

Musico-Linguistic Culture of India and Japan: Exploring Foundations for Collaboration in Music and Language Arts

T. M. Hoffman

A century and a half after the opening of Japan to the northern nations of the western hemisphere, the opening of channels of direct communication between Japan and the southern nations of the eastern hemisphere is now in progress. Although arrival in Japan of influences from the Indian subcontinent predate by some 1,200 years the contact with Western culture that has greatly transformed Japanese society, development based upon those earlier importations from South Asia has not been consciously pursued in Japan. Therefore, the presence of India in Japan has been only marginally perceptible over a span of many centuries, while the presence of Western civilization has been amplified in a few decades to a degree of influence that in many ways eclipses that of Japanese culture itself. This is first of all evident in the industries that provide employment for the populace, and the forms and functions of the products of that labor.

Arts and education in this sense resemble commerce and industry. In Japan, the relatively small number of major public events featuring Asian content and artists has its counterpart in the realm of education. Judging from course offerings in universities and music academies in Japan, as well as the availability of professional practical training in music of the major classical music systems of the world, the Asian continent is grossly underrepresented in Japan. Mozart occupies a larger portion of the music world in Japan than in Europe, while internationally renowned traditional Japanese artists and their Asian counterparts are known to few in Japan itself.

The fact that there are more major Asian arts events annually in London than in Tokyo is related to a larger and more visible representation of Asian immigrants in the population of Great Britain. The low profile of Japanese music within Japan, however, is a result of a more abstract type of representation, that of intangible, non-quantifiable socio-cultural influences. Furthermore, in India today, a rapid decrease in the stature of Indian traditional music, accompanied by concerted efforts to introduce Western popular culture for commercial interests, is an indication of major changes among the generation of Indians that is currently most visible on the world stage of business and commerce. The ears of Indians are being transformed along with the face of India.

In the background of this survey of relativity in the soundscapes of India and Japan are two considerations that may lead us to focus simultaneously on the past, present and future of language and music in India and Japan.

- [1] The classical music system of India, with its principles of organization developed in conjunction with Sanskrit linguistic theory and its major developmental stage concentrated in the seventeenth century through the twentieth century, is a valuable source of creative development in Japanese music; and the potential for Japanese musical instruments and poetic forms to “safely” expand the scope of expression in Indian music represents a valuable opportunity to both cultures.
- [2] The evolution of music culture in Japan, particularly during the century and a half stretching from the Meiji Restoration of the mid-nineteenth century to the present, provides an example to India of the predictable result of the alternative to interaction with integrally compatible music traditions such as the Japanese, that is, how rapidly and radically the current prominent influences from the West can transform the aural aesthetics of a people whose indigenous arts and letters had developed so differently from those of the West, and from a time before the geo-political and cultural identity of Europe had even suggested itself to history.

Cracking Codes to Reveal Cultural Relativity

Works of individual or collective genius come disguised in many different forms. Recognition of their excellence requires the opportunity and ability to access the media (languages, styles, theoretical systems) through which they are brought into being to thereby realize the messages (expressive intents) of the works themselves. This applies in attempts to appreciate the arts and sciences both within a given culture and in relation to the creative products of another culture. In India, the *Devanāgarī* script (used in Sanskrit, *Hindī*, *Marāthī*, and *Nepālī*) and others (including those used in South Indian languages) follow parallel principles of organization that allow any one of them to be memorized and put into use in a matter of days. What is obviously a multiplicity of languages is nonetheless built around a common abstracted theoretical system of phonetic organization. This system has also been exported to the phonetic scripts used in most of the languages of Southeast Asia.

The scripts used in the Japanese language itself, on the other hand, represent a complex amalgamation that brings into question the characterization “homogenous” often associated with Japan. Simultaneous use of the ideographic *kanji* (most of which have multiple phonetic assignments) and the syllabic *kana* (of the two types *hiragana* and *katakana*, neither of which displays a degree of theoretical consistency in organization approaching that which is found in South Asian and Southeast Asian scripts) necessitates concentration on their proper use among even the most experienced user. Therefore, a great degree of attention that could otherwise be directed to detail and effect regarding the work itself, that is, a treatise or poem, must be reserved for application to proper usage of the materials through which the work is brought into being, that is, script in which it is rendered. In such a case, abstract theoretical bases operating behind the work are not so readily perceived. This issue, regarding both language and music, is investigated in detail in another treatise (ホッフマン 2001).

A similar contrast is evident in the case of music theory, terminology and notation. Though in India there are two major systems (*Hindustānī* of the north, *Karnatak* of

the south), they share the dual pillars of *rāga* (melody) and *tāla* (rhythm)—described briefly below—and reflect organizational principles found in the Sanskrit language, which, in turn, connect the various languages it has engendered. The two different traditions (Hindustānī and Karnatak) can thereby be readily cross-referenced, and their features compared systematically. Theoretical constructs in Indian music also provide insights into other music cultures that likewise feature modal melody and rhythm, for example, traditions of West Asia, the Middle East and Eastern Europe. Although Japan is ethnically homogenous and ostensibly united by one standardized national language, the Japanese classical music culture has evolved no system of universally applicable notation, terms and theoretical constructs that would perpetuate understanding of the indigenous music throughout its own culture, and provide a basis for comparison and appreciation of other Asian music styles. Furthermore, salient features of Japanese and other Asian musics are in effect masked when approached primarily through the notation and terminology of the Western system that has been in wide use in Japan following the Meiji Restoration.

The above-mentioned differences between Japan and India in the media employed in approaching sound culture, that is, through the symbols of language and music, are primarily responsible for the fact that similarities and potentialities as outlined in this paper have heretofore not been brought to the fore and applied in practice in cooperative cultural exchange involving Japan and India. The author, through the privileged experience of studying and using both Japanese and Hindi languages while learning, performing and producing vocal and instrumental music in both cultures, has confirmed in practice what has been indicated by comparisons of the respective theoretical systems. In this case in which the two sound cultures of study, that is, India and Japan, are both non-native vis-à-vis the researcher who has nonetheless been acculturated to become an ‘insider’ in both, a more objective stance may be possible than in a case wherein the researcher is a native of either of the two.

Research and practical trials, conducted concurrently and in conjunction with celebrated artists and scholars of both cultures, has uncovered two contrasting determinants:

- [1] gaps in perception of similar aural phenomena resulting from different visual representation through morphologically unique scripts and notation (as outlined above), and conversely,
- [2] viability of the sound cultures of India and Japan to collaborate integrally in creative activity without requiring undue compromise regarding the salient aural features of their respective language and music cultures.

In terms of contemporary performing arts, [2] defines the ideal in arts of *crossover* based on selection of the most viable partners for collaboration, as opposed to the unpredictable dynamics of random experimentation which often characterizes the more popular process of *fusion*. Crossover allows further stages of evolution within the art itself, of a nature in agreement with the genetics of the art itself.

Enhancing Awareness of India-Japan Cultural Proximity

Certain aspects of the cultural milieu of each respective geographical region and nation of Asia, though uniquely encoded in its language(s) and other cultural properties, can find valuable application in other settings and among other ethnic groups, but this would first require an environment of mutual awareness and opportunity for close contact. In the case of Japan and India, after centuries of vague references to cultural ties (primarily limited to connections suggested through the existence of Buddhism in Japan), a concerted drive to promote exchanges has emerged in this first decade of the twenty-first century.

This newfound awareness is most evident in regard to trade and other facets of economic relations. The prospect of immediate reward in the form of readily confirmed profits drives economies to more rapid evolution and expansion of relationships than could be expected in cultural exchange initiatives. Nonetheless, when a high-level business delegation from Japan accompanied the Minister of Trade and Industry Shoichi Nakagawa to India in August 2004, it was the first time in more than five years that a business delegation from Japan had visited India. Six Indian representatives and five Japanese formed together the NPO India-Japan Initiative (IJI) for greater exchange of ideas, and proposed an Economic Partnership Agreement (Basu).

Then, in India just five months later, in a meeting between Japanese Prime Minister Koizumi Junichirō and Indian Prime Minister Manmohan Singh, both countries agreed on a strategic partnership for cooperation in diverse fields. An eight-fold initiative was outlined in a joint statement “India-Japan Partnership in the New Asian Era: Strategic Orientation of India-Japan Global Partnership.” Two of the provisions (numbers 5 and 6) address the potential for understanding and development in the cultural sphere: (v) cultural and academic initiatives and strengthening of people-to-people contacts to raise the visibility and profile of one country in the other; and (vi) cooperation in ushering in a new Asian era. Included are measures to promote Japanese language studies in India, including the introduction of Japanese language as an elective foreign language in Indian secondary schools, and the Government of India’s initiative to establish centers of Japanese studies at Indian universities and institutions. New facilities include Japan Cultural Center of the Japan Foundation in New Delhi and an Indian Cultural Centre in the Embassy of India in Tokyo, and the Festival of India in Japan and Festival of Japan in India in 2007 commemorating the fiftieth anniversary of the Cultural Agreement between India and Japan (Rao).

The foundation of such institutions and partnerships paves the way for parallel studies in linguistic and musical arts of Japan and India, which can produce unprecedented development initiatives of benefit to both cultures. There is at present no institution in India or Japan that combines qualified practical instruction in the music of the other culture with sufficient opportunity for cross-cultural research in a bilateral context. In the absence of such, the author has during three decades in Japan and India pursued theoretical and practical studies under various recognized authorities in language/linguistics and music/musicology, including training under masters of the respective Indian and Japanese vocal and instrumental styles and instruments mentioned in this text.

In pursuit of the understanding of art as science, and science as art, the combination

of scholarly research and practical studies provides for feasible directions in creative activity. Likewise, a liberal arts education leads the student to interdisciplinary and cross-cultural intersections from which to explore new avenues of understanding and development in any given profession. In the context of our focus on music and language in the present and with a view to the future, the process described above represents the new field of applied ethnomusicology. “As the old notion of a disengaged academic ‘ivory tower’ continues to lose its relevance, ethnomusicologists are faced with a variety of hands-on roles in the wider community as consultants, activists, specialists, and educators. The term ‘applied ethnomusicology’ has emerged to help define how ethnomusicologists interact with people and interests beyond the traditional domain of academia (UCLA).”

The ideal of combining research, performance and activism in an interdisciplinary approach serves to constructively connect past, present and future. Relativity in Japanese and Indian sound culture has its origins in the transmission of influences from India via the Silk Road.

To Where History has Transported Sound

While the flow of goods and ideas between East and West has been a topic of vigorous research and source of creative activity for millennia, cultural exchanges between South and North have often escaped attention. In Asia, cultural relativity among East Asian languages and musics is verifiable in visibly similar forms of ideographic scripts and musical instruments of China, Korea and Japan. Examination of phonetic and grammatical features in language, and of melody and rhythm in music, however, reveals that the intangible sound culture of Japan resembles more that of India than of China. Many of these features have been described and illustrated by the author in earlier academic journals (ホッフマン 1997 and 2001).

The Silk Road brought silk and other tangible goods from Asia to the West. The same route viewed from East Asia is more appropriately termed “Sound Road,” considering the significant intangible musico-linguistic elements transmitted from South, West and Central Asia to the Far East. Transmission of Indian aural elements to Japan has been almost totally indirect, that is, after a few Indian visitors to Japan in early Japanese history, arriving in combination with early Chinese and Korean cultural products, and as integrated facets of European arts and sciences with the importation of Western civilization from the nineteenth century onwards.

Though there are no records of visits to India by Japanese prior to the nineteenth century, there are numerous references in Japanese chronologies and religious texts to the arrival of Indian Brahmins in Japan from 736 to instruct in Buddhism and Indian linguistics, for example, through Siddham script and phonetics (岸辺 1982). Texts and practice of mantra was introduced into Japan by Kūkai in 808 in the form of Shingon Buddhist chant *shōmyō* 声明, and its scale intervals and *go-on-hakase* notation have origins in ancient Vedic chant of India. *Tenjiku-gi* 天竺伎 (musical art of Indian origin) was the most influential of the ten contributing Asian cultural spheres embodied in the continental orchestral music imported to Japan as *gagaku*. This Japanese court music and the music it spawned (known collectively as *hōgaku* 邦楽) exhibit similarities with Indian music that are not found in Chinese music, including an overwhelming prefer-

ence for the *Hyōjō* scale (the *Bhairavī* ultimately popular in northern Indian Hindustānī music, or *Hanumat Tōdi* of southern Indian Karnatak music)—see Figure 2. Pitch names used in East Asian court music (*ya-yue* in China, *a-ak* in Korea, *gagaku* in Japan), though rendered in Chinese characters, are traceable phonetically to Sanskrit and other continental syllabic languages. This musical orthography issue was investigated extensively by the late Kishibe Shigeo, Japan’s most prolific scholar of East Asian music history (岸辺 1944 and 1982).

The promulgation of Proto-Indo-European (hypothetical common ancestor of what are today known as Indo-European languages) in 1786 by the English scholar Sir William Jones following his study of Sanskrit is said to have given birth to comparative linguistics. In turn, methods of analysis adapted from Sanskrit into Western linguistics were later applied in formulating Japanese linguistic theory. Instrument classification schemes (which incorporate principles also found in Sanskrit linguistics) originating in India reached Japan only after passing through the West, as also did the materials of Indian music—publications, recordings, and the performing artists themselves.

Significantly, these Indian contributions to scholarship in linguistics and musicology did not enter Japan through direct contact with India, but were imported beginning from the time of the Meiji Period, only after they had taken form as components of Western scholarship, in essence as third-generation incarnations (India → Western Europe → the United States, and finally → Japan). In spite of the general categorization of Indian and European languages as “Indo-European” based primarily on etymological similarities (the existence of Sanskrit root words, prefixes, and suffixes, that is, at the level of vocabulary, in European languages), the radical differences existing between phonetic, grammatical, and syntactical features of Indian languages and Germanic languages rendered the Indian contributions in different form. Then, in the stage of transmission from Europe and America to Japanese culture, the Indian methodologies of linguistics were rendered back into phonetic, grammatical, and syntactical ordering resembling that of Sanskrit. To be sure, in a process spanning the Eurasian continent, the Atlantic Ocean, the North American continent, and then the Pacific Ocean (essentially, transversing the complete globe) over a few centuries, much was lost in translation.

A similar case of radical transformation in the course of indirect transmission occurred in the transfer of Buddhist texts from India through Central Asia, China and Korea to Japan. The classical and modern Chinese languages differ from their Indian counterparts in more significant ways than is visible in the obvious orthographic distinction between phoneme and ideogram. Beginning with the principles of combining vowel and consonant in single-syllable utterances, and up through the structural features of grammar and syntax, the Chinese language has very little in common with either Sanskrit or Japanese. The manifestations of sound culture (that is, works that represent the religious, scholarly and artistic culture of Indian civilization, produced through the medium of language and music) were upon entry into Chinese cultural space reconstituted into drastically different matrices, and then upon crossing the Sea of Japan required transformation into musico-linguistic formulae of a sort resembling that in which they began their journey, that is, a process analogous to the transforming of oil into plastic and then later attempting to return it to its original state. Compari-

son of the texts of the *bonsan* type of Buddhist liturgical chant *shōmyō*—bonsan being ostensibly texts in Indian languages transliterated into Chinese and then to Japanese—with their original Indian texts reveals great differences in both form and content.

A similar progression ushered in the arrival of Indian classical music in modern Japan. It was the rudimentary use of the Indian musical instruments *sitār* and *tablā* in Western popular music—by prominent rock bands including The Beatles, the Rolling Stones, and Led Zeppelin—that introduced Indian music to Europe and America, from where it was a few years later brought to the attention of the Japanese public. Viewed from Japan, Indian music icon Ravi Shankar came essentially from the Far West to the Far East, and even today is known to many upper-middle-aged Japanese as an Asian artist who was befriended by George Harrison, and his instrument as a complement to Western popular music. Such a circuitous route, that is, from classical Asia through the centers of Western popular culture, would not facilitate in Japan the awareness of relationships between Indian sound culture and indigenous Japanese arts.

Japanese instruments are particularly suitable for modal melody including that of India, as is evident in the performance of *rāga* on *koto* and *shakuhachi*, and the compatibility of Japanese language with Indian vocal music forms has been verified through the use of Japanese poetic texts in Indian song forms (described below). In a much broader context, aural principles and constructs developed in South Asia continue to be relevant in the modern era. Some of these are already employed in health care, architecture and industrial design, and other fields. Further developments in the integrated application of sound in art, society and industry may be encouraged by an understanding of the past, including the journey of sound from south to north in Asia.

India-Japan Communion in Sound, by Divine Decree

Before considering present and potential future correlations between the sound cultures of Japan and India, let us first identify some important features in Indian music that are also evident in Japanese musical art. Many of these aural attributes of the two cultures are embodied in Sarasvatī and Benten, goddesses of music and learning in India and Japan, respectively.

The Hindū goddess Sarasvatī, originating in pre-Buddhistic India, was transformed into the Japanese goddess Benten, the only female member of the *Shichi Fukujin* (Seven Gods of Fortune). The seven are drawn from Indian, Chinese, and Shinto sources, but have been grouped together from at least the sixteenth century. Comparison of the attributes of Sarasvatī and Benten reveal them as the main musico-linguistic icons of traditional India and Japan.

Sarasvatī, the patroness of art, music, and learning, is known as the personification of the sacred underground river Sarasvatī, and is also identified with Vāk, the goddess of speech, that is, language which flows. Another name for this deity is *Bhārati*, or Mother India, and she is the only consort of the deity Brahma (creator, and promulgator of the Vedas, from which classical language and music are said to have sprung). She is credited with invention of the Sanskrit language and its phonetic/syllabic *Devanāgarī* script. She is usually represented in painting and sculpture as riding on a



Sarasvatī



Benten

Figure 1: Divine representations of music and language in India and Japan

swan and holding a *vīna* (a lute which is known throughout India as *Sarasvatī vīna*) and a palm-leaf manuscript or book. The presence of the swan, a water bird, is consistent with the flowing nature represented in water/river and in sound (dynamic, existing in time), in contrast to the nature of earth and script existing on the printed page (static, existing in space). The primacy of sound/speech in language and its role as the basis of learning and creativity is illustrated in these attributes of Sarasvatī (Figure 1).

Benten is known as the patron goddess of literature and music, and is associated with the sea. Many of her shrines are located near water, and she is frequently depicted riding on, or accompanied by, a sea dragon. She is often shown playing the *biwa*, a kind of lute. A white serpent serves as her messenger.

Benten is sometimes associated with wealth, particularly when referred to as Benzaiten, the “*zai*” referring to economic assets, though that is an attribute acquired by the inadvertent merging in Japan of the Hindu goddesses Lakshmī to Sarasvatī, which would be out of character for these two in Indian culture. Traditionally, where Sarasvatī the Goddess of Learning rules, Lakshmī the Goddess of Fortune may not be present, and vice versa. This poses a paradox in India during this age of focus on information technology, as today’s knowledge-based economy presumes that Lakshmī and Sarasvatī may coexist without adverse consequences.

Indian Classical Music as a Transplantable Process

Improvisation is an essential feature of Indian music, and *rāga* and *tāla* are the primary vehicles of improvisation, or means by which the artist produces unique musical passages. The final objective in this extemporary process is the creation and communication to the listener of states of *rasa* (emotional experience) consistent with the nature of the *rāga* and (in the case of vocal music) textual content.

Rāga, which is an Indian system of melody, is acclaimed as the crowning achievement in Indian classical music (and in Indian arts). Theoretically, there may be tens of thousands of *rāgas*, with a few hundred in current use in any given period. Each *rāga* has its own unique ascending and descending melodic forms, prescribed use of microtones and other subtleties, and principal mood such as love, devotion, tranquility, loneliness, heroism, and others. Many *rāgas* have their origins in regional melo-

dies, and in the North Indian Hindustānī classical music system individual *rāga* are associated with particular times of day or night, and some with the seasons. Performance in Indian music is a process of improvisation based most prominently upon the nature of the *rāga* employed.

Tāla defines the system of rhythm in India. There are rhythm cycles ranging from 3 to 108 beats in length. Some *tāla* have the same number of beats as in others, but with quite different internal structures. For example, a 14-beat *tāla* may be divided as $3 + 4 + 3 + 4$ (*Jhūmrā*, *Deepchandī*), $5 + 2 + 3 + 4$ (*Dhamār*), or some other arrangement. Within the framework of each *tāla* there is much possibility for rhythmic improvisation. Performances usually begin with *ālāp* (a free-rhythm melodic exposition of *rāga*), after which *tāla* is introduced by the accompanying drum (*tablā* or *pakhāwaj* in North India, *mridangam* in South India). Though drum solo performance is also possible, following and responding to the improvisation of the performer of voice or melodic instrument being accompanied is the soul of the art of a *tāla* exponent (drummer) in Indian music.

The correlation of language with music is visible in the rhythm patterns comprising the Indian *tāla*. The contrast of short and long is the most definitive feature in the arrangement of measures (*vibhāg*) of differing numbers of beats in larger units, or cycles (*avarta*). A $2 + 3 + 2 + 3$ arrangement, as in the *Hindustānī tāla Jhaptāl*, represents long + short + long + short in a similar relationship as found in words distinguished by their use of long and short vowels. For example, in the word *tāla* itself, the first syllable “*tā*,” in which the “*a*” vowel is a long one, must be given two beats, and the second syllable “*la*,” containing a short “*a*” given only one. Therefore, the word “*tāla*” is a long + short duple unit of $1 + 2 = 3$ beats (or, this can be represented as $2 + 3 = 5$ beats if the ratio 2:3 is used as short/long time differential). The word ‘*Jhaptāl*’ itself is a two-syllable three-beat word of short + long.

This principle is central to Sanskrit poetics, and also in ancient Greek poetics. It is not part of Chinese or Western European linguistic practice, and we can note that no system of rhythmic modes based on addition of short + long measures has been developed in those music cultures. Very significant is the question as to why in Japan, where long/short distinctions are integral to the language, such rhythmic modes as *tāla* (or *usul* in Turkish music, *iqā’āt* in Arabia, *durub* in Egypt) have not emerged. The answer is simple—music and language have not been perceived as two integral counterparts of human aural communication, as was the case in the classical musico-linguistic systems of South Asia, West Asia and the Middle East. This, however, poses a more significant question, that of “why not?”

Universality (for example, as represented by shared principles of sound in a musico-linguistic culture) is a characteristic revealed through the simultaneous apprehension of multiple samples within a classification scheme devised on the basis of theoretical distinctions. While systematic classification schemes in Indian scholarship (including musicology) are a byproduct of the organizational structure of the Sanskrit language, the Japanese language would not produce such an effect. “Japanese prefer aesthetics (focus on object) to philosophy (focus on abstract relationships). The Japanese people have never studied scientifically the language they use everyday. There was no system of model grammar before the Meiji Period. In India and Greece, gram-

mar was regularly taught from classical times” (Nakamura 514).

We should also note that analyses of the Japanese language carried out within Japan from the Meiji Period to the present have been built around structural–analytical constructs imported from the Western world, where such distinctions as the one of long/short vowel described above do not apply. In earlier periods before contact with European culture, the source of models for comparative and analytical study of Japanese language and music was China, which is likewise devoid of long/short vowel distinctions and other significant phonological/grammatical/syntactical features of Japanese language that are also manifest in the corresponding music of that culture.

Principles of arrangement of tones into melodic modes, and of beats into rhythmic modes, both of which were largely responsible for the earlier developments in music in India, had entered Japan encapsulated in compositions of court music *gagaku*, from as early as the seventh century. These principles of non-Chinese origin, however, were not evident in the written forms in which they had come to be represented during their transmission through Chinese culture. It was not possible, then, to abstract those principles from the individual pieces and combine them into a systematic theoretical base for their more expansive role as guides in composition or improvisation in the Japanese cultural context.

Employing Japanese Instruments in the Indian Classical Music Process

In spite of all the East-West fusion happening in the world of music today, rarely are there East-East collaborations undertaken fully independent of Western musical influence. Furthermore, the North-South axis presents most interesting possibilities. In the western hemisphere, harmony of Europe (of northern hemisphere) was wedded to rhythm of Africa (of southern hemisphere) to produce jazz, the most representative music of the Americas. Furthermore, it is important to note that this combination did not compromise the salient features of either contributing partner.

In Asia, the application of Indian “software” (principles of *rāga* and *tāla*) of the southern hemisphere in combination with Japanese “hardware” (musical instruments) of the northern hemisphere has likewise been blessed by favorable conditions. Any combination of instruments, languages, and other elements can be presented as “fusion,” but true “crossover” is possible only where structural and stylistic features of one music culture can be authentically presented on the instrument and/or in the language of the other music culture.

Among the most direct and obvious of potential Japanese contributions to Indian musical art is the addition of traditional Japanese instruments (each with its own inimitable tone qualities) to the soundscape of Indian music. Japanese music, though employing only a few different scales as melodic material, has a variety of instruments that are *rāga*-compatible. India, on the other hand, has thousands of scales and seemingly limitless melodic variety to showcase, yet the number of instruments used in Indian classical music is by comparison small. The violin, introduced to India around 1790 by military bandsmen in the British East India Company, is fully capable of the particular graces distinguishing melody in Indian classical music.

Other additions from the West have not been so blessed. Instruments of the Western brass band, first presented in 1750 in Calcutta by the British East India Company,

and the harmonium, introduced by European missionaries in the nineteenth century, are not capable of the ornamentation techniques *gamak* or microtones *sruti* which are integral parts of Indian music. Guitar, keyboard, saxophone and other Western instruments introduced in the late twentieth century have been subjected to efforts at adaptation for Indian melodic expression. The Japanese proverb “fusing wood to bamboo” (*ki ni take wo tsugu* 木に竹を接ぐ) aptly allegorizes the attempt to perform *rāga* on a piano or trumpet, or even on a *sitār* if placed in the format of Western-style harmony. Clearly, however, Japanese instruments—most particularly *koto* and *shakuhachi*—are well-suited to Indian melody. Many instruments from other Asian cultures are also fully compatible with such modal music, but the predominant trend of “Look West” in India and among its potential partners in Asia has consistently bypassed the most fertile fields for co-development.

Indo-Japanese Frontiers in Improvisation

Viewing together the sound cultures of India and Japan, we can note significant similarities. Some of these can be attributed to influences derived from features passed from South Asia through Central Asia and continental East Asia in ancient times, while others may indicate intrinsically shared ideals of expression. In both India and Japan, vocal music is central, microtones (*shruti*) are important elements of melody, and performance progresses from slow to medium to fast (known as *vilambit-madhya-drut*, in India, and *jo-ha-kyū* 序破急 in Japan). Furthermore, the Japanese language is much closer to South Asian languages in phonetic, grammatical, and poetic structure than it is to Chinese or Western languages.

Activity between India and Japan in music and poetry can produce exciting and coherent creative developments within and between the traditions and in the music of Asia. The ability to create music and poetry in the very process of performing it is central to the arts of sound culture of India. The systematic methodology of extemporaneous performance through melody and rhythm (*rāga* and *tāla*) and in combination with poetry (song texts) is the most distinguishing feature of Indian classical music.

With each guild of each vocal, instrumental and dramatic style in the music culture having its own separate set of notation symbols and vocabulary rendered in a complex writing system, traditional Japanese music does not facilitate improvisation in performance. Development of practical improvisatory means, especially those which can bypass irreconcilable differences in written representation, can be a significant addition to Japanese musical art options. Indian music provides models as to how this may be accomplished without compromising the salient nature of Japanese music itself. Similar principles existing between music and language of India and Japan indicate a high degree of compatibility in such cross-applications.

Knowledge in India of elements of Japanese sound culture can not only affirm the interconnection of language and music that has long been part of Indian scholarship and art, but can also inspire further development in Indian music. These creative developments can be carried out without compromise of existing Indian expressive means that have evolved in conjunction with the languages and music forms of South Asia. For example, Japanese forms and styles of poetic expression can be models for new directions in poetic expression in conjunction with music, as in Indian forms of

vocal music *khyāl*, *thumrī*, *ghazal* and others. The compact, poignant Japanese poetry forms *tanka* and *haiku*, “whose spiritual origins can be traced to pre-Buddhistic Indian thought” (Blyth 17), exhibit a high degree of visual acuity in the positing of key subjects (primarily concrete nouns, which are by nature representative of things existing in the three-dimensional visual plane) within brief phrases. These poetic styles are primarily free of references to culture-specific phenomena and experiences that could limit the scope of their appeal, for example, by identifying them as being written by or for a particular ethnic group defined by a given religion, language, or other exclusive attribute.

This issue of text and context is particularly relevant to Indian classical song texts, which have most often carried both overt and subtle indicators of Hindū, Muslim, or other sectarian content. The author has often noted members of the Hindū community declining to sing a particular *bandish* (composition) because it contains language that identifies it as of Muslim content or origin, or vice-versa in the case of a Muslim artist. This is not to advocate that classical music for a populace of mixed religious affiliations should be purged of associations with any given religion, but rather to present the Japanese model as a valuable reference for other creative options.

A work of music is of interest to both its producer (the musician) and its consumer (listener), but the process of performing belongs to the musician alone. The nature of the experience of the performer is greatly dependent on whether or not the element of harmony is dominantly present. In a Western orchestra, the clearly defined roles of the respective players in combination produces a grand group effect, but does not allow improvisation by the individual musicians. Conversely, the soloist in Asia, for example, the singer of *khyāl* or *kriti* in India, the player of traditional *shakuhachi* music in Japan (before the wide use of notation had fixed the solo *honkyoku* pieces into their present versions), who weaves many different melodic and rhythmic variations into the performance in a spontaneous experience may not be able to function comfortably in a larger ensemble with fixed notation.

Indian music is often characterized as *manodharma sangeet* (literally, “mind-regulated music”), indicating a self-directed process to benefit, first and foremost, the performer, that is, producer of the sound, whereas a Western classical music performance presents an artistic product prescribed more specifically for the satisfaction of the listener, that is, consumer of the music. Although performer and listener are part of the equation in both cases, the difference in emphasis is significant. Also, discipline is equally important in both Western orchestra music and Indian *rāga* music, but the allegiance is to the composer and conductor in the former, and to the principles of the art form (of *rāga* and *tāla*, for example) in the latter.

The experience of making music in each of these contrasting socio-artistic environments—as a member of a social collective, for example, in a band or orchestra, or in an affirmation of individuation in solo format, for example, in performing Indian classical music—is paralleled by non-musical aspects of the respective cultural environment. The extent to which improvisation is incorporated into the artist’s (and listener’s) world, and even the factors behind this presence or absence of improvisation, are greatly predictable by being aware of the nature of the language(s) of that culture.

Cultural Relativity Revealed in the “Software” and “Hardware” of Music

One might expect that China and Japan, with relatively close geographical locations, racial identities, and shared ideographic scripts, would share close affinity in the phonetic, or aural, character of their languages. To the contrary, the Chinese language—its syllables devoid of discrete length distinctions (timed long/short vowels), vocabulary being monosyllabic, and sentence structure in a S-V-O (subject-object-verb) order, is closer to English than to Japanese. And, most significantly for our study, the Japanese language—with long/short vowel distinctions, vocabulary being predominantly polysyllabic, and with a S-O-V sentence structure—mirrors Indian languages in these features that are counterparts of very significant determinants in music expression. The author has published a comparative study of theory and practice in Indian, Japanese, Chinese and Western European music systems through analysis of relevant features of the dominant languages in these four respective linguistic cultures (ホッフマン 1997 and 2001).

An identical dichotomy in visual/aural indicators exists in relation to musical instruments, the visible manifestations of the art of music. Though many instruments of China have counterparts in Japan that are close enough in configuration to be indistinguishable by view from a distance, a closer examination reveals what even a casual listener can affirm. The sound ideals in the respective musics are as different as we find in the case of phonetics in the two languages. Furthermore, the most significant ideals of tone production and combination are shared between Chinese and European musics, and between and Japanese and Indian musics. The very instruments held by Sarasvatī (*vīna*) and Benten (*biwa*) can serve to illustrate this. Japanese *biwa* lutes are made with frets raised to allow pressing down or pulling laterally of the strings to raise pitches (*meend* in Indian *sitār* and *vīna*) produced with a relatively long sustain, while Chinese *pipa* has lower frets over which the fingers are moved, with little lateral motion applied to the strings which have a relatively shorter sustain. Related to the absence of long/short vowel distinctions in Chinese language, there is a markedly less use of long/short contrast in Chinese music than in music of either India or Japan.

String tuning schemes and the arrangement of intervals in the scales played on these instruments (and sung in the respective vocal musics) further substantiate the India-Japan continuum, and, conversely, aural similarities of China to Western European practice.

Following rigorous comparison of the structures of Japanese and Hindi languages, artists participating performances organized by Indo-Japanese Music Exchange Association (described below) have demonstrated this in practice by singing Japanese classical poetry *tanka* and haiku in *khyāl* and *thumrī* style (from 1993 in Japan, from 1996 in India, also in performances in the United States). Such collaboration would be unapproachable with poetry in English or Chinese languages. In addition to fourteen IJMEA advisors, these endeavors have been guided by recognized authorities in Indian and Japanese languages, including Dr S B Verma (late Professor of Japanese in Jawaharlal Nehru University, and publisher of works on haiku in Hindi) and Haruhiko Kindaichi (late author of the best-known book on the Japanese language *Nihongo*, and a celebrated performer of the Japanese *biwa*).

The differences between India and Japanese sound cultures are primarily differenc-

es in perception and not in principle, and as such would not preclude sharing of innovations. Consider the relative role of ear and eye—the aural and the visual aspects—in the aesthetic experience of people in the respective cultures. The written characters in South and Southeast Asian scripts, for example, represent the phonemes of the language (as *nādarūpa*), whereas East Asian languages using the ideographic script approach meaning through thousands of unique visual forms. Likewise, in India and throughout South Asia the *sargam* pitch names and notation represent musical tones without referring directly to any specific instrument or other visible/material object, while in Japan and East Asia the notation symbols refer to hand positions on specific instruments. The Japanese orientation is “hardware intensive,” while the Indian is a more abstracted “software intensive,” a propensity that predates the computer age. It is not surprising, then, that Japanese listeners at a concert consistently notice details of stage setting, dress and posture of performers and other visible elements, while Indian listeners are more likely to remark on aural features such as rhythms and melodies.

Common Factors for Cooperative Research and Development

Any concerted collaboration for mutual benefit requires an investment of time and effort in becoming familiar with both sides of the equation. In music, melody is a most significant factor, and comparison of the musical scales from which different melodic forms are derived reveals similarities and differences between two or more traditions. [The following comparison is illustrated in Figure 2.]

When viewed through the Indian *melakarta/rāga* process of systematically deriving various melodic forms from the same basic scale, the two pentatonic scales in Japanese music often called *In* 陰 and *Yō* 陽 appear to be members of the same septatonic (seven-tone) scale, known as *Hyōjō* (in Japan) and *Bhairavī* (in India). These two pentatonic scales *In* and *Yō* are involved in generating the vast majority of melodies in Japan. The Hindustānī *rāga Bhairavī* (based on the scale of the same name) is known as the “queen of *rāgas*” and, as such, is performed more often than any other *rāga*, particularly as the last item in a concert.

While the five tones of the prominent Japanese *In* and *Yō* pentatonic scales (mentioned above) are found within the Indian *Bhairavī* scale, the predominant septatonic and pentatonic scales in Chinese music scale display a totally different arrangement of tones which is much closer to the Major scale of European music.

Japanese melody itself belongs, as mentioned earlier, to the world of relative pitch, but Japanese music terminology and notation symbols refer to “absolute” positions on the instruments. In other words, the system uses “absolute symbols” to represent “relative relationships,” a theoretical inconsistency that obstructs perception of underlying structural features. As traditional Japanese instruments are best suited for use in conjunction with relative pitch, Japanese musicians could note through relative pitch principles inherent in the simple Indian solfege system *sargam* the potential for performing hundreds of melodic modes on their own instruments. Many such observations can spring from cross-referencing theory and practice in Japanese and Indian languages and musics.

Rāga cannot be performed authentically in Western-style harmony, and *tablā* and *tambūra* are not good partners for piano. On the other hand, modal melody like *rāga*

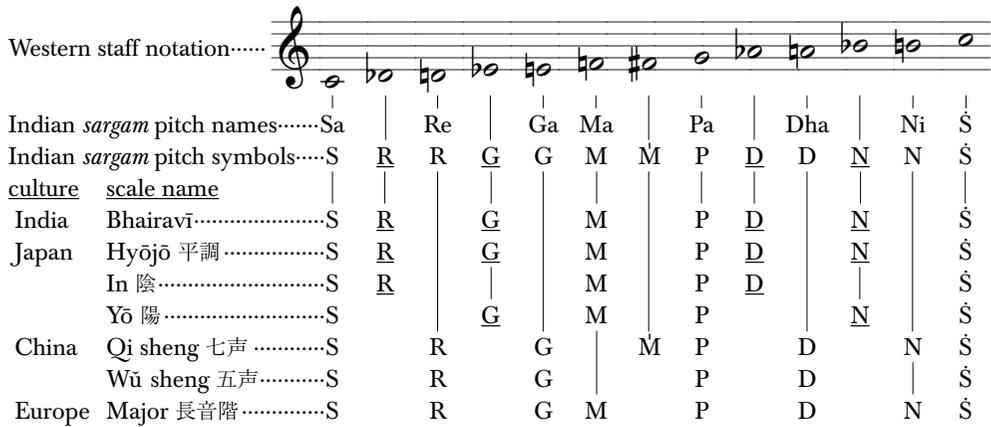


Figure 2: Prominent musical scales in India, Japan, China, and Europe

is an intrinsic feature of Japanese music, though in Japan this has not yet been widely recognized. The author tested this hypothesis in Bhātkhande College of Hindustani Music with special permission from the government, by using *shakuhachi* to complete the degree for *bānsurī*, something which would be impossible with the Western classical flute. In short, the (Japanese) instruments are able to ‘cross over’ completely into the second culture (India), to render the classical music fully as it is—two Asian traditions positively interacting without undue compromise in principle, technique or instrument configuration. Such interaction can promote understanding and development within and between the respective traditions, and serve as a model in the broader context of music in Asia and the world. Other possibilities abound, for example, in similar organization of beats into rhythm cycles are evident in Korean *changdan* and Indian *tāla* represent the seed of interaction.

In a global environment dominated by East-West interchange in political, economic and cultural activity, conscious effort is required to transcend limiting preconceptions regarding partners in collaboration. In a healthy world cultural ecology, all roads do not lead to, or originate from, Rome (or London, or New York). Connections East-West (which in the present era would be more aptly expressed as West-East, considering the flow direction of the most telling influences) are many, while North-South connections have yet to receive due attention.

This is perhaps the most “revolutionary” aspect of the intra-Asian crossover topic—the fact that progressive intercultural collaborations need not involve the Western world, and that, furthermore, in many cases significant creative developments may be possible only if certain elements are excluded from the equation, particularly in early stages of the developmental process. Artists and scholars worldwide, however, can expect to welcome significant discoveries and developments that result from selective exclusiveness for a period of incubation and nurturing. Such development would therefore be of a more robust constitution than if left to encounter whatever may come upon it in its infancy. At present, it appears that cultural colonialism is being welcomed and perpetuated from within in regions of the world where geo-political colonialism has been so vehemently decried. Therefore, responsibility for ensuring the best possible environments for mutually empowering cultural development to occur is

with the partners themselves—in this case, Japan and India.

Bringing Together Partners for Indo-Japanese Music Exchange

Development is a continuum, with past progress acted upon by discoveries of the present to carry forth the process into the future. The performing arts of a culture, developed through history and performed by contemporary proponents of the art, connect the past to the present. These arts are introduced abroad through tours of artists supported by agencies such as the Japan Foundation and the Indian Council for Cultural Relations. The other side of the time line, that is, from present to future, is represented by creative activity by artists themselves. In the India-Japan context, models for viable cooperative bilateral creative activity based on shared knowledge have not yet emerged. As a concrete initiative to bring to light North-South intra-Asian connections and promote bilateral interactivity, the NPO described below was established.

The Indo-Japanese Music Exchange Association (IJMEA) is a private, non-profit organization founded in Tokyo in June 1989 for the purpose of promoting opportunities for Japanese and Indian musicians to observe, study, and appreciate the classical music of their counterparts, both as performing art and subject of theoretical and historical study. The IJMEA is guided by an advisory board of fourteen distinguished educators and internationally renowned artists, seven each in India and Japan. More than fifty performing artists, teachers, and advanced students of Japanese or Indian music have participated in international exchange performance projects of IJMEA, and many others have collaborated in research and interactive workshops held in both countries. Performance, education, and developmental projects are carried out in conjunction with public and private agencies, including educational institutions, various NPOs and other organizations.

Activities organized and carried out by the Indo-Japanese Music Exchange Association include public performances featuring artists and instruments of India and Japan presenting the classical music of the respective tradition, and in collaborations which are carefully designed to build upon shared features and mutually recognized potentialities. Workshops are held for musicians, and lecture-demonstrations are held for students and the general public. A total of five major tours to Japan for Indian groups have been carried out, and six tours to India for Japanese artists. Most of these projects have been supported by governments of India and/or Japan, and/or by private organizations in both countries.

A sample list of venues in Japan where workshops on Indian *rāga* for Japanese instruments and/or voice have been held would include the Embassy of India Auditorium, Japan Foundation Asia Center, Tokyo University, Tokyo Music College, and the temples Gokokuji, Kenchōji, and Ishiyama-dera. In India, venues include the Japan Culture and Information Centre, India International Centre IIC, Indira Gandhi National Centre for the Arts IGNCA, Sangeet Natak Akademi, University of Delhi, Benares Hindu University, University of Madras, Bhātkhandee Music Institute, Santiniketan, and music training centers of renowned gurus throughout India.

Cooperative performances featuring Indian and Japanese instruments and vocal music have been presented in Japan in the Embassy of India Auditorium, International House of Japan, German Culture Center, Keio University, International Christian

University, Shuchi-in University, Foreign Correspondents' Club of Japan, and many concert halls. Music and interviews have been broadcast by NHK and other radio and television media.

In India, major events have been held in the IIC, IGNSA, National Centre for the Performing Arts NCPA, Government Museums in Delhi and Chandigarh, Indian Institute of Technology IIT in New Delhi and Mumbai, Guru Nanak Dev University, Benares Hindu University, Santiniketan, University of Madras, Bhātkhande Music Institute, Centre for Ethnomusicology, Brhaddvani Music Centre, and concert halls throughout India. Performances and interviews have also been carried on broadcasts on national television Doordarshan and All India Radio.

Major festivals in which performances were given in Japan include International Shakuhachi Festival and Namaste India Festival; and in India, Allauddin Khan Music Festival, Bhātkhande Music College Festival, Lok Kala Mandal, festivals of temples, and others. In other countries of South Asia, performances have been given in Shilpakala Academy (Dhaka), National Council of the Arts (Islamabad), national radio and television in Sri Lanka, and other sites. In the Western world, venues include London University School of Oriental and Asian Studies, New York University, Princeton University, Cornell University, Syracuse University, University of Chicago, University of California, East-West Center, and Center for World Music. Performances and interviews have been broadcast on Voice of America VOA and various FM radio stations. The above is only a partial listing of activity sites, many of which have hosted two or more IJMEA programs.

Related articles and reports have been published in Japan (*Japan Times*, *Hogaku Journal*, *Yomiuri Weekly*, and others), India (*Times of India*, *Hindustan Times*, *Journal of the Sangeet Natak Akademi*, and others) and in other countries where IJMEA programs have taken place. Music instruction and consultation for cooperative research and practical music projects are also carried out in conjunction with institutions and individuals.

Performance of Indian Classical Music on the Japanese *koto*

The following is a description of an eighteen-month project carried out jointly by the author and collaborating artists, scholars, students, and institutions and individuals in India. "Asian classical crossover—Performance of Indian classical music on the Japanese *koto*," is a cooperative performing arts research and development program by Indo-Japanese Music Exchange Association (Japan) and American Institute of Indian Studies AIIS (India and the United States). The author was awarded the AIIS Senior Performing and Creative Artist Fellowship for partial support (four months) during the July 2006–January 2008 period.

Research and experimentation in adapting the Japanese 13-stringed classical stringed instrument *koto* to the performance of Indian classical music has been carried out in music centers of India between July 2006 and January 2008. Having earlier been presented in public performances with established Indian artists, the *koto* as an instrument of Indian classical music is slated for wider exposure and documentation as recordings and publications.

This tri-cultural endeavor features Indian musical "software" (*rāga/tāla*/theory) ap-

plied on Japanese “hardware” (instrument), coordinated by an American musicologist/performing artist deeply involved with both cultures over a period of thirty-five years. Although the originator of this project is an American national (the author) working under the AIIS banner, it has been carried out in India and Japan as a bilateral intra-Asian research and development program to, ideally, unfold independent of other influences. As mentioned earlier, the Japanese flute *shakuhachi* has been deemed fully suitable for *rāga* expression with the conferral of the *Visharad* degree, and in subsequent concerts and broadcasts in India and Japan. Japanese *koto* debuted in India as an instrument of *rāga* performance in 2003 in a series of public concerts and in educational institutions. A *koto* artist trained somewhat in Indian music had in Japan from the year 2001 participated in similar performance programs as part of a series of concerts [幻楽夢奏 Gengaku Musō].

During the term of the present project in India, joint studies with established Indian musicians and musicologists in Delhi, Lucknow, and elsewhere have aided in development of appropriate technique for *rāga* on *koto*. The use of classical Japanese poetry in Indian vocal music together with *koto* and Indian instruments has also been successfully demonstrated in concerts and recordings. In addition to artists and scholars in India, Japan, and the United States, accomplished musicians in Korea, Vietnam, Indonesia, and other cultures have expressed interest. Many other instruments in Asia are latent purveyors of *rāga*-like melody, and demonstration of facility for *rāga* on *koto* can open up avenues for those instruments, as well.

To allow artists and advanced students of Indian classical music in India (of both the Hindustānī tradition of northern India and Karnatic tradition or southern India) to fully participate in the process of research and development, three *koto* instruments have been placed in the leading music education institutions in India: Bhātkhande Music Institute (in March 2005), University of Delhi / Department of Music and Fine Arts (July 2006), and University of Madras / Department of Indian Music (September 2006). Photographs of these instruments in use are posted on the Indo-Japanese Music Exchange Association websites (see below, Photos 1, 2).

Periods of project activity throughout India:



Photo 1: *Koto rāga* workshop for graduate students in University of Delhi, August 3, 2006.



Photo 2: *Koto* with Baul artist in Santiniketan, September 4, 2006.

- (1) February–March 2005 — preparatory visit to Delhi and Lucknow to consult with affiliated institutions and collaborating artists and educators; donation of first *koto* instrument;
- (2) July–September 2006 — placement of two Japanese *koto* instruments in other Indian institutions; work with musicians and hold workshops and small-scale cooperative performance events; and
- (3) January–March 2007 and November 2007–January 2008 — continue development process, hold performances, prepare documentation in India.

Interim progress reports have been submitted, and a detailed report is to be compiled and submitted to AIIS in early 2008, with further performances and demonstrations to be presented in India and Japan, and in universities throughout the United States. Related studies, performances and other presentations have also been carried out in Japan and the United States during this eighteen-month period.

An instrument closely resembling in construction the present *koto* in Japan (and somewhat resembling counterparts in Korea, China, and Vietnam) was known in India as *Narāyan vīna*, a replica of which is in Raja Dinkar Kelkar Museum, Pune. Reintroduction of this type of instrument—and for the first time as an instrument of classical music—can in India serve to connect past and future periods, and folk and classical traditions. A similar purpose was served in having the Japanese flute *shakuhachi* fully accredited for Indian classical music. A vertical flute resembling *shakuhachi* is found in ancient cave paintings of Bhimbetkar (Madhya Pradesh).

Indian Classical and Indo-Japanese Music Project 2007 in Japan

During the period June 5–24, 2007, a series of ten concerts 「インド古今神秘の調べ Echoes of the Ganga」 was produced by the Indo-Japanese Music Exchange Association, in concert halls and universities in Kantō- and Kansai-area cities. This project was supported by the Japanese Government Agency for Cultural Affairs (*Bunkachō*) as part of the Festival of India in Japan during the India-Japan Friendship Year 2007. The concerts of Indian classical, folk and sacred music, and Indo-Japanese music collaborations featured four musicians of the Benares *gharana*, along with eight prominent artists of Japan performing both separately and together with the Indian artists in the respective events, some of which included other genres such as dance, poetry, and culinary arts.

The group from India was comprised of two prominent vocalists along with artists of the bowed lute *sārangi* and drum set *tablā*. The artists had previously developed a relationship with Japan through IJMEA projects, as the father of the leading vocalist had been in 1993 the first Asian musician to be invited to Japan by Agency for Cultural Affairs as Expert in Arts and Education. The two-week series of events in 1993 featuring Pandit Ganesh Prasad Mishra had included a concert for the Asian Cultural Center for Unesco, participation in a vocalization research project at Tokyo University, and collaboration with premier Japanese *koto* artist Keiko Nosaka in performing Japanese haiku in Hindustānī vocal forms. Pandit Mishra's sons Vidyadhar (vocalist in this 2007 group) and Girdhar (*tablā* artist who had performed again in Japan in 2004) have continued to closely collaborate in Indo-Japanese music projects, including



Photo 3: Takasaki Core Hall concert,
June 6, 2007



Photo 4: Foreign Correspondents' Club of Japan,
June 22, 2007

concerts of *rāga* + haiku and *tanka* in the India International Centre IIC in New Delhi.

The complementary nature of the poetic and musical arts of both India and Japan were highlighted during the June 2007 project in Japan, as Japanese instruments *shakuhachi*, *koto*, *biwa* and *shamisen* were presented in Indian, Japanese, and Indo-Japanese vocal and instrumental music items (Photos 3, 4).

Indo-Japanese Music Exchange Association website www.ijmea.com/ (in Japanese and English) carries records of activity in musico-linguistic exchanges in the Japan-India corridor, including text and photographic documentation of past events, music and film samples, and schedules of upcoming projects and events.

Traditions of music and language, like other living things, will continue to evolve in response to conditions in their environments. It remains to be seen if traditions in Asia will withstand global forces in this twenty-first century and find the will to build upon mutual relativity in carrying forth further coherent creative development.

Bibliography

Publications in English

- Al-Biruni, *India*, (Calcutta: Rupa and Co., 1988).
- Bakshi, D. N., *Hindu Divinities in Japanese Buddhist Pantheon*, (Calcutta: Benten Publishers, 1979).
- Basu, Indrajit, "India and Japan Cozy Up," *Asia Times Online*, December 22, 2004.
- Blyth, R. H., *Haiku Volume 1: Eastern Culture*, (Tokyo: The Hokuseido Press, 1949).
- Crystal, David, *The Cambridge Encyclopedia of Language*, (London: Cambridge University Press, 1997).
- Danielou, Alain, "Conscious or Haphazard Evolution in Music," *Music: East and West*, (New Delhi: Indian Council for Cultural Relations, 1969), 11–15.
- Davidson, LeRoy, "Indian Influences on China," *A Cultural History of India*, Ed. A. L. Basham, (Oxford: Oxford University Press, 1975), 454–60.
- Deva, B. C., *An Introduction to Indian Music*, (New Delhi: Ministry of Information and Broadcasting, 1973).
- Fromm, Mallory, *Before Babel*, (Tokyo: Macmillan, 1995).
- Kaufmann, Walter, "The *mudras* in *samavedic* Chant and their Probable Relationship to the *go-on hakase* of the *shomyo* of Japan," *Ethnomusicology* 11(2), May 1967, 161–169.
- , *The Ragas of North India*, (Bloomington: Indiana University Press, 1968).
- Nakamura Hajime, *The Ways of Thinking of Eastern Peoples*, (Tokyo: Japanese Government Printing Bureau, 1960).
- Prajnananda, Swami, *Music of the Nations*, (New Delhi: Munshiram Manoharlal, 1973).
- Rao, M. Rama, "India, Japan Identify Eight-fold Initiative for Strategic Partnership, Resolve to Launch a Gas and Oil Cooperation Dialogue," *Asian Tribune*, April 30, 2005.

- Sachs, Curt, *The Rise of Music in the Ancient World—East and West*, (New York: W. W. Norton and Co., 1943).
- Sharma, S. D., “US Maestro Enchants Music Lovers,” *Chandigarh Tribune*, February 25, 2007.
- UCLA Conference Announcement, “Ethnomusicology at Work and in Action,” 2005 Annual Graduate Student Conference, University of California at Los Angeles, April 9–10, 2005.
- Verma, Satya Bhushan, “India in Japanese Literature,” *India and East Asia: Culture and Society*, Ed. N. N. Vohra, (Delhi: Shipra Publications, 2002), 144–53.

Publications in Japanese 和文資料

- 岸辺成雄『東亜音楽史考』龍吟社、1944年。
- 『古代シルクロードの音楽』講談社、1982年。
- 岸辺成雄他『日本の音楽・歴史と理論』国立劇場事業部、1974年。
- 小泉文夫『フィールドワーク』冬樹社、1984年。
- デーヴァ, B. C., 中川博志訳『インド音楽序説』東方出版、1994年。
- 中西亮『世界の文字をたずねて』松香堂、1982年。
- 中村元「日本におけるインド文化の発見」『日本文化研究』第1巻、新潮社、1958年。
- ホッフマン, T. M.『東洋音楽との邂逅 尺八と箏のためのインド音楽』エコ、1989年。
- 「言葉と音楽における時性の相互関係を探る」『武蔵野音楽大学研究紀要』記29号、武蔵野音楽大学、1997年、155–75頁。
- 『北インド声楽の神髄』解説冊子、JVC CD、VICG-60322、1998年。
- 「言葉と音楽における「減」と「増」の原理を探る」『武蔵野音楽大学研究紀要』記33号、武蔵野音楽大学、2001年、151–75頁。
- 「言葉と音楽でみるアジア南北の音文化交流」『武蔵野音楽大学研究紀要』37号、武蔵野音楽大学、2005年、59–83頁。
- 「インドの音大で箏が活躍」『邦楽ジャーナル』Vol. 221、2005年。