporary art music, as in *Stedman Doubles* for clarinet and percussion (1956, revised 1968) by the British composer Peter Maxwell Davies. In *Lahara* (1977), the percussionist Bob Becker scored elements of the repertoire of his teacher, Sharda Sahai of Banaras, for solo drum with accompaniment by drone and melodic instruments (*lahrā* is the cyclical melody used to accompany a tabla solo). Becker has written for tabla solo and Western percussion in *Palta* (1982) and for drum solo imitating tabla in *Mudra* (1990).

Tabla ensembles first appeared under the tutelage of the Calcutta teacher Jnan Prakash Ghosh, and his student Shankar Ghosh continued the trend. The material featured multiple tablas playing the same pieces, various sounds in counterpoint, heightened use of verbal drum-syllable presentations as an art in itself, and the tuning of several right-tabla drums to form a pitch row (*tablā tarang*). (In extreme cases, other musicians have used *tablā tarang* to perform ragas.) The tabla-ensemble concept is being continued and developed in North America by Ritesh Das and his Toronto Tabla

Ensemble.

SOURCES AND FURTHER READING

Little has been written on the *pakhāvaj*, and recordings of solo performances are rare. An exception is Raja Chatrapati Singh (1989), whose recitations and performances became legendary in his lifetime. In accompaniment, the *pakhāvaj* can be heard on the vocal *dhrupad* recordings featuring members of the Dagar or Mallick families.

Noteworthy literature exists on the tabla, much in Indian languages. In English, Rebecca Stewart's doctoral dissertation (1974) laid the foundation for modern studies of tabla. Stewart investigated the technical origins of various stylistic schools and analyzed the repertoire and the structure of individual types of composition in detail. Robert Gottlieb (1993) has provided recordings and extensive transcriptions of six tabla solos representing the *gharānā* traditions of Delhi (Inam Ali Khan), Farrukhabad (Keramatullah Khan), Lucknow (Wajid Husain Khan), Banaras (Kishan Maharaj), Ajrara (Habibuddin Khan), and Punjab (Alla Rakha). James R. Kippen (1988) has offered a cultural analysis of the Lucknow tabla *gharānā* through a study that focused on its *khalīfā*, Afaq Husain Khan (1930-1990), and its repertoire; both Afaq Husain and his son Ilmas Husain Khan provide solos on accompanying cassette. Kippen (1988, 1989) and Daniel Neuman (1990) have provided information on the social organization of tabla players. David Roach (1972) and Frances Shepherd (1976) have written on the Banaras tradition, and Gert-Matthias Wegner (1982) has covered the Laliyana *gharānā*. Both Shepherd and Wegner notate extensive repertoires.

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Commercial recordings of solo tabla playing abound on LP disk, cassette, and compact disc; most of the twentieth-century masters mentioned above are represented as both accompanists and soloists. Of particular interest are LP recordings of Ahmad Jan Thirakva performing with his contemporaries such as Amir Hussain Khan (Laliyana-Purab *gharānā*; 1968, 1969). On cassette are fascinating performances by Keramatullah Khan (?1980s), Afaq Husain Khan (1991), and Shanta Prasad (Banaras *gharānā*; 1988). The number of compact-disc recordings is growing rapidly. Notable among them are those of Nizamuddin Khan (Laliyana-Purab; 1994) and Kishan Maharaj (1993). Alia Rakha has made many solo recordings (1989) and duets with his son Zakir Hussain (?1980s, 1991). Zakir Hussain (1987) and Swapan Chaudhuri (Lucknow *gharānā*; 1993a, 1993b) both live in California and have produced solo recordings of excellent quality, as has Anindo Chatterjee (Calcutta, a student of Jnan Prakash Ghosh; 1992).

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Karnatak Tala

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