Implicit *Rāga* Knowledge in the Kathmandu Valley[1]

Richard Widdess

BACKGROUND: *RĀGA* IN SOUTH ASIA

The term *rāga* has been a central concept of the theory and practice of South Asian art-music for over a millennium. Theory has been transmitted primarily through written texts, practice through oral tradition, with the latter channel normally considered the more authoritative. In both, the individuality of a *rāga* rests on a combination of melodic features, including scale structure, characteristic motives and phrases, strong and weak or omitted pitches, and ornamentation, and also on the aesthetic experience to which these melodic features give rise, nuanced by extra-musical meanings such as time associations and visual imagery. Performers, teachers and theorists have extensive explicit—that is, verbal—knowledge of such factors (Jairazbhoy 1971; Powers 1971; Widdess 1995; Bor 1999; Powers and Widdess 2001; Leante 2009; etc.).

The term *rāga* is also encountered in many traditions outside the urban, classical music world, because local and cross-regional musical systems have informed each other over many centuries (Widdess 1993). *Rāga*-like melody-types have been documented, for

example, in Kashmir (Pacholczyk 1996), Bengal (Capwell 1986), Gujarat (Thompson 1995), and rural Nepal (Tingey 1994). In such regional traditions, performers seldom discuss the structure of *rāga* in explicit technical language. It is unclear, therefore, whether the concept of *rāga* functions in the same way in classical and non-classical traditions, and the mechanisms of historical transmission between regional and classical traditions remain largely undocumented.

A valuable opportunity for investigating these questions is provided by the Newar ethnic group resident in the Kathmandu Valley, Nepal. In this culture, song melodies are attributed to *rāgas* in several genres of ritual or devotional music, including tantric Buddhist ritual songs (*caryā*: Widdess 2004), Indian-style *rās bhajan* (Grandin 1989) and Hindu-Buddhist temple singing (*dāphā*) (Grandin 1989 and 1997; Widdess forthcoming a, b). In the last case, evidence is emerging for the transmission of musical tradition from elite court society, and ultimately from India, to the largely farming community in which *dāphā* is currently performed.[2]

Today, groups of Newar men of the farmers' or other middle- or low-ranking castes gather at temples and wayside shelters in the early mornings or evenings to sing *dāphā* songs in praise of a variety of Hindu and Buddhist deities (Figure 1). The texts of the songs, contained in manuscript songbooks,[3] are attributed to Newar kings of the seventeeth and eighteenth centuries, and to medieval Indian poets such as Jayadeva (twelfth century), and are in a variety of languages: chiefly Newari, but also Sanskrit, and

---

[2] There is abundant evidence for a rich musical culture, based on concepts of *rāga* and *tāla*, at the Newar courts in the seventeenth and early eighteenth centuries, continued by some members of the succeeding Shah dynasty. See for example, Wegner and Widdess (2004), Grandin (1997).

[3] The manuscript songbooks in daily use today are probably not more than fifty to one hundred years old, but were copied from earlier manuscripts of indeterminate date. The Kathmandu National Archive has a number of similar manuscript songbooks and poetry collections going back to the seventeenth century, when it is believed that the *dāphā* tradition began.

the Maithilī dialect of Hindi (formerly the court language of the Newar kings). Each song is ascribed in the songbooks to a particular *rāga* (*rāg*) and one or more musical meters (*tāla, tāl*). About seventy different *rāgs* are mentioned in songbooks, many of which resemble in name North Indian classical *rāgas* of the seventeenth or eighteenth centuries;[4] but few singers know more than half that number today, and many songs in the songbooks are no longer sung.

Dāphā singers rarely have any musical training other than their training in *dāphā* itself and sometimes other genres of Newar traditional music (as described in Wegner

---

[4] In this respect, as in others, *dāphā* seems to be a younger tradition than that of *cacā*, Newar Buddhist tantric songs, which apparently originated around the eleventh century in India (Widdess 1993). Unlike *cacā*, which are traditionally only performed in secret rituals by Buddhist priests, *dāphā* songs are sung in public by singers of non-priestly castes. The training of *dāphā* singers and accompanists, however, takes place in secret, because the knowledge of *rāgas* and songs, as of music generally in Newar society, is considered esoteric.

1986). They have no vocabulary to describe the structure of individual *rāgas*—not even scale-degree names. But they can define a *rāga* musically, by singing a short unmetered melody that is unique to that *rāga*, the *rāg kāyegu* (lit. "taking [up] the *rāga*"). The appropriate *rāg kāyegu* melody is invariably sung, using non-lexical syllables, by one or two solo singers, before the start of each song. Its function, according to the musicians, is to invite the gods to dance invisibly in the open space around which the musicians sit, while the subsequent song is being sung (Widdess forthcoming a). This function, I suggest, is of the greatest importance for understanding the structural characteristics of *rāga* in the Kathmandu Valley.

RĀGA AND SONG MELODIES

In an important article by Ingemar Grandin (1997) entitled "Rāga Basanta and the Spring Songs of the Kathmandu Valley. A Musical Great Tradition Among Himalayan Farmers?" he analyzes and compares twelve Newar devotional songs ascribed to the *rāga Basanta*, a *rāga* of the Spring season. Grandin argues that they show a *rāga*-like structural coherence; that is, they employ a common set of melodic phrases and pitch-emphases, even though they do not all employ the same scale.[5] Grandin suggests that the method of composition from stock phrases shown by these melodies represents a musical Great Tradition of Indian origin, mediated through the court culture of the Malla dynasty (1200s–1769) and Shāh dynasty (1769–2008), and preserved today among the farmers of the Kathmandu Valley.

---

[5] Grandin's argument and conclusions are strikingly similar to those of Thompson (1995), who analyzed melodies in a folk *rāga* (*ḍhāl*) of Gujarāt.

While I do not take issue with the broad thrust of Grandin's argument, his analytical methods leave open important questions. His data consists of one *rāga* only. Are melodies in other *rāgas* constructed in a similar way, while remaining distinctively different from *Basanta*? His analytical method, in which melodies are segmented into recurrent formulae and motives, is sufficient to show that the same melodic materials occur in all the songs examined, but does not explain how these materials are organized sequentially. Is there any underlying model, schema or trajectory that governs the sequence of motives? As he himself observes, the songs sound very different, on account of scalar, rhythmic and stylistic differences; how far are they recognized as the same *rāga* by musicians or listeners? Finally, Grandin does not mention the practice of *rāg kāyegu*. What can we learn about the Newar concept of *rāga* from the melodies that are held to embody that concept most explicitly? Is a *rāg kāyegu* melody a model for song melodies in that *rāga*?

RĀG KĀYEGU

In an unpublished study of *dāphā*, based on *dāphā* groups in the town of Bhaktapur, Carol Tingey (1991) made two important observations about *rāg kāyegu* melodies:

> 1. They are fixed melodies, learned and memorized, not improvised or significantly variable in performance.

> 2. Most *rāg kāyegu* melodies follow the same formal structure, having three sections in an ABA pattern, and a standard melodic contour in each section.

Among singers belonging to the same group, it seems to be largely the case that they sing the same fixed melodies. Indeed, the esoteric function of *rāg kāyegu* (see above)
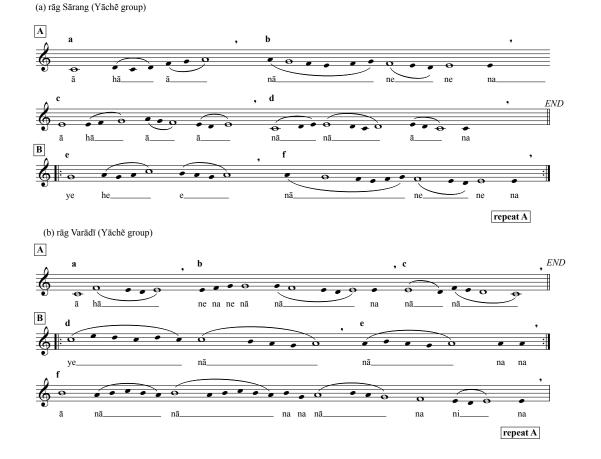
encourages singers to ensure that they sing these melodies "correctly", as defined within the group. However, there is some rhythmic flexibility—singers say that individual pitches can be made longer or shorter at will—and occasionally one hears more substantial melodic alternatives from singers in the same group.[6] How far the same melodies and variants are sung by singers of different groups is a different matter, which will be considered below.

Tingey illustrated her second observation with examples from different groups, two of which from the Yāchẽ group are shown in Example 1. The structure that these and other *rāg kāyegu* melodies have in common is shown diagrammatically in Example 2.

This structure is, I suggest, a melodic contour schema; that is, a memory structure (Rubin 1995; Snyder 2000) comprising a sequence of rising and falling pitch-contours, into which the pitches and melodic phrases appropriate to different *rāgas* can be inserted, and/or which helps the singer to remember which phrase of a given melody comes next. The contours are pitched with reference to a groundnote or tonic, and to the corresponding pitch one octave above. The fourth or fifth scale degree above the groundnote is usually present but less prominent. Although the schema consists primarily of pitch-contours, the non-lexical syllables are also embedded in it, with the syllables *ā* and *ye* occurring at certain specific points—the onsets of successive contours and sections—marked in Example 2.[7]
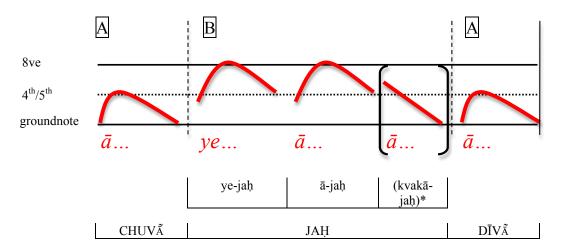
---

[6] In many groups the *rāg kāyegu* is sung twice in succession by two different singers, one from each of the two antiphonal groups of singers. It is in this context that one can notice variations in the melody from one singer to the other. Sometimes this is due to differences in vocal register between the singers; transposition of the melody, in whole or part, up or down, often by a fourth or fifth, can occur in this situation.

[7] Similar contour schemas are typical of Indian *ālāpa* melodies from the thirteenth century to the present day (Widdess 1995, 312–67).

Example 1. *Rāg kāyegu* melodies transcribed by C. Tingey

(a) rāg Sārang (Yāchẽ group)

(b) rāg Varādī (Yāchẽ group)

Example 2. *Rāg kāyegu* contour schema (each contour may be sung as one or more phrases)

* Not present in all rāg kāyegu melodies.

In 2009 I became aware, through working with *dāphā* singers in different groups, that some groups or individuals have explicit knowledge of this contour schema, while others do not. The evidence for explicit knowledge is a set of names for the different sections and individual contours of the schema. The names and their application differ between groups, but the version most consistent with the musical structure is that shown at the foot of Example 2.[8] It is clear that the schema identified by Tingey constitutes explicit knowledge for some groups or individuals, and implicit knowledge for others.

How far is the practice and repertoire of *rāg kāyegu* consistent across *dāphā* groups? Example 3(a) shows the beginning of a comparative analysis of *rāg kāyegu* melodies ascribed to *rāg Byāhā̃garā*,[9] transcribed from seven performances by members of five different groups, located in different areas of Bhaktapur:
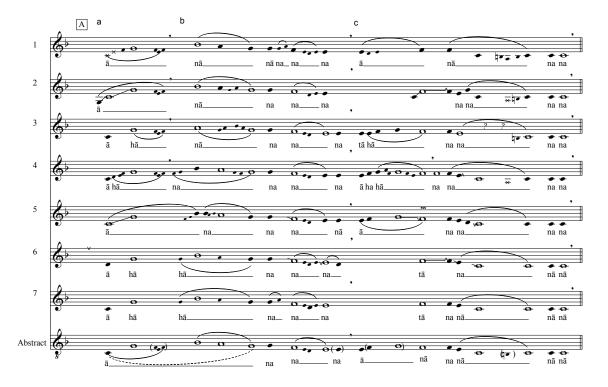
1. Dattātreyā Navadāphā, 1996, singer: Ratnamala Lachimasyu.
2. Dattātreyā Navadāphā, 2009, different singer from 1.
3. Yāchē Navadāphā, 1989 (recorded by G.M. Wegner and C. Tingey).
4. Taḥmāṛhi Navadāphā, 2004.
5. Taḥmāṛhi Navadāphā, 2004, different singer from 4.
6. Khyaḥ Dāphā, 2003, singer: Ganesh Bahadur.
7. Khyaḥ Dāphā, 2004, different singer from 6.

This selection of performances allows us to compare different singers from the same group, and singers from different groups, from different parts of Bhaktapur. Audio Example 1 comprises performances 4 and 5. Audio Example 2 comprises performance 6.
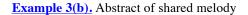
We may conclude from Example 3(a) that all seven singers sang the same melody, of which the first three phrases are abstracted on the last staff of Example 3(a), and the complete melody in Example 3(b). They performed individual variants of this melody,
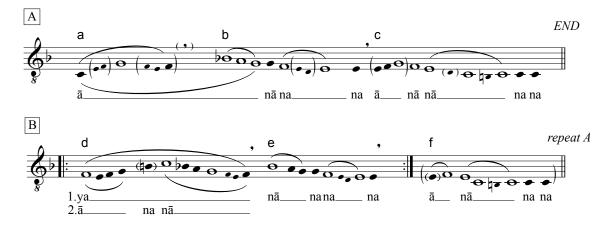
---

[8] This information is from my principal informant, Panchalal Lachimasyu, of the Dattātreya *dāphā* group.
[9] This *rāga*-name presumably derives from the North Indian *rāga Bihāgaṛā*.

Example 3(a). Seven performances of *rāg kāyegu* in *rāg Byāh̃ãgarā* (beginning)

Example 3(b). Abstract of shared melody

Audio Example 1

Audio Example 2

81

and some of these variants are shared by two or more singers, from the same or different groups (cf. Audio Examples 1 and 2). But they are no more than variants, such as might have arisen in oral transmission and performance from memory. All seven versions conform to the contour schema identified by Tingey; the number and sequence of phrases is similar in all versions, as is the number, choice and placement of syllables. Within this framework, certain distinctive melodic features of the *rāga* can be discerned, such as the opening gesture embracing pitches 1, 5 and ♭7 before descending stepwise to the groundnote (phrase a, b); the omission of 2 in ascent from 1 to 3; the approach to 1' from 4-3-4-5 (phrase d)**;** and the tendency for descending phrases to end 4-3-4 or 3-2-3.

Similar comparisons of *rāg kāyegu* melodies in other *rāgas*, including the *rāga Basanta* analyzed by Grandin, support the view that different *dāphā* groups in different parts of Bhaktapur sing versions of the same *rāg kāyegu* melodies. This shared repertoire is not, however, apparent to *dāphā* singers. When listening to recordings of *rāg kāyegu* sung by other groups, singers I interviewed were rarely able to identify which *rāga* was being sung; they either stated that they could not identify the *rāga*, or they guessed incorrectly. Even when told which *rāga* was being sung, they were sometimes unable to detect any similarity to their version of the melody. The best *rāg kāyegu* singers tended to be more perceptive than other singers, but not consistently accurate.

This observation might be explained in a number of ways:

- *Dāphā* groups are invariably centered in specific neighborhoods, and draw their members from a caste-based community living for the most part in that neighborhood. Consequently singers do not participate with groups in other neighborhoods: if they attempt to do so, they find themselves exposed as outsiders by differences in musical repertoire and practice. They are therefore not familiar with the musical practices of other groups, although they are aware that their practices differ.

- Singers regard *rāg kāyegu* as a fixed melody: therefore even a slight variation from the version learned may be sufficient to prevent recognition.

- Singers regard the sequence of syllables as a defining characteristic of each *rāg kāyegu* melody, and criticize singers from other groups for singing the "wrong" syllables; thus slight differences in syllable sequence could impede recognition even if the melodic outline remains identical.

- Few singers know the *rāg kāyegu* for every *rāga* in use; a singer might not be able to identify a particular *rāg kāyegu* melody, even when sung by a member of his own group, if he happened not to have learned it himself.
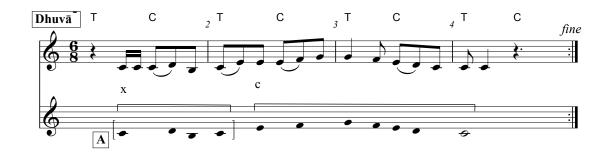
A combination of the above factors probably accounts for the difficulty singers exhibit in recognizing *rāgas* sung by other groups. Meanwhile we can conclude that there is a shared *rāga* system, in the form of a repertoire of *rāg kāyegu* melodies known to different groups. The standard formal structure of these melodies is explicit knowledge for some singers, but the similarity in melodic content between versions sung by different groups is not generally perceived.
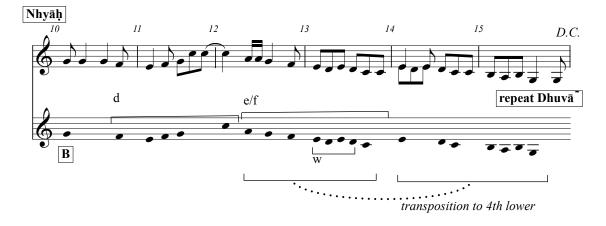
RĀG KĀYEGU AND SONG MELODIES

If, as Grandin asserts, song-melodies are constructed in a *rāga*-like way, and if, as argued here, each *rāga* is represented by a fixed, standard *rāg kāyegu* melody, the question arises whether song melodies in a particular *rāga* resemble the corresponding *rāg kāyegu* melody. Example 4 analyzes four song melodies in *rāg Byāhā̃garā*, in the forms in which I learned and notated them.[10] The first song melody is shown in full in Example 4(a), while Example 4(b) shows an outline paradigmatic comparison of the

---

[10] The songs, and the temples and dates at which I learned them, are: (1) *Brahmāyanī* (Dattātreyā 1996); (2) *Manakāmanā* (Bārāhī, 2003); (3) *He Jadunātha* (Bārāhī, 2003); (4) *Kachepāla* (Bārāhī, 2003).

Example 4(a). *Brahmāyanī* (Dattātreyā, 1996)

melodic material of all four songs. Phrases a–f correspond to similar phrases in the *rāg kāyegu* outline in Example 3(b). Letters *w*, *x* and *y* are motives that do not appear as such in Example 3(b).[11] This example shows that all the songs are largely constructed of the same set of phrases (a–f) as the *rāg kāyegu* melody. At the same time they differ among themselves in the sequencing of melodic materials, and even in scale structure.

---

[11] These motives are melodic formulae common to songs in a number of different *rāgas*.

Example 4(b). *Rāg Byāhā̃garā*: relationship of 4 songs to the *rāg kāyegu* model (Example 3(b))
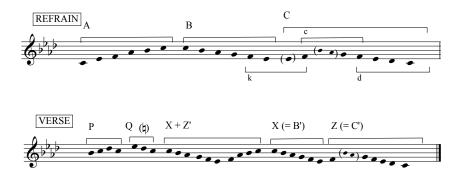
It is significant that although the selection and ordering of phrases is different in different songs, their sequence broadly corresponds to the first two sections of the *rāg kāyegu* contour schema (Example 2). That is, phrases in the lower pitch-range, focusing around 4 or 5 before returning to 1, as in *rāg kāyegu* Section A, are followed in song melodies by an ascending movement to the upper octave; this ascent may be repeated before the melody descends stepwise to the groundnote, as in *rāg kāyegu* Section B. These two sections of the contour schema are mapped, in different ways in different songs, onto the three lines of the song text, which are called *dhuvã̃*, *pad* and *nyāḥ*:[12] the shift to the upper register may occur during *pad* or *nyāḥ*, or even at the end of the *dhuvã̃*. In each song, the *dhuvã̃* (refrain) is repeated after the *nyāḥ*, just as Section A is repeated at the end of the *rāg kāyegu* schema.

Thus both the characteristic phrases of the *rāg kāyegu* melody, and its contour schema, are replicated in song melodies. One could argue that the *rāg kāyegu* melody constitutes a cognitive model or schema for songs in the same *rāga*. Each song melody is a particular instance of the *rāg kāyegu* schema, combined with the *dhuvã̃*/*pad*/*nyāḥ* schema of song texts. That these are independent schemas is evident from the fact that they are combined in different ways in different songs.

Example 5 shows the relationship between the *rāg kāyegu* schema in *rāga Basanta*, as sung by groups in Bhaktapur, and the *Basanta* song melodies from Lalitpur and Kathmandu transcribed and analyzed by Grandin. Example 5(a) represents Grandin's analysis of the song melodies; Example 5(b) shows how this relates to the *rāg kāyegu*

---

[12] *Dhuvã̃* is from Sanskrit *dhruva*, "fixed," meaning a refrain. *Pad* is from Sanskrit and Hindi *pada*, "poem for singing." *Nyāḥ* means "moving forward" in Newari. Compare the names for the two sections of Gujerati bhajans: *dhruvapada* and *pada* (Thompson 1995).

Example 5(a). *Rāga Basanta*: Grandin's motivic analysis of song melodies (Lalitpur, Kathmandu: after Grandin 1997)

Example 5(b). *Rāga Basanta*: *rāg kāyegu* (Bhaktapur: abstract from 4 performances) compared with Grandin's analysis of songs (Lalitpur, Kathmandu) (see Example 5(a))

melody sung in Bhaktapur. This example suggests that *Basanta* is constructed in a similar way in different parts of the Kathmandu Valley, and that once again the *rāg kāyegu* provides a common model or template that underlies the sequence of formulae and motives in individual song melodies.

Grandin observed that the structure of *rāga Basanta*, as transmitted in the Kathmandu Valley, does not appear to resemble that of the Indian *rāga* called *Basanta*. Our Example 5, and the examples given by Grandin himself, confirm this, but at the same time reveal a striking resemblance to a different North Indian *rāga*, the well-known *rāga* (or *rāginī*) *Bhairavī*. Similar features include the scale, equivalent to the North Indian *Bhairavī ṭhāṭ*, which in the *dāphā* repertoire seems to be confined to this *rāga*; the parallel omission of scale-degree ♭2, in the ascending line 1-♭3-4-5, and 5, in 4-♭6-♭7-1', which are distinctive features of Indian *Bhairavī*; the use, in some of Grandin's examples, of both flat and natural 2, another distinctive feature of *Bhairavī* as rendered in India today; and many individual motives. This resemblance to the modern form of an Indian *rāga* may raise doubts about Grandin's argument that Newar *rāgas* branched off from the Indian *rāga* tradition many centuries ago. We may suspect that in this case, a popular Indian *rāga* melody has been substituted, in relatively recent times, for an older or indigenous *Basanta*; but how or why this occurred is impossible to say at present.

The relationship between *rāg kāyegu* and song melodies, demonstrated here through analysis, is again largely implicit. In conversation, singers are often unsure whether the concept of *rāga* applies to songs; some assert that it only has to do with the *rāg kāyegu* melody. One particularly perceptive informant[13] asserted that in order to remember a *rāg*

---

[13] Panchalal Lachimasyu, Dattātreya group.

kāyegu melody, it is sometimes helpful to think of a song in the same *rāga*, or vice versa; and that singing the *rāg kāyegu* in some sense prepares one for the melody of the song to follow.

CONCLUSIONS

The evidence suggests that *rāga* is a reality in Newar music. Each *rāga* is defined and exemplified in a fixed melody, the *rāg kāyegu*, which follows a standard contour schema. This contour schema is explicitly recognized by some singers, although the details of specific *rāgas* are not verbalized. In addition, a *rāg kāyegu* is a model for song melodies in the same *rāga*; this relationship is largely implicit. The repertoire of *rāg kāyegu* melodies, and hence of melodic templates for songs, is shared by different groups, but this commonality is largely implicit, hardly perceived, if at all, by singers.

The existence of a shared repertoire of *rāg kāyegu* melodies implies that different groups have inherited their repertoire from a common source. Here we may follow Grandin in assuming that the source would have been the royal courts of the Malla or Shah kings. Although *dāphā* today is performed in Bhaktapur mainly by middle-ranking farmer castes, historical documentation and oral tradition show that in former times it was also performed by some of the highest castes in the community. These people had direct access to palace culture, and therefore to court musicians, who in some cases emigrated from the courts of northern India (as has been documented by Grandin (1997)). In the palace context, an explicit form of *rāga*-knowledge may therefore have led to the composition of melodic models that were then transmitted in a fixed, memorized form, outside the original context, and independently of the knowledge that created them. A

rāga system has thus become implicit in the repertoire of shared models and song melodies, but largely inaccessible to the singers themselves.

The fact that a shared repertoire of *rāg kāyegu* melodies in different neighborhoods of Bhaktapur can be identified by comparative analysis suggests that its transmission in the oral tradition, outside the context of court and palace, has been more consistent than one might have expected, given the historical depth of the tradition (which singers ascribe to Malla times; that is, before 1769). This degree of consistency, in the absence of explicit *raga* knowledge, might lead one to think that the transmission of this repertoire from palace to farmers' neighborhoods must have happened relatively recently, say within the last three or four generations. But the comparative stability, if not rigidity (in some respects), of Newar society, and a deeply-rooted nostalgia for the days of Newar autonomy, give rise to many historical continuities in Newar culture.[14] In the present case, the esoteric function with which the performance of *rāg kāyegu* is endowed, as an invocation to specific deities to participate directly in the performance, and the consequent concern of singers for their "correct" transmission and performance, may have helped to preserve the melodies relatively intact over a long period.[15]

This local process of transmission has resulted in the survival, in the Kathmandu Valley, of a local *rāga* repertoire analogous to those documented by Thompson, Tingey, Capwell, Pacholcyk and others in several areas of South Asia. A combination of historical research, musical analysis, and ethnography is needed in order to tease out the

---

[14] For example, despite the absence of the Malla king since 1769, the royal temple rituals continue to be performed in the temple of Taleju within the palace compound, by the linear descendants of the royal priests.

[15] Grandin looks to South Indian and pre-Islamic North Indian models for analogous structures and performance practices to those of Newar music, implying that the latter would have originated, perhaps, not later than the 16th century.

relationships between such repertoires, their social contexts and cognitive processes, their

histories, and their meanings for those who sing them.

REFERENCES

Bor, Joep, ed. 1999. *The Raga Guide*. Nimbus Records.

Capwell, C. 1986. *Music of the Bauls of Bengal*. Kent: Kent State University Press.

Grandin, Ingemar. 1989. *Music and Media in Local Life: Music Practice in a Newar Neighbourhood in Nepal*. Lingköping: Lingköping University.

Grandin, Ingemar. 1997. "Rāga Basanta and the Spring Songs of the Kathmandu Valley. A Musical Great Tradition Among Himalayan Farmers?" *European Bulletin of Himalayan Research* 12–13.

Jairazbhoy, Nazir Ali. 1971. *The Rāgs of North Indian Music, Their Structure and Evolution*. 1st ed. London: Faber.

Leante, L. 2009. "The Lotus and the King: Gesture, Imagery and Meaning in a Hindustani Rāg." *Ethnomusicology Forum* 18.2: 185-206.

Pacholcyk, Józef F. 1996. *Ṣūfyāna Mūsīqī: The Classical Music of Kashmir*. Berlin: Verlag für Wissenschaft und Bildung.

Powers, Harold S. 1970. "An Historical and Comparative Approach to the Classification of Ragas." *Selected Reports in Ethnomusicology* 1.3.

Powers, Harold S. and Richard Widdess. 2001. "India, Sub-Continent of, III.2 Rāga." In *The New Grove Dictionary of Music*, edited by S. Sadie. London: Macmillan.

Rubin, David C. 1995. *Memory in Oral Traditions: The Cognitive Psychology of Epic, Ballads, and Counting-out Rhymes*. New York: Oxford University Press.

Snyder, Bob. 2000. *Music and Memory*. Cambridge, MA: MIT Press.

Thompson, G. R. 1995. "What's in a ḍhāḷ? Evidence of Rāga-like Approaches in a Gujarati Musical Tradition." *Ethnomusicology* 39(3):417-432.

Tingey, Carol. 1991. "Dāphā: A Newar Devotional Singing Tradition." Unpublished MS.

_____. 1994. *Auspicious Music in a Changing Society: The Damai Musicians of Nepal*. London: SOAS.

Wegner, G.-M. 1986. *The Dhimaybājā of Bhaktapur*. Wiesbaden: Franz Steiner.

Wegner, G.-M. and Richard Widdess. 2004. "Musical Miniatures from Nepal: Two Newar Ragamalas." In *Nepal: Old Images, New Insights*, edited by Pratapaditya Pal, 80–91. Mumbai: Marg Publications.

Widdess, Richard. 1993. "The Geography of Rāga in Ancient India." *The World of Music* 35.3: 35-50.

_____. 1995. *The Rāgas of Early Indian Music: Modes, Melodies and Musical Notations from the Gupta Period to c. 1250*. Oxford: The Clarendon Press.

_____. 2004. "Caryā and Cacā: Change and Continuity in Newar Buddhist Ritual Song." *Asian Music* 35.2: 7–41

_____. forthcoming a. "Dancing Gods and Virtual Pilgrimage: Devotional Singing (*dāphā*) in the Kathmandu Valley." *Musiké*.

_____. forthcoming b. *Songs of Praise in the Kathmandu Valley: The Dāphā Tradition of Bhaktapur*.