A guide to the musical instruments of NE India: classification, distribution, history and vernacular names

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TABLE OF CONTENTS

PHOTOS

TABLES

MAPS

Error! No table of figures entries found.

Preface

Despite some individual studies, the traditional music of Northeast India is little-known in comparison to the richness of its musical cultures. This book was begun to try and improve the definitions of musical instruments in dictionaries, ethnographies and museum displays, by providing technical terms to describe instruments, bibliography, maps and images. However, the potential to compile comparative names for instruments also suggests some historical and cultural speculations, and these have become an integral part of the book. It is very much a work in progress, and all contributions to improving it would be very welcome.

Roger Blench
Cambridge
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Glossaire/Glossary

This glossary is highly provisional, since I have not had a chance to check it against a technical work of ethnomusicology in French.

English	Français
Idiophones	
concussion rings	bagues de concussion
scraped notched stick	bâton râpé
concussion sticks	bâtons de concussion, bâtons entrechoqués
concussion balls	boules de concussion
struck gourd	calebasse frappée
clapper bell	cloche à battant interne
clapperless bell	cloche en fer (double) sans battant
concussion bells	cloches de concussion
rock-gong	gong de pierre
pellet-bell	grelot
gourd net-rattle	hochet de calebasse en réseau
box-rattle	hochet en boite
gourd-rattle	hochet en calebasse
vessel-rattle	hochet en vaisseau
basketry rattle	hochet en vannerie
concussion rattles	hochets de concussion
struck bar	poutre frappée
slit-gong	tambour à fente
xylophone	xylophone
Membranophones	
hourglass drum	tambour-sablier
barrel-drum	tambour en baril
single-headed cylindrical drum	tambour cylindrique avec un seul peau
goblet drum	tambour-gobelette
wedge-laced drum	tambour calé avec lacets
Chordophones	
guitar	guitare
arched harp	harpe arquée
spike-lute	luth à bâton
spike-fiddle	vielle à bâton
Aerophones	
double-reed	anche double
single-reed	anche simple
clarinet	clarinette
transverse horn	corne traversière
single-note bevel-flute ensemble	ensemble de flutes verticale oblique
duct flute	flute à bec
notch-flute	flute à encoche
ocarina	flute globulaire
vessel-flute	flute en vaisseau

English	Français
transverse flute	flute traversière
end-blown flute	flute verticale
bevel-flute	flute verticale oblique
shawm	hautbois
cruciform whistle	sifflet cruciforme
European whistle	sifflet Européen
stamping-tube	tuyau tapé
struck vessel	vaisseau frappé

TABLE OF ETHNOLIGNUISTIC GROUPS CITED IN THE TEXT

Name	Other names	State(s)	Phylum	Subgroup
Adi		Arunachal Pradesh	Sino-Tibetan	Tani
Ao		Nagaland	Sino-Tibetan	Naga
Assamese		Assam	Indo-European	Indo-Aryan
Garo		Meghalaya	Sino-Tibetan	Garo-Bodo
Hruso		Arunachal Pradesh	Hrusish	
Khasi		Meghalaya	Austroasiatic	Khasian
Mey	Sherdukpen	Arunachal Pradesh	Kamengic	
Mog	Arakanese	Tripura	Sino-Tibetan	Lolo-Burmese
Monpa of Tawang		Arunachal Pradesh	Sino-Tibetan	Bodish
Naga		Nagaland	Sino-Tibetan	Naga
Nocte		Arunachal Pradesh	Sino-Tibetan	Naga Tangsa
Tangsa		Arunachal Pradesh	Sino-Tibetan	Naga Tangsa
Tiwa		Meghalaya	Sino-Tibetan	Garo-Bodo
Wancho		Arunachal Pradesh	Sino-Tibetan	Naga Tangsa

Acronyms cited in the text

DBCIC Don Bosco Centre for Indigenous Cultures, Shillong

1. Introduction

1.1 General

All continents are rich in music, but Northeast India has a particular diversity of instrumental music, partly as a result of its ethnic diversity and also because of the multiple influences the region has undergone over many millennia. In contrast to the classical music of continental India, this music has remained poorly known, partly because the region has remained largely closed to outside researchers for a long period. Even now, much of it is difficult to access. There is, however, a lively local research tradition in some of the 'Seven Sisters' and bringing some of this material to the outside world in an accessible format would seem to be a useful enterprise. Descriptive ethnomusicology is not much in favour at present, despite a global enthusiasm for 'world music'. Even so, it is noticeable that performance groups from Northeast India have not made it to the international music stage.

Yet the time for research and documentation is now. At the moment, many musical and oral traditions are still in place; but the spread of electricity and cheap satellite television, combined with relentless promotion of Hindi in the school system are rapidly diffusing a diet of global music and pressing home a message of the irrelevance of the old culture. Many young people are turning away from their language, and thus many associated cultural traditions. At the 2011 celebration of the centenary of Pasighat in Arunachal Pradesh, the main attractions were advertised as stars of recent television talent shows.

Another issue is the staged performance of cultural shows. In many areas, villages traditionally competed against one another in displays of dancing and costume, and this has been adapted to performances in large arenas, often with highly inappropriate musical accompaniment and poorly amplified sound, with sometimes inappropriate commentary in languages other than that of the performers. This type of performance is increasingly divergent from actual ceremonies performed in villages and should not be confused with ground reality. Nonetheless, it does function to keep alive in some form traditions which might otherwise be moribund. Tourist brochures and websites advertising individual states are very often illustrated with photographs from performances of cultural dancing taking place in large arenas.

A major development in the documentation of traditional music and performance is the availability of relatively cheap high-quality lightweights video and sound recording equipment. These make it possible to document both long performances in a village setting and to disseminate digital copies cheaply and easily. This material can also be made available on the web, although there is little sign that local communities are taking advantage of this. However, DVDs are available, often with rather limited documentation, from institutions such as the Don Bosco Centre for Indigenous Cultures (DBCIC) in Shillong, with performances of many musical traditions. Indeed, one of the problems of such a profusion of individual ethnolinguistic groups is that there may be little else available in print or on the web in relation to some of those documented.

Each culture deserves to be documented in its own right and preferably recorded both in audio and video. But it also needs to be analysed and compared with cultures beyond the political boundaries of India, as music does not neatly match the frontiers of the modern nation-state, especially one with the rather contorted shape of India. Bangla Desh, Myanmar, Tibet all border NE India and there are clear links with the cultures of all these areas. Music also need to be analysed in terms of text, scale systems, melody type and much else to make sense of its interlocking relationship with other areas of culture. In this region, music has a particularly strong relation to dance; in many groups, almost all music is danced, and dance is in turn related to elaborate costumes and ornamentation. Music also changes over time; the penetration of Assamese and Bengali culture in the lowland areas of Northeast India has had a marked influence on musical culture over many centuries. Changes in patterns of performance as a consequence of contact with world religions and modern recording technology are also worthy of more than a footnote.

In Northeast India much of the rich musical heritage remains intact and where there has been some, albeit highly sporadic, documentation of traditional music. However, many descriptions are rather inexact, and it is

sometimes unclear from the existing materials what instruments are being referred to and their exact status. A review such as Sharma (2004) has numerous vernacular names for many of the ethnic groups of NE India. However there are virtually no illustrations and the descriptions are garbled at best, making them difficult to use in a text such as this. Where instruments are illustrated, it is usually possible to be much clearer about their organology, for example in Syiem (2005) which has numerous photos of Khasi instruments. However, in some instruments, such as the flutes, a picture is not enough, it is necessary to understand how an instrument is played to characterise it correctly.

This book is being prepared to make both Northeast Indians and outsiders aware of their musical heritage and to encourage the better description and documentation of that heritage. The main object is to provide a summary of existing knowledge of musical instruments. The text therefore covers;

a) the correct description of musical instruments likely to be encountered in Northeast India
b) the likely distribution of those instruments, with notes on where they are found outside Northeast India
c) the vernacular names for the instruments, where these are known
d) the history of those instruments inferred from geography and history
e) the distribution of particular types of instrumental ensemble
f) changes to the instrumentarium as a result of external influences, as well as globalisation and recording technology

It is emphasised that this is a highly provisional document. Our knowledge of instruments is fragmentary and the records are sometimes hard to interpret. Part of the function of this book is to encourage further work and better materials.

1.3 Introduction to organology

Organology is the science of describing and classifying musical instruments. Having precise descriptions of how musical instruments work is essential to understanding how instruments develop and how they are related to one another. Two major systems have been proposed in the twentieth century, Hornbostel/Sachs (Hornbostel & Sachs 1919 trans. Baines 1963) and Schaeffner (1954). The translation of Hornbostel/Sachs into English in 1963 ensured that it has become dominant in the Anglophone world although some French publications still use Schaeffner's system. The exact point of classification, except as a reference tool, is sometimes hard to determine; clearly many instruments present combinations of sound-production systems. Northeast Indian societies are not so obsessed with this type of classificatory order; few have a term corresponding to 'musical instrument'. Even rather evident categories such as 'drum' may often not have a unitary term as opposed to specific names.

The Hornbostel/Sachs system for classifying musical instruments and sound-producers divides instruments primarily on the basis of the way sound is produced, whether through percussion, vibrating strings or air. The early version of their system envisaged four categories, idiophones, membranophones, chordophones and aerophones. More recently it has become necessary to add electrophones, instruments that produce sounds by purely electronic means, such as synthesisers. Another more controversial category used here is lamellophones, instruments where the sound is produced by a vibrating tongue or lamella. This particularly applies to the Jews' harp. Such a classification is helpful for comparing instruments across cultures and for cataloguing museum collections, but is very remote from the way instruments are classified in indigenous systems. Typically, instruments may be classified by the material they are made of, the ensembles they are part of, or not classified at all, but simply given individual names.

When seeking to classify an instrument correctly, the primary question to ask is, how is the air excited to produce a sound? The basic mechanisms are shown in Table 1;

Table 1. The classification of musical instruments

Mechanism	Term	Example
The sounding body is the instrument itself	idiophone	slit-gong
The sounding body is a stretched membrane	membranophone	drum
The sounding body is a stretched string	chordophone	lute
The sounding body is the air	aerophone	flute
The sounding body is a vibrating tongue	lamellophone	jew's harp
The sounding body is excited by electricity	electrophone	electric organ

1.4 Musical instruments and sound-producers

The definition of a musical instrument is not as obvious as at first sight appears. Many societies have what can be described a noise-makers and 'sound-producers', often used by children. In one location they will be used simply as a sound-producer whereas elsewhere they may play a part of a musical ensemble. Music is often associated with seasonality, especially in the drier zones where timely planting and weeding are essential to survival. As a consequence, particular noise-makers are associated with the growing crops or other agricultural processes. Children make and use their own distinctive repertoire of sound-producers. Sometimes these are in imitation of adults, for example unpitched raft-zithers of cornstalks and drums made from tin-cans with plastic heads. As a consequence, the text makes no clear distinction between sound-producers and instruments since the boundary is often hard to establish.

1.4.1 Modern materials

Northeast Indian musical instruments have also modernised the materials they use. From an early period, instruments have been made from plant and animal materials, with the introduction of bronze and iron as techniques for smelting these metals became known. They tended to be carved rather than painted, because the vegetable colours available would rapidly degrade with the instruments in use. The first major change was probably the replacement of vegetable fibre and gut strings with metal and later plastic strings. More strikingly, wind instruments have replaced the cane and wood with metal and rubber.

1.4.2 European instruments

European musical instruments may have been introduced from the late nineteenth century onwards, when soldiers, missionaries and schools introduced a wide variety of previously unknown sound-producers. Few of these have been incorporated intro traditional forms, but many exist in urban settings and often have indigenous-sounding names in many languages.

1.4.3 Electrification

Another feature typical of the modernisation of the Western instrumentarium is electrification. The most iconic instrument is the guitar, but the piano and others have also been important in changing the sound of music. Although (bad) amplification is becoming common, even in Northeast Indian village music, electrified instruments are still rare. Electrification is unlikely to prolong the life of many instruments; the prestige of traditional instruments is so low that they are simply replaced with global detritus.

1.5 Why study the history and the distribution of musical instruments?

Musical instruments are generally the most concrete evidence we have about the music of the past. Even if we can only speculate what type of music people played, we often know what instruments they used, and something about ensembles and techniques of performance. As a consequence, a large part of musical reconstruction is devoted to tracing the evolution, development and change in morphology and distribution of musical instruments. This has a long intellectual history in ethnology; it was thought in the German *Kulturkreislehre* school that musical instruments were associated with different cultural layers in human evolution. The apotheosis of this type of scholarship is Curt Sachs' (1927) *Geist und Werden der Musikinstrumente* which trawled the ethnological literature and museum collections of the world to produce a massive database of distributions of instrument types. The interpretation of those distributions would not make much sense in terms of modern understanding of ethnohistory, but the compilation of data it represents

remains unsurpassed. It seems rather clear that human societies have a way of borrowing each others' cultural practices in a rather more haphazard fashion than such neat historical schemas would suggest.

There exists no general overview of the musical instruments of Northeast India; indeed it is safe to say that for the majority of ethnic groups no information exists. Most dictionaries are nearly useless, giving only definitions such as 'flute' or 'drum' without further description. Museums with significant collections of instruments do not have catalogues, so the only way to explore their holdings is physically visit each museum. The literature search for this monograph leans heavily on relatively few publications and also draws on the often scant notes accompanying commercial and academic recordings.

1.6 Linguistic background to Northeast India

Understanding the peopling of Northeast India and its complex linguistic makeup is essential to interpreting the patterns of musical instruments. The languages of Northeast India can be divided according to their linguistic affiliation; the four main Northeast Indian language phyla represented are Sino-Tibetan, Austroasiatic, Indo-European and Tai-Kadai. These in turn are divided into several branches (Table 2);

Table 2. Language families of Northeast India

Phylum	Branches
Sino-Tibetan	Tani, Naga, Bodish, Lolo-Burmese, isolates
Austroasiatic	Munda, Khasian, ? Palaungic
Indo-European	Indo-Aryan
Tai-Kadai	Tai
Isolates	Kamengic, Siangic, Puroik

Arunachal Pradesh in particular is inhabited by populations whose languages are hard to classify. Most have been treated as Tibeto-Burman although without any good evidence. Many languages are known only by name; no material has ever been published on them, and their actual affiliation remains unproven.

Archaeology and prehistory remains poorly developed in Northeast India, possibly with the exception of some late Hindu temples and the megaliths of Meghalaya. But dates for the Neolithic and other key cultural stages, such as the introduction of metals, remain doubtful. Linguistics can provide a 'window' into the peopling of the region, albeit somewhat imprecise.

Photo 1. Khasi megalith

Source: Author photo, Shillong

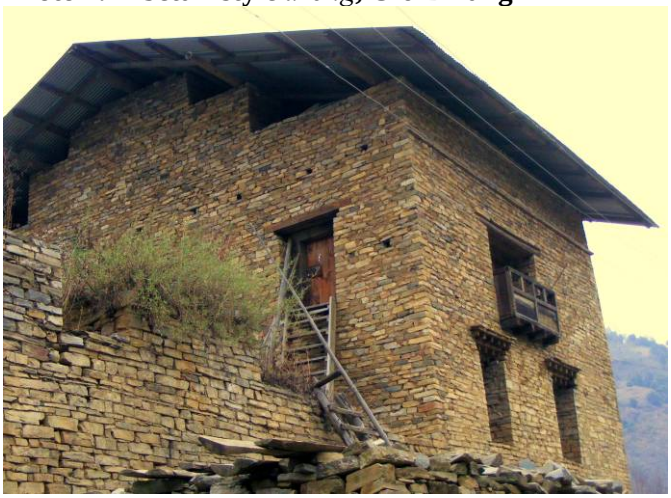
In the earliest period, from the Palaeolithic onwards, the region must have been inhabited by highly diverse hunter-gatherers. These would undoubtedly have spoken a variety of languages, which have largely disappeared today, although evidence for them may survive as substrates in existing languages. Only in Arunachal Pradesh, where we find languages that are difficult to classify, such as Puroik, Mey, Bugun, Koro, Hruso and Miji, are there probable survivals from this period. Elsewhere, such as in the Khasi Hills and the Assam plains, the subsequent expansion of incoming populations has eliminated all traces of these peoples. In addition, in Arunachal Pradesh we find evidence that even populations who farm today, such as the Puroik and Milang, were formerly dependent on semi-wild plants, such as the sago-palm and the tree-fern. Undoubtedly, the isolation and difficult communications in Arunachal Pradesh have contributed to their persistence in remote areas.

The first clear evidence for the expansion in the region of an outside population is the spread of Austroasiatic. Only one Austroasiatic language, Khasi, is spoken in Northeast India today, but distributional evidence makes it clear such languages must once have been common. The Khasi

people were responsible for the striking stone megaliths still found widely in Meghalaya (Photo 1). The Munda languages are spoken in Orissa and other parts of subcontinental India, and these represent the westward limits of Austroasiatic. Thus, a chain of languages must have spread through this region which connected Khasi to important Munda languages such as Sora and Santal. These languages were presumably overwritten by the later expansions of other language phyla, particularly Sino-Tibetan.

Following this era, which may have been around 3500 years ago, there was an expansion of Sino-Tibetan languages. The exact homeland of Sino-Tibetan and the period at which it began to expand is much disputed. However, some of the incursions into NE India are relatively late. All along the northern edges of Arunachal Pradesh there are Bodic languages, notably the Monpa/Memba cluster, which are part of the same grouping as Tibetan. These are strongly associated with the introduction of Tibetan Buddhist culture, and many people have been influenced by this, even when not adopting Buddhism wholesale. At Old Dirang, inhabited by a Monpa group who speak a language related to Sharchop in Eastern Bhutan Tibetan-style *dzongs* Photo 2 were built inside fortified towns. The Monpa expanded south into the northern mountains and heavily influenced resident populations such as the Mey and the Nah, who are linguistically unrelated.

Photo 2. Tibetan-style *dzong*, Old Dirang



Source: Author photo, Old Dirang

Scattered across the region are various languages which constitute individual branches of Sino-Tibetan, including the Meithei and the Karbi [Mikir]. Two very widespread branches of Sino-Tibetan represented in Northeast India are the Tani and Garo-Bodo peoples. The Tani peoples are a complex of languages and ethnic groups spreading from the Tibetan Plateau down to the valley of the Brahmaputra. The Adi and the Galo are probably their most well-known representatives, but there are many others. The Tani languages are all closely related and therefore they must have expanded relatively recently, perhaps around 1500 years ago, for reasons now unknown. Much the same is true of the Garo-Bodo peoples, who occupy the Garo Hills in Meghalaya and adjacent areas. This group of languages is similarly coherent, although what caused their expansion is unknown. Other local expansions of Sino-Tibetan are the movement of the Jingpho into this region. One language, Turung [Singpho] is spoken in the north of Arunachal Pradesh. Similar, in the south of Mizoram, the Mog people represent the northern expansion of Arakanese, which is itself a dialect of Burmese.

Around the tenth century, perhaps earlier, came the expansion of Indo-Aryan. This is represented principally by the eastward extension of Bengali into the flood plains of the Brahmaputra valley, and the evolution of Assamese. These populations may have introduced wetfield rice cultivation, a technique previously unknown. Whatever peoples lived there then must either have been displaced or absorbed. Photo 3 shows the ‘Kachari ruins’, the remains of a palace at Dimapur dating from the tenth century. The architecture clearly represents a type of hybrid between local iconographic traditions and the styles of the incoming Indo-Aryan peoples.

Photo 3. Kachari ruins, Dimapur

Source: Author photo

The last major expansion was the Tai-Ahom. Representing the westernmost branch of the Tai languages, these peoples entered the region in the early Middle Ages, probably originally as a military expansion. Indeed, some of their forts can still be seen in the region of Itanagar (Photo 4). After their kingdoms broke up, they dispersed and became small village-oriented populations, which persist as the Khamti and others. Unlike many of the peoples in this region, the Tai had their own writing system, so there is a certain amount of information concerning their history.

Photo 4. Tai Ahom fort at Itanagar

Source: Author photo

The British colonial era also had an important impact on language and ethnic distribution. Tibetan military expansion was under way in the late nineteenth century and British opposition effectively froze this process. At the same time, the cessation of chronic warfare among the hill peoples allowed some of them to move

south into the plains without fear of attack. The southern distribution of the Tani-speaking Mishing is a likely reflection of this process.

1.7 Vernacular names of musical instruments

Musical instruments in Northeast India have a complex terminology. By collecting vernacular names in individual languages it is often possible to infer how instruments spread from one culture to another and explore the extent to which they can be reconstructed in individual language subgroups.

1.8 Musical forms

Making any generalisation about musical forms over such a large area is difficult, and the lack of detailed studies is a further hindrance. However, there are some broad patterns which can be deduced form performance and recordings which are worth outlining.

a) The scales used in this region are generally very restricted; pentatonic and tetratonic scales are common. The classically influenced music of the Assamese and the Arakanese uses a much wider range, including heptatonic and complex scales associated with Indian art traditions.
b) The ambit is usually very restricted; the range of melodies rarely exceeds an octave and is sometimes even more restricted. Again, this does not apply to the classically influenced music
c) Music is essentially monodic, sung either in unison, or octaves.
d) Larger ensembles are heterophonic, that is they play underlyingly the same melody but individual performers vary the tune or the rhythm
e) Choral polyphony or singing in parallel chords occurs among some Naga and Kuki-Chin groups. Sometimes these are used in call-and-response structures, as where chords in individual whistle respond to the chords of a mouth-organ. However, this appears to be very rare.
f) Instruments with marked capacity to sound overtones and thus create drone plus melody structures are exemplified by the widespread Jew's harp and the Kuki right-angle flute. Unlike over areas of Central Asia, this is not carried over into singing styles

This pattern reflects very well the overall ethnolinguistic history of the region. Monody and heterophony is characteristic of much of East and SE Asia. The restricted scales and ambits are typical of the forager populations that are a recent memory in this region. Most striking is the presence of parallel chordal singing, which is quite atypical for both subcontinental India and SE Asia. Although there is extensive vocal polyphony in South China, parallel chords are more characteristic of the Melanesian region. Together with the presence of very large slit-goings, this points strongly to some prehistoric connection between these regions, which is still poorly understood.

2. Idiophones

2.1 General

Idiophones are 'self-sounding' instruments, that is they make sound by vibrating without a stretched membrane, vibrating string or air. They include bells, gongs, slit-drums, rattles and a variety of other instruments. The simplest instrument is probably clapped hands, which is virtually universal and is not normally considered a 'musical' instrument. A key division is between tuned and untuned idiophones. Most sounding bodies produce a definite pitch, and these can either be treated as untuned, or arranged in sets according to a scale system. The only tuned idiophone in Northeast India is the comparatively rare xylophone and metallophone played by the Mog people in Tripura.

Beyond that, an important division in struck idiophones is between percussion and concussion. Percussion instruments are when the sounding body is struck with a different type of implement, such as a beater or stick. Concussion instruments are those where two similar objects are struck together. Typical concussion instruments are paired wooden clappers, bells or other metal pieces that sound when clashed together, for example when tied around the ankle.

How instruments are played can also make a difference to their classification. For example, the Monpa people of Arunachal Pradesh used domed cymbals which they clash together to accompany ritual music. However, the performers have also developed a technique of swiping the cymbals against one another so that the air trapped between the two cavities makes an aerophonic sound with a component of sliding pitch. This illustrates the importance of carefully analysing performance techniques as well as closely examining specimens of instruments.

2.2 Percussion

2.2.1 Untuned

2.2.1.1.1 Struck plaques

2.2.1.1.2 Struck vessels

2.2.1.1.2.1 Gongs

The major type of struck vessel idiophone in this region is the gong. Gongs are cast from bronze and have a deep, booming sound with a long resonance. Most of those in Northeast India have been imported from SE Asia and are often regarded as valuable family heirlooms, prestige goods as much as simply musical instruments. There are three types of gong found in the region;

a) Bossed gongs
b) Shallow gongs without bosses and with a straight rim
c) Deep-sided gongs without bosses and an outcurving rim

Bossed gongs have a projection in the centre of the surface which gives the instrument its characteristic appearance and increases the resonance. Photo 5 shows a typical bossed gong, played by the Nocte in Arunachal Pradesh. The Nocte do not make these gongs so they are probably imported from Burma.

Photo 5. Bossed gong, Nocte, Arunachal Pradesh

Source: Author photo, Itanagar Museum

Photo 6. Bossed gong, *khar ŋa*, Tawang monastery

Source: Author photo, Tawang Monastery Museum

Gongs are also found in some of the monasteries in northern Arunachal Pradesh, although they are not a typical Buddhist instrument. They are probably imported from Tibet. Photo 6 shows a bossed gong, *kʰar ŋa*, used in Tawang monastery.

Shallow circular gongs are first recorded from China in archaeological excavations at around 100 BC. They are common in Northeast India in the Mizo and Garo areas.

Relatively uncommon is the type of deep-sided gong

without a boss and an outcurving rim. Indeed these are not generally made in SE Asia and it is possible this is a bronze vessel originally cast for a different purpose which has been adapted as a gong. Photo 8 illustrates one of these deep-sided gongs, *rang*, with an everted rim, played by the Garo in the Shillong area. Photo 7 shows how the instrument is played, beaten with a single stick on the base.

Photo 8. Deep Garo bowl-gong, *rang*

Source: Author photo, DBCIC

Photo 7. Performing on the Garo bowl-gong, *rang*

Source: DBCIC photo

2.2.1.1.2.2 Struck animal horn

Another type of struck vessel is the struck animal horn. A mithun or other horn is cleaned out and beaten with a stick as a rhythm instrument. Photo 9 shows such a struck mithun horn among the Thado Kuki;

Photo 9. Struck mithun horn, Thado Kuki

Source: DBCIC photo

2.2.1.1.3.3 Slit-gongs

Slit-gongs are hollowed logs or sections of bamboo internode with a lengthways slit, often with resonator holes at the ends of the slit, producing two distinct notes when struck with sticks. Slit-gongs are found across the world, throughout much of Africa, SE Asia, Oceania and Central-South America (ref). They occur in all sizes from small hand-held types to instruments as much as five metres long. In Northeast India, slit-gongs are typical of the Naga-speaking peoples. Examples as much as 5 metres long may be found in some villages, and the carving of a new drum is considered of great ritual and social importance. During the 1950s and 1960s when the Indian army was burning Naga villages, many of these older drums were destroyed. Fortunately, they are being carved anew and we have at least two good illustrated accounts of this process. Vattoth (2006) depicts the felling, transport and carving of a new drum among the Wancho, while Saul (200x) illustrates a similar process among the Naga in neighbouring Myanmar. Ao (2005) also describes the making of a new drum and transcribes some of the songs used in the process, but unfortunately without pictures.

The shapes and sounding bodies of Naga slit-gongs vary a great deal throughout the region. For example, Photo 10 shows a slit-gong shaped to represent a tiger, with a cylindrical sounding-body.

Photo 10. Chang theriomorphic slit-gong

Source: Author Photo, Kisama

Photo 11 shows a Sema slit-gong which has the pattern of an open tube, cut away obliquely at an angle, to increase the resonance.

Photo 11. Sema slit-gong

Source: Author Photo, Kisama

The playing of large slit-gongs is also quite idiosyncratic. Photo 12 shows the beaters on a Nocte slit-gong. They are double-headed and can be played with either end. The performers grasp the beaters in the middle and strike the slit-gong lips vertically. There are usually multiple performers. The Nocte instruments have a relatively short slit that will not accommodate more than two performers. However, other Naga groups have instruments with a slit running the length of the drum (Photo 13) and thus many players can beat the slit-gong at the same time.

Photo 12. Beaters, Nocte slit-gong

Source: Author photo, Itanagar Museum

Photo 13. Wancho slit-gong

Source: Author photo, DBCIC, Shillong

This method of performance is strikingly similar to the style of beating the large slit-gongs, 'garamuts', characteristic of New Guinea. Whether the two are historically connected remains to be seen. These large slit-gongs are used more as signal instruments than for rhythmic accompaniment to dance.

Another quite different type of struck hollowed log is played by the Mizo. These are short, heavy hardwood logs, which are either split in half or partly hollowed out from the top. They are struck with two beaters to keep time in ensembles. Photo 14 shows two different examples of this type of struck bar.

Photo 14. Struck hollowed logs, Mizo

Source: Author photo, DBCIC, Shillong

Another intriguing type of small slit-gong is the instrument played by Bengali musicians shown in Photo 15. The instrument consists of a large bamboo internode, with a slit along one side. The player has two stick which are held together, rather like chopsticks. He beats the bamboo tube rhythmically, while at the same time revolving it in his hand to produce a wide variety of percussive sounds with varying timbres.

Among the Khasi, single bamboo internode slit-gongs are played in sets of three, beaten with a pair of wooden sticks by one performer. These are known as *kdor*. It was typically played in the fields for the amusement of herdsmen and hunters (Syiem 2005:112).

Photo 15. Bengali bamboo slit-gong

Source: DBCIC photograph

2.2.1.1.3 Clapper-bells

Clapper-bells are any bells which have an internal striker attached to the interior of the bells. Church bells, school bells are all examples of clapper-bells. This type of bell is strongly associated with Tibetan religion, a peoples such as the Monpa and Memba of Arunachal Pradesh use these bells, usually cast from bronze, in their ceremonies. However, the Tibetans also export bells as an item of trade, and they have found their way to a number of non-Buddhist peoples, who use them as ornaments or precious possessions. Photo 16 shows a small bronze clapper bell used by the Hill Miri in Arunachal Pradesh.

Photo 16. Small bronze clapper bell, Hill Miri, Arunachal Pradesh

Source: Author photo, Itanagar Museum

Photo 17. Bronze bell, used by Hruso shamans

Source: Author photo

Photo 17 shows a bronze bell, probably of Tibetan origin, used by shamans among the Hruso in Thrizino, Arunachal Pradesh. Photo 18 illustrates the manner of performance using the bell.

Photo 18. Hruso shaman, ringing bronze bell

Source: Author photo

Buddhist monasteries often hang very large bronze bells above gateways. Photo 19 shows a bronze bell, *chod dril*, with an inscription in Tibetan, cast in the 17th century and hung above the door of Tawang monastery.

Another quite different type of clapper-bell are the ox-bells used in various parts of the Mizo area. These consist of a hollowed-out rectangular block of wood suspended on a rope, with several wooden clappers suspended inside. It is hung around the neck of the animal and produces a pleasant 'klok' nose as it walks along. Similar cow-bells are used throughout SE Asia. Photo 20 shows a Mizo cow-bell;

Photo 19. Large suspended bronze bell, Tawang

Source: Author photo, Tawang Monastery Museum

Photo 20. Wooden Mizo cow-bell

Source: Author photo, DBCIC, Shillong

Photo 21. Bronze pellet-bells on leather strap for horses, Mey of Rupa

Source: Author photo, Rupa Museum

2.2.1.1.4 Pellet-bells

Pellet-bells are bells where a vessel, usually metal, contains a rattling pellet. The vessel is usually slit to ensure improved resonance for the bell. The main type found in Northeast India is the oval pellet-bell, hammered or cast in brass or bronze and fixed to a leather strap, to be attached around the neck of a horse to keep the owner aware of its presence. These pellet bells are often quite large and heavy. Photo 21 shows a set of bronze pellet-bells attached to a leather strap used by the Mey people of Rupa.

2.2.1.1.5 Vessel-rattles

2.2.1.1.5.1 General

2.4 Rattles

The principle of a rattle is that a large number of sounding bodies, either loose or fixed, strike one another or a vessel, thus mixing concussion and percussion. Rattles are very common attached to the bodies of dancers, for example, tied around the waist or ankle. Vessel-rattles are where

rattling pellets are enclosed in a vessel and shaken to produce a rhythmic sound. The South American maracas are based on this principle. Rattles are generally very rare, but one has been recorded among the people of Tripura. This is made of a heavy cylindrical container mounted on a wooden handle. This is filled with rattling seeds and then beaten against the palm of the hand in a slow rhythmic pattern. It is not shaken freely like rattles elsewhere. Photo 22 shows the Tripura vessel-rattle;

Photo 22. Vessel rattle, Mog, Tripura

Source: DBCIC photograph

2.2.2 Tuned

2.2.1.1.1 Xylophones and metallophones

The principal tuned idiophone is the xylophone. There are two main types in NE India, the hanging xylophone and the frame-xylophone. The hanging xylophone is played by the Thadou Kuki and the Anal Naga and consists of a six wooden keys suspended on two cords. The far end of the instrument has a cord which is looped around the big toe of the player. The player then strikes the keys with two wooden beaters. This type of suspended xylophone is well-known from Northern Thailand and must presumably be played in Myanmar.

The frame-xylophone is very characteristic of SE Asia, but is only known in Northeast India from the Mog people of Tripura. The instrument has around twenty keys, suspended on cords over a trough-resonator and struck with two rubber-headed beaters. A single lead-player, usually a woman, leads an ensemble which consists of flutes and percussion. A performance video shows her alternating with the Jews' harp; whether this is common is unclear. A metallophone with iron or bronze keys, with exactly the same structure is also used in the same ensembles. Photo 23 and Photo 24 show respectively the metallophone and the xylophone;

Photo 23. Mog metallophone

Source: DBCIC photograph

Photo 24. Mog xylophone

Source: DBCIC photograph

2.3 Concussion

All concussion idiophones are untuned, so a division by tuning is unnecessary.

2.3.2.1 Concussion sticks

The simplest form of ideophonic concussion are two sticks struck together. If a suitable hardwood is chosen, then the noise is quite loud and penetrating and can be used to create an underlying rhythm for a percussion ensemble. Photo 25 shows pairs of hardwood clappers used to keep the rhythm in Assamese percussion ensembles. They have a slightly oval shap and are hollowed out in the centre. String loops are pierced through the centre for the performers to grip them strongly.

Photo 25. Wooden clappers, Assam

Source: Author photo, Guwahati Museum

2.3.2.2 Split-bamboo concussion tube

An unusual instrument with SE Asian affinities is the split-bamboo concussion tube played by the Bodo people. A single internode of bamboo is split lengthways at one end and a triangular hole is cut through the bamboo just next to the intact internode. The two half-tubes can then strike together, the performer taking advantage of the natural flexibility of the bamboo. Performers usually rest one half-tube against the palm of the hand and strike the other half-tube against it in a simple rhythmic pattern. Photo 26 shows a split-bamboo concussion tube played by the Bodo;

Photo 26. Split-bamboo concussion tube, Bodo

Source: Author photo, DBCIC, Shillong

2.3.2.3 Concussion rattles

A very common type of rattle is the multiple concussion rattle. This is where suspended pieces of something hard are fixed to a frame and when the frame is moved they strike one another and produce a rustling or jingling sound. One example of this are the metal jingling rods played in Assam (Photo 27). The rattle consists of a long rod with metal branches at the head. Fixed to these are pieces of metal, which strike one another when the performer bangs the stick on the ground. Similar instruments were used in marching bands in the European and Turkish tradition, known as 'jingling Johnnys'.

Photo 27. Jingling stick, Assam

Source: Author photo, Guwahati Museum

2.3.2.4 Cymbals

Cymbals are flat or slightly bossed and hollowed circular metal plates which are clashed together to make a penetrating rhythmic sound. There are two types in this region, small, heavy cymbals where the performer grips them close to the boss and larger cymbals with a long resonance period. Cymbals have a strong association with religious music. For example, both types are used in Buddhist ceremonies, and are seen among peoples influenced by Tibetan Buddhism in Arunachal Pradesh. Photo 28 shows a small pair of heavy cymbals with larges bosses which are clashed together vertically, along with the cylindrical drum as an accompaniment to masked dances for the Choskor festival in Old Dirang. Photo 29 shows a much larger pair with a different shape being played for the same festival.

Photo 28. Bossed cymbals, Monpa of Dirang

Source: Author photo, Old Dirang

Photo 29. Large vertical cymbals, Monpa of Dirang

Source: Author photo, Old Dirang

However, cymbals also form part of the Indian musical repertoire and accompany drum ensembles in Assam. Photo 30 shows an example of Assamese small cymbals;

Photo 30. Assamese small cymbals

Source: Author photo, Guwahati Museum

3. Membranophones

3.1 General

Drums can be categorised in a number of ways, according to their shape, the number of heads and the way the head is fixed. The way the head is fixed to the body is often the most characteristic feature. In Northeast India, the main ways of head-fixing are;

a) Pegged or pinned. The skin is fixed to the body with wooden pegs, and more recently, nails or metal pins
b) Laced. Laces pass through the skins and are fixed to the body of the drum or hold in place a second skin at the lower end of the drum.
c) Wedge-laced. The head is laced and linked to another loop halfway down the body. Wedges are used to tighten the skin
d) Glued. The skin is simply glued to the outside of the drum. This method is not very strong and is comparatively uncommon, but is used by the Monpa for ritual drums
d) Screw-tensioned. Modern, manufactured screw tensioners are attached to a loop going round the head of the drum. Associated with imported drum-types in churches and not generally seen in villages

3.2 Pegged or nailed drums

Pegging or nailing is a comparatively rare method of fixing drum heads in Northeast India. A series of cords often passes over the wooden pages to present them from tearing holes in the skin. Photo 31 shows a pegged bowl-drum used by the Tiwa people;

Photo 31. Pegged bowl-drum, Tiwa

Source: Author photo, DBCIC, Shillong

Photo 32. Khasi conical single-headed drum, *ksing*

Source: DBCIC photograph

3.3 Laced drums

3.3.1 Laced single-headed drums

Laced single-headed drums are quite rare, but the single-headed hourglass drum is an example of such a drum. Instead of passing to a second head, the laces pass to the base of the drum, where they pass through holes and can thus be tightened by pulling them taut. Kettledrums, such as used by military bands, derive from the Arab *naqqara*, which gave the medieval European name 'nakers'. A version of such an instrument is used by the Khasi (Photo 32). The drum is small and conical, and rests on the player's outstretched legs. It is beaten with two plain sticks.

3.3.2 Laced double-headed drums

3.3.2.1 Cylindrical drums

Photo 33. Thado Kuki laced cylindrical drum

Source: DBCIC photograph

Photo 34. Double-headed laced drum, Hruso

Source: Author photo, Sakhrin village

A highly characteristic method of fixing the head of drums is to have two skins, which are laced to one another. These occur in very different forms in NE India. For example, the Thado Kuki drum shown in Photo 33 is relatively wide and has a network of laces joining the two heads. The drum is laid upon the ground and beaten with the palm of the hand by the performer. Photo 34 shows a double-headed drum beaten with hands used by the Hruso of Arunachal Pradesh. An intriguing

performance technique is shown in Photo 36 which shows such a drum played among the Mey [Sherdukpen] people of Rupa. One person holds the drum and the two heads are struck by different performers. On the other hand, the Meithei drum is designed for walking and dancing (Photo 38). The drum is wide but very shallow and is suspended from the neck of a standing performer by a cord. The drum is held vertically so it can be beaten on the side like a bass drum in European military tradition. The heads are joined together by a chain of single laces rather than a network and beaten with a stick.

Photo 35. Garo subconical double-headed drum, *dama*

Source: DBCIC photograph

An interesting ensemble of double-headed drums is used by the Garo (Photo 35). The drum, *dama*, is about 150 cm long, and has a skin at both ends. The skins are joined by a network of laces. The performer sits on a stool and beats both ends simultaneously with the flat of the hand.

Photo 36. Mey double-headed cylindrical drum

Source: Author photo

Photo 37. Suspended laced drum, Tawang monastery

Source: Author photo, Tawang Monastery Museum

Buddhist monasteries also use double-headed laced drums to accompany certain ceremonies. Photo 37 shows such a drum, suspended from a frame, used in Tawang monastery.

3.3.2.2 Barrel drums

Barrel drums have short wide bodies and the two heads are joined by a network of laces, beaten with sticks or hands. Most commonly the two heads are equal sizes, but sometimes the lower head is small than the beating head, given the drum a conical profile.

3.3.2.2.1 Conical drums

Conical drums are those where the head is much wider than the base. A typical instrument of this type is the Khasi *ka bom*, which has laces joining the striking head to a ring around the much smaller base. It is placed on the ground and beaten with two sticks (Syiem 2005:85).

3.3.2.2.2 Biconical drums

A biconical drum is where the drum swells in the middle and curves down towards a skin at either end. The two heads are tensioned by skin laces. Photo 39 illustrates Khasi performance on the *synthieth* barrel-drum. The laces pass around a tensioning ring at each head, rather like most classical Indian drums. Photo 40 shows a biconical laced drum played by the Meithei people. The performer hangs the drum from a cord around the neck and beats both heads with the palm of the hands.

Photo 38. Meithei shallow laced cylindrical drum

Source: DBCIC photograph

Photo 39. Khasi *synthieth* barrel-drum

Source: DBCIC photograph

Photo 40. Meithei biconical laced drum

Source: DBCIC photograph

3.3.2.3 Kettle-drums

Apart from drums with straight walls, another type of laced drum is spherical or nearly so. This often-known as a 'kettle-drum' in organology, although the term is not very accurate. In Assam, there are paired kettle-drums with a nearly spherical profile where the two heads are laced together (Photo 41). They are held in place by cloth rings and laid on the ground at an angle so that a standing performer can beat two drums with a single stick.

Photo 41. Assamese spherical kettle-drums

Source: Author photo, Guwahati Museum

3.4 Wedge-laced drums

Wedge-laced drums are drums where the body has a bowl or conical shape and there is a network of laces surrounding the narrower part of the drum. By hammering in wedges it is possible to tighten the skin of the drum. This type of head-fixing is not common in NE India, but it is widespread in island SE Asia and parts of Africa. Photo 42 shows paired wedge-laced goblet drums used by the Karbi people. Each drum is carved out of a single piece of wood and is open at the base.

Photo 42. Karbi wedge-laced drums, *burup*

Source: Author photo, Guwahati Museum

3.5 Glued drums

Glueing the skin to a drum body is uncommon, simply because it is not a very durable method of fixing the skin. If the glue dries or the player beats the head too hard it will come adrift. Nonetheless, if the pattern is regular and the tone soft, the drum can function. Photo 43 shows one of the large, shallow-two-head drums played by the Monpa of Dirang. The drum is held aloft and beaten with a complex curved stick and is used for most types of ritual activity.

Photo 43. Glued shallow cylindrical drums, Monpa of Dirang

Source: Author photo, Old Dirang

3.6 Screw-tensioned drums

Screw tensioners are not traditional in Africa and would first have been applied to Northeast Indian-type drums in the New World.

4. Chordophones

4.1 Raft-zither

One of the more remarkable instruments in Northeast India is the idiochord raft-zither. This instrument is characteristic of Africa, and its presence in the Garo and Mizo areas is quite atypical for the region. Indeed it is something of an enigma how such similar instruments can be constructed in areas so remote from one another. A raft of heavy, dried grass-stalks is bound together and a bridge is formed at either end with a transverse stick. The strings are created by raising up the epidermis of the grass with a knife and tensioning it with the bridges. The width and tension of the string affects the pitch, and it can be wound with fibre to deepen the tone. Nonetheless, tuning is not very exact. The player strums the instrument to accompany a song. Photo 44 shows two raft-zithers, one from the Garo and one from the Khasi people. The Khasi instrument is known as the *dymphong* and the Khasi *dinkhrang*.

Photo 44. Raft-zithers, Garo and Khasi

Source: Author photos, DBCIC, Shillong

Photo 45. Garo raft-zither, *dinkhrang*

Source: DBCIC photograph

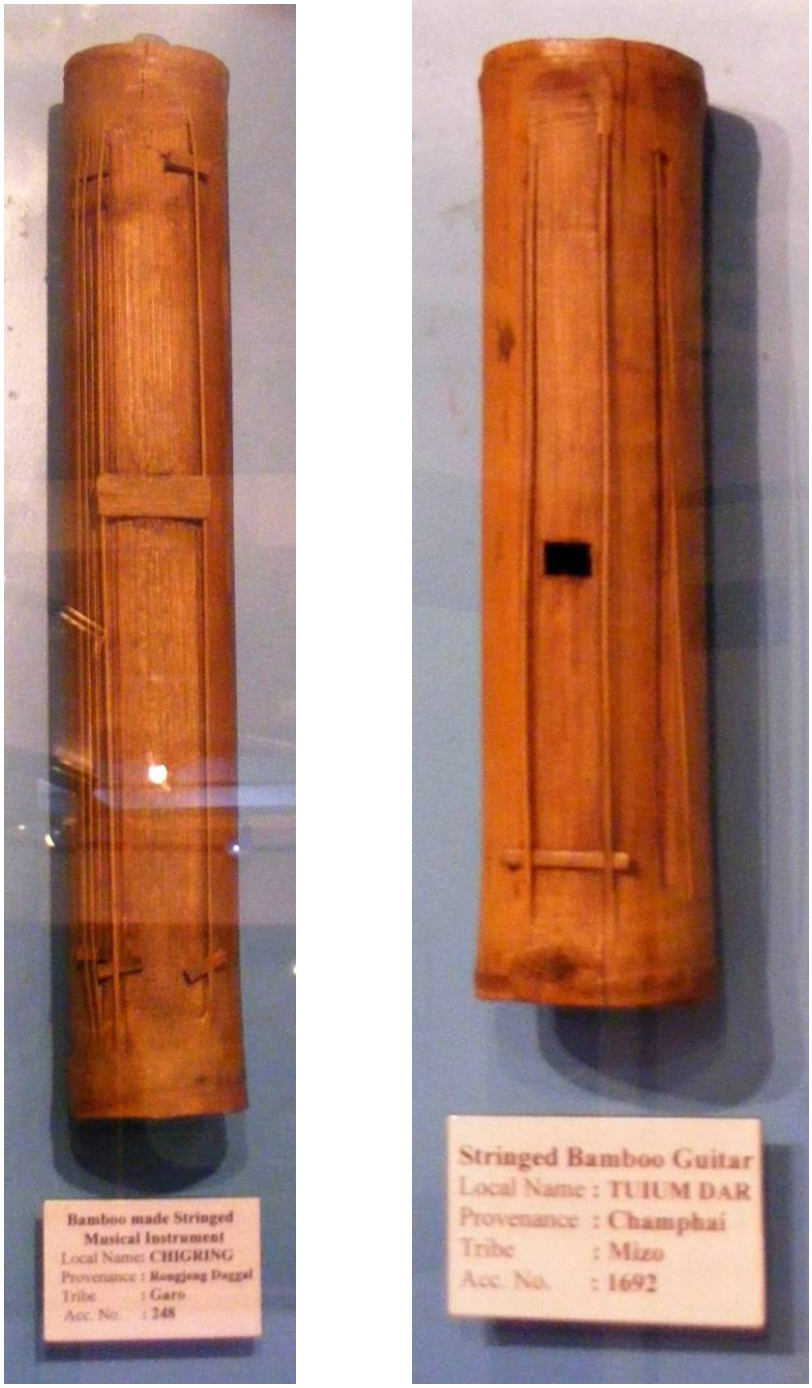
The construction and performance techniques of the raft-zither are very varied, but in all cases, they are not used as a true melodic instrument, with carefully tuned strings, as is the case in Africa. Photo 45 shows the Garo raft-zither, which has a small raised platform on the side facing the performer. The player supports the instrument with two cords looped around the outer edge of the zither, and then strikes a set of short strings tensioned across the raised frame, with a strumming motion. At the same time, he slaps the back of the instrument in a regular percussive rhythm, so the whole effect is similar to the flamenco guitar.

4.2 Tube-zither

A musical instrument with typical SE Asian affinities is the struck idiochord tube-zither. This is made from a single internode of a giant bamboo species. The outer skin is lifted up and two small bridges are inserted beneath the string thus created both to stop the string striking the wall of the resonator and to effectively tune it. The instrument can be plucked but is usually struck with wooden or bamboo sticks. Some instruments have a hole in the wall of the bamboo tube to increase the resonance. These instruments are known from various groups on the eastern side of continental India, for example among the Muria, Reddi and Bondo. They also occur in Sumatra, the Philippines and various parts of the Austronesian world. Photo 47 shows two examples of struck idiochord tube-zithers, from the Garo and Mizo. The Garo instrument appears to have additional resonating strings to the side of the main struck strings, which probably resonate sympathetically. Photo 46 shows an example of the Garo instrument

in performance. The player supports one end of the tube on his lap and leans the other against the shoulder. He then strikes the two strings rhythmically with paired sticks. However, the central bridge (which is not present on other instruments in this area) appears to serve a damping function, as the player regularly reaches up and presses down on the bridge, to stop the strings vibrating.

Photo 47. Idiochord tube-zithers, Garo and Mizo



Source: Author photo, DBCIC, Shillong

Photo 46. Garo struck idiochord tube-zither, *chigring*

Source: DBCIC photo

Photo 48. Struck tube-zither, Mog

Source: DBCIC photo

Struck tube-zithers are also played as part of the Mog ensemble music in Tripura. Photo 48 shows a struck tube-zither beaten with two sticks. The body of the zither is fixed a wooden support with two metal bands, to stop it moving during performance.

Table 3 shows the vernacular names of the struck idiochord zither;

Table 3. Vernacular names of the struck idiochord zither

Ethnic group	Vernacular name
Garo	*chigring*
Mizo	*tutum dar*
Khasi	*singphong*

4.3 Stick-zither

The stick-zither is a string instrument where the string is raised above a long stick and pressed down with the fingers while being plucked. Some stick-zithers have multiple strings, others a single string. In this region, wooden blocks are raised up from the stick, and the player stops the string, thus giving different pitches. Very often, instruments have either one or two resonators, made of wood or gourds. The South Indian *vina*, used in classical music is an example of a stick-zither. Photo 49 shows an example of a Khasi stick-zither. This may be a folk copy of the classical instrument.

Photo 49. Khasi stick-zither

Source: Author photo, DBCIC, Shillong

Photo 50. ***Dotara*** **lute, Bengali**

Source: DBCIC photo

4.4 Lute

Lutes are instruments where strings pass over a soundbox and a lengthened neck from a stringholder at the base to the head. They are tensioned by tuning devices, normally pegs. The strings pass over a bridge to determine their sounding length. The player stops the strings with the fingers, usually by pressing the strings against the fingerboard. The guitar is themost well-known example of a lute. Lutes are not very common in NE India, though they play an important role in the classical music of the subcontinent. Photo 50 shows the *dotara* lute played by the Assamese people. The instrument is of Persian origin, as the name indicates (*du tara* = 'two strings'). However, most examples actually have four strings. The Khasi play this instrument also using the name *duitara* (Photo 51). The lute has also been modernised.

A quite different instrument is shown in Photo 52, a two-string lute played by the Karbi people, where the body is a separate resonator made of a coconut.

The Khasi have a five-string instrument, the *marynthing*, which has an oval soundbox with S-holes modelled on a violin. The neck has raised frets and the strings pass up to a pegbox. It is quite likely such an instrument can be electrified.

Photo 51. Khasi *duitara* lute

Source: DBCIC photo

Photo 52. Karbi two-string lute

Source: Author photo, DBCIC, Shillong

Photo 53. Naga one-string lute

Source: DBCIC photo

A most unusual development of the lute principle is found among some Naga groups in Tripura. A very long one-string lute is made with a gourd-resonator and a pegged skin table, looking very like a small drum. The instrument is then turned upside down and held against the shoulder. The single string is plucked to create a generalised thrumming noise to accompany singing rather like the drone in classical Indian music. Photo 53 shows such a single string lute among the Naga of Tripura. These instruments can also beheld across the body and played in mixed male-female ensembles as shown in Photo 54.

Photo 54. Naga one-string lute ensemble

Source: DBCIC photo

Photo 56. Three-string fiddle, *saranga*, Tiwa

Source: Author photo, DBCIC, Shillong

4.5 Fiddles and viols

Fiddles are essentially bowed lutes, a bow is drawn across the strings instead of plucking them. The many types of fiddle in Northeast India look very similar to those outside the region and may probably be quite recent introductions, as their names often indicate. Some Naga groups play fiddles with one or two strings and coconut shell or gourd resonators, which resemble instruments in China and Yunnan which may have arrived from a different direction.

Photo 55. Hruso single-string fiddle

Source: Author photo

A related instrument is the one-string fiddle played by the Hruso people in Arunachal Pradesh (Photo 55). The resonator is made from coconut shell and the neck transpierces the body like a typical spike-lute. Both the bow-hair and the string are extremely thin and produce only a faint sound, audible to the player and those directly next to him. The instrument is

played solo for personal amusement. The origin of this instrument is a matter for conjecture, since it is not otherwise found in Arunachal Pradesh and may be related to the coconut-shell fiddles of China.

An instrument that resembles numerous folk-fiddles across India is the *seria*, played by the Bodo. The sound-box, unusually for a fiddle, is open, which decreases the resonance. The fingerboard is a single piece of wood which projects over the open sound-box. The strings pass over a bridge, which is fixed to the tailpiece. Photo 58 shows a performance on a tradition single-string *sarenda* by a Garo player. These instruments have been modernised under influence from the violin and modern instruments may now fitted with screw-tensioners similar to a mandolin, rather than the traditional wooden pegs. Photo 57 shows an example of the four-string *seria*, played by the Bodo. The smoothed out profile may also reflect the image of European string instruments.

Photo 57. Modernised viol, *seria*, Bodo

Source: Author photo, DBCIC, Shillong

Photo 58. Garo fiddle, *sarenda*

Source: DCBCI Museum

Another instrument which is more clearly a copy of a classical instrument is the *saranga*, a version of the *sarangi*, played by the Tiwa. The instrument is carved from a single block of wood, with a circular sound-box and a flat wooden table nailed to it. The three strings pass into pegbox, which supports the heavy wooden tuning pegs. Photo 56 shows a typical example of the *saranga*;

The Khasi people play a three or four-stringed fiddle, *maryngod*, with a waisted soundbox made from a single piece of wood.

4.6 Ektara

An instrument which is probably easier to visualise than classify is the Bengali *ektara*, 'one-string'. The resonator is made of a globular gourd and the lower face is cut off and a stretched skin is glued or pegged across it. Two arms project upwards from the side of the gourd and are joined together. A tuning peg is passed through the point at which they join. A single string passes from the tuning peg to the centre of the lower skin. The performer plucks the single string, and during performance, the arms of the instrument can be pressed together. This increases the tension on the string and hence the pitch rises. By skilful manipulation of the tension, the performer can produce a wide range of notes from a single string. Photo 59 shows and example of a Bengali *ektara* in performance.

Photo 59. Bengali *ektara*

Source: DBCIC photo

5. Aerophones

5.1 Flutes

5.1.1 Terminology of flutes and whistles

There is no true distinction between flutes and whistles in terms of the way they are played or their organology. Both make a sound when the player blows air across a sharp edge. Normally, however, flutes are considered to be instruments which produce a series of regularly related pitches, usually a scale, while whistles produce notes which are different pitch heights but showing no regular relation. In Northeast India, as across much of Central Africa, an intermediate case occurs, sets of tuned whistles which individually produce a single note, but a played in sets to produce a scale. Flutes can also be classified according to the shape of the vessel, either cylindrical, conical or vessel-shaped. Vessel-flutes are often known as ocarinas.

5.1.2 End-blown flutes

Flutes can be divided into end-blown and side-blown or transverse. Side-blown flutes are quite rare in Northeast India. End-blown flutes can be subdivided into three types;

a) flutes without a mouthpiece blown across a chamfered end similar to the Arab *ney*
b) bevel-flutes, where the blowing end is sliced across at a 45° angle to create a blowing edge. These are also common in single-note polyphonic ensembles
c) notch-flutes, where the player blows across a V-shaped notch cut in the top end of the flute, like an Andean *qena*

Photo 60. Thado Kuki bevel whistle

Source: DBCIC photograph

5.1.2.1 End-blown flutes without embouchure

5.1.2.1.1 Cylindrical end-blown flutes without embouchure

The most common end-blown flute has either no mouthpiece or the top end of the flute is slightly bevelled, to improve the position of the lips.

5.1.2.1.2 Bevel whistle

A type of whistle which is common elsewhere in the world, notably Africa, but rare in Asia, is the whistle with a bevelled embouchure. The end of a hollow cane is cut away at a diagonal

and the player blows across the top of the tube, producing a single pitched note, determined by the length of the tube. Photo 60 shows a typical bevel-whistle played by the Thado-Kuki people.

5.1.3 Transverse flute

5.1.3.1 General

The transverse or side-blown flute is common in Northeast India. There seem to be multiple layers of such flutes, depending on their area of origin. The types so far discovered are;

a) Six-hole transverse flute
b) Three or four-hole transverse flute
c) Single-hole transverse flute
d) Combination fipple flute and transverse flute
e) Right-angle transverse flute

5.1.3.2 Six-hole transverse flute

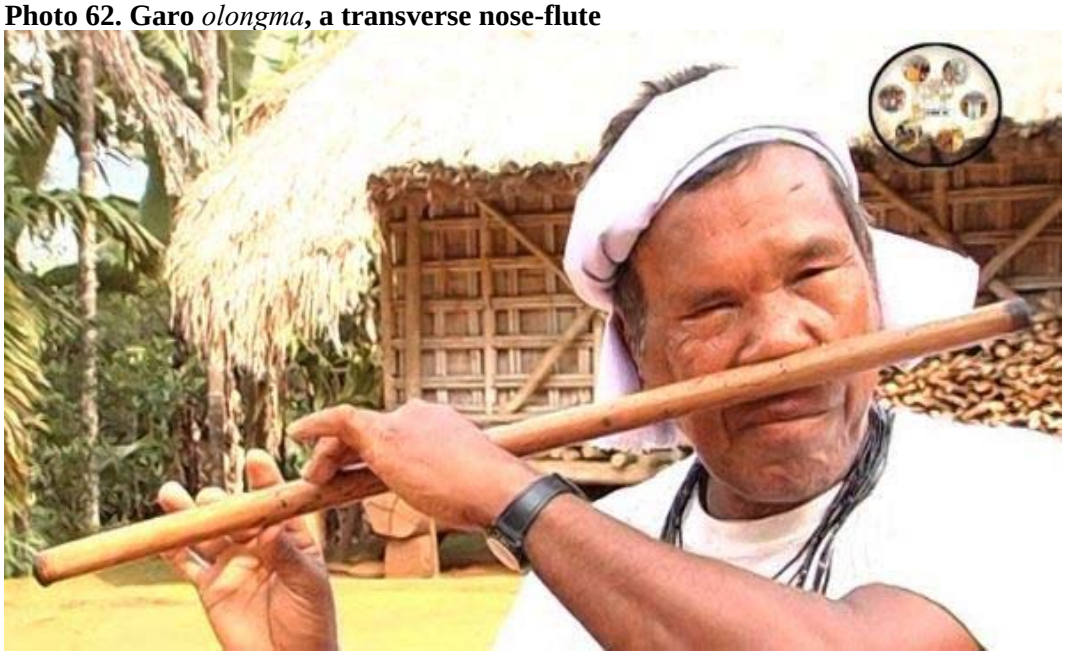
The six-hole transverse flute closely resembles the typical Indian *bansari* flutes and indeed the European fife. The end closest the blowhole stopped, and there is no thumbhole. Some instruments are certainly derived from these subcontinental flutes as their names indicate. The Khasi play a flute of this type called the *ka besli* (Photo 61), which may well be borrowed from Assamese. They have another six-hole flute, the *shawiang*, longer and of a different construction, which may be a more traditional instrument.

Photo 61. Khasi six-hole transverse flute

Source: DBCIC photograph

However, even more striking is the Garo *olongma*, which is a six-hole transverse flute blown either with the nose or the mouth (Photo 62).

Photo 62. Garo *olongma*, a transverse nose-flute



Source: DBCIC photograph

Photo 63 shows the same flute being played as a mouth-blown flute as part of a performance ensemble.

Photo 63. Garo performance group

Source: DBCIC photograph

5.1.3.3 Four-hole transverse flute

Another transverse flute whose origin is less clear is the three and four-hole transverse flutes, played by various indigenous populations. Structurally, they are similar to the six-hole flutes, but ay represent an earlier type. Photo 64 shows a pair of such flutes, played by the Mey people of Rupa in Arunachal Pradesh.

Photo 64. Four-hole transverse flutes, Mey of Rupa

Source: Author photo, Rupa Museum

5.1.3.3 Single-hole transverse flute

A very striking transverse flute is the Garo single-hole transverse flute, *singatek* (Photo 65). This is made from a short length of bamboo and has no fingerholes. The end nearest the blowhole is close and the far end is closed by the player's hand. Different notes are achieved by partially stopping and unstopping the open end and by overblowing.

Photo 65. Garo single-hole transverse flute, *singatek*

Source: DBCIC photograph

5.1.3.4 Combination duct-flute and transverse flute

One of the more unusual instruments played in NE India is a combination duct-flute and transverse flute. The Khasi and the Mog both play this instrument. The flute has a duct and can be played in the same way as a European recorder. However, it has a large vent-hole and the instrument can be turned at a right angle and blown as a transverse flute. The Khasi call this instrument *tanglod*.

5.1.3.5 Right-angle transverse flute

One of the most unusual flutes played in the region is the *sapouli*, the right-angled transverse flute played by some Kuki groups. The flute is made from a naturally hollow plant stem and a similar section if joined to the primary sounding tube at a sharp right-angle to increase the effective length. The effect is to produce a polyphonic sound, with deep fundamentals sounding at the same time as higher notes. In addition, the player sometimes hums or sings into the instrument, producing further complex chordal sounds. Organologically, this seems to be quite unique, and deserves significant further investigation. Photo 66 shows an example of the Kuki flute;

Photo 66. Right-angle transverse flute, Kuki

Source: DBCIC photograph

5.1.4 Duct flute

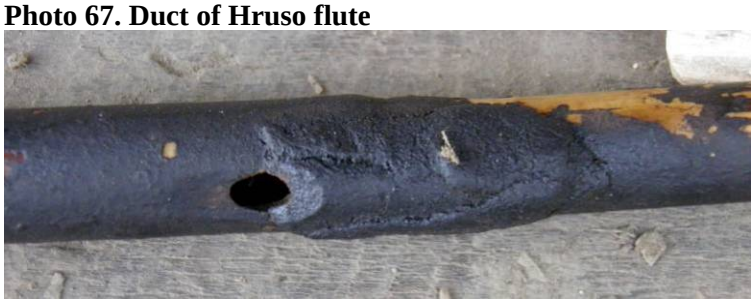
Duct flutes are flutes where a constricted tube leads the air across an edge, typically like the European recorder. The combination of duct and transverse flute is described above. However, the ordinary duct-flute is played by most Naga groups (Ao 1999). The instrument usually has a pronounced beak and six fingerholes.Table 4 shows the vernacular names of the duct-flute;

Table 4. Vernacular names of the duct-flute

Ethnic group	Vernacular name
Angami	*lou*
Ao	*jemji*
Khiamngan	*poipoi*
Konyak	*wewo*
Lhota	*phililí*
Phom	*jemji*
Rengma	*kheli*
Sangtam	*khongkholi*
Sema	*fulili*
Zeliang	*nthiam*

An unusual type of duct-flute is the external-duct flute played by the Hruso people of Arunachal Pradesh (Photo 68). It is made of cane and covered with a sticky black substance. There are five fingerholes and the external duct is mounted on the outside and also covered with the pitch (Photo 67).

Photo 67. Duct of Hruso flute



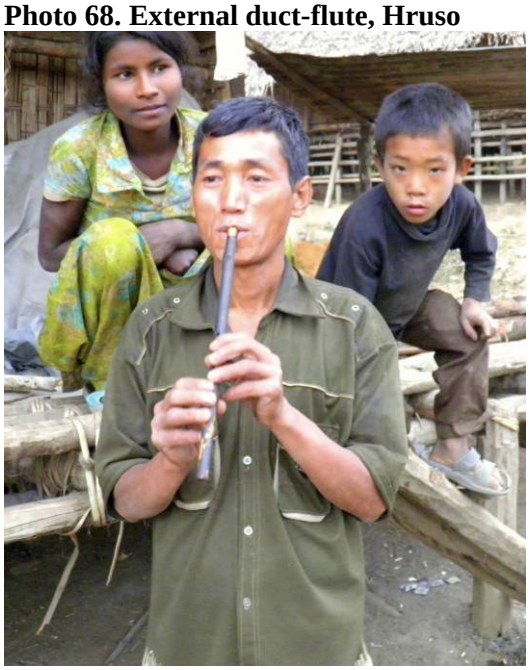
Source: Author photo

5.2 Trumpets and horns

5.2.1 Trumpet, horns and others

Trumpets and horns are distinguished by the way in which the sound is produced; the player compresses the lips against an embouchure and forces air through them. In this way they act as a type of natural double-reed. Throughout most of European musical history, trumpets and horns were 'natural' i.e. they depended entirely on the player producing the natural harmonic series through lip-tension. Fingerholes and keys are introductions dating to the seventeenth and eighteenth centuries and are not generally found on Northeast Indian instruments. The distinction between 'horn' and 'trumpet' is slightly artificial, but is taken here to imply a distinction between a cylindrical bore (trumpet) and a conical bore (horn). The most common horn is an animal horn, which is naturally conical.

Photo 68. External duct-flute, Hruso



Source: Author photo

5.2.2 Trumpets

5.2.2.1 Thigh-bone trumpet

One of the most characteristic trumpets of the Buddhist-influenced areas of Arunachal Pradesh is the thigh-bone trumpet. This is made from a human thigh-bone, cleaned and cut across one end to make an embouchure. This is typically used in Buddhist ritual music, along with a characteristic ensemble of instruments, including the cymbals, shawm, long trumpet and drum. Such instruments are characteristic of Tibetan Buddhism. Photo 69 shows such a trumpet, as used by the Mey [Sherdukpen] people in Rupa, West Kameng District, Arunachal Pradesh.

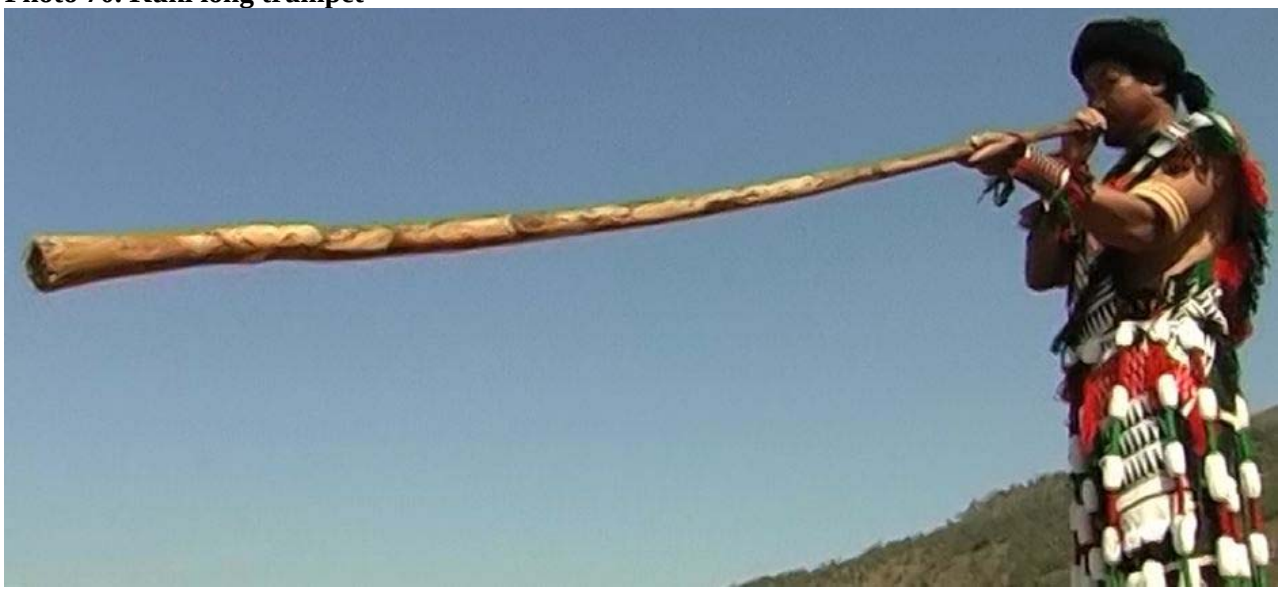
Photo 69. Trumpet made from a human thigh-bone, Mey of Rupa

Source: Author photo, Rupa Museum

5.2.2.2 Long trumpet

A characteristic trumpet of this region is the type of long trumpet made from a naturally hollow plant stem. Some of these can be several metres long. The melody is constructed entirely of overblown notes, like the European bugle. Photo 70 shows one such trumpet played by the Kuki people;

Photo 70. Kuki long trumpet



Source: DBCIC photo

Another type of long trumpet is played by the Garo people, known as *adil* (Photo 71). The *adil* consists of a length of bamboo with a buffalo horn hollowed out and fixed to the far end as a bell. The player can only produce short bursts of sound like signals.

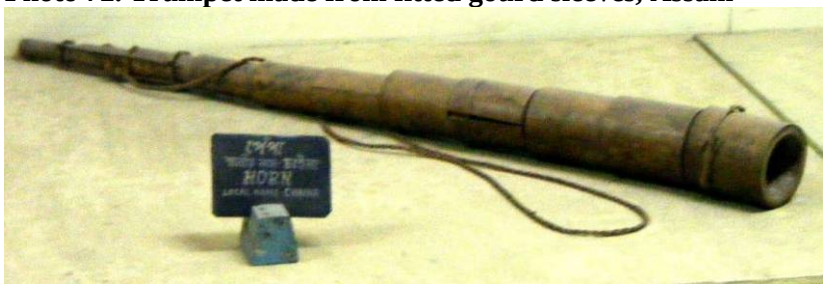
Photo 71. Garo long trumpet, *adil*

Source: DBCIC photo

Photo 72 shows a trumpet from Assam made from a series of graduated gourd sleeves inserted into one another.

On the other side of the region, paired long trumpets made of bronze or silver are typical in areas influenced by Tibetan Buddhism. They can be heard every day in Tawang and associated gompas. Photo 73 shows a pair of long trumpets being blown for the Choskor festival in Old Dirang.

Photo 72. Trumpet made from fitted gourd sleeves, Assam



Source: Author photo, Guwahati museum

Photo 73. Paired long trumpets, Monpa of Dirang

Source: Author photo, Old Dirang

5.2.2.3 Short trumpet

There is no true organological difference between short and long trumpets but they are played in very different contexts, so they are distinguished here. In Assam, a short bronze trumpet is played which resembles those played in temples in subcontinental India (Photo 74). The name, *karranal*, appears also to be related to the Hindi name.

Photo 74. Short bronze trumpet, Assam

Source: Author photo, Guwahati Museum

5.2.3 Horns

5.3.2.1 Side-blown or transverse horn

Photo 75 shows a side-blown horn played by the Naga. The mouthpiece is slightly unclear and it is probably cut at an angle across the horn.

Photo 75. Naga transverse buffalo horn

Source: DBCIC photo

5.3.2.2 End-blown horn

5.3.2.2.1 Conical end-blown horn

End-blown horns are rare in Northeast India, but they are found in Assam. Photo 76 shows a typical horn found in Assam, with a small mouthpiece, made out of buffalo horn.

Photo 76. End-blown buffalo horn, Assam

Source: Author photo, Guwahati Museum

Another end-blown horn, *wong*, is used by the monks of Tawang monastery to call people together for assemblies in the main prayer hall (Photo 77).

Photo 77. End-blown ox horn, *wong*, Tawang

Source: Author photo, Tawang Monastery Museum

An extremely characteristic instrument of the Buddhist tradition is the end-blown bronze horn with a flared bell representing a dragon. These are very common in Bhutan and are also played in Tawang (Photo 78).

Photo 78. End-blown bronze horn, *kang ling*, with dragon mouth

Source: Author photo, Tawang Monastery Museum

5.3.2.2.2 End-blown vessel horn

Apart from conical horns, a very characteristic instrument of this region is the end-blown conch. Technically speaking, this is a globular or vessel-horn. Blown conches are strongly associated with Buddhist ritual and are often seen in Buddhist ceremonies, for example in the highlands of Arunachal Pradesh. However, they are also an ancient instrument in Hindu iconography and are seem to be used by peoples with some influence from Hindu tradition. An unusual instrument played by the Meithei people is the double conch, where a performer blows two instruments simultaneously. Photo 79 shows one such instrument;

Photo 79. Meithei double end-blown conch

Source: DBCIC photo

5.3 Double-reeds or shawms

Double-reeds are instruments where two pinched reeds are brought together and sound when the player blows through them. The most well-known example of a double-reed is the European oboe, but these instruments are usually known as shawms when taken as a family. These are widespread in Northeast India and appear to derive historically from different sources. In the northern, Tibetan and Buddhist influenced areas, there are elaborate shawms with large decorated silver bells, associated with Buddhist ritual music, and played together with cymbals and long trumpets by peoples such as the Monpa. Photo 82 shows a typical pair of such shawms in Old Dirang, where they were performing for the Choskor festival, together with cymbals and long trumpets. In the central Assam plains, the classic North Indian *shenai* is played, a wooden shawm with seven fingerholes. Among the Bodo-Garo and Khasi there are a variety of folk-shawms of uncertain origin. The Khasi play a seven-hole shawm with a detachable wooden bell known as *tangmuri* (Photo 80). The Dimasa, a Bodo-Garo people, use a strikingly long shawm, *muri*, to accompany dance-music

Photo 80. Khasi shawm, ***tangmuri***

Source: DBCIC photo

Photo 81. Long wooden shawm, ***muri*****, Dimasa people**

Source: Author photo, DBCIC, Shillong

5.4 Single-reeds or clarinets

Single-reeds are instruments where a single reed beats against a surface when the player blows through it. Only one type of single reed is known in Northeast India, the idioglot clarinet, which has a small reed cut from the surface of a cane tube inserted in a larger wooden or cane tube. These instruments seem to have the same name as the shawms, *muri*, and are apparently treated as a variety of double-reed. Nonetheless, organologically they are quite distinct. The Karbi, or Mikir, people are the main group using these clarinets.

Photo 82. Paired shawms, Monpa of Dirang

Source: Author photo, Old Dirang

Photo 83 shows two examples of Karbi idioglot clarinets, with cane sounding tubes and bells made either of wood or animal horn. One instrument has seven fingerholes, the other five and their names suggest these are two distinct local varieties.

Photo 83. Idioglot clarinets, wooden and horn bells, Karbi

Source: Author photos, DBCIC, Shillong

5.5 Free reeds

The free-reed is an unusual type of reed, where the tongue is cut into a frame, usually of the same material. The tongue vibrates against the frame, exciting the air in the small gap between them. Free-reed instruments are known only from societies in South and East Asia, although since their adoption into the European instrumentarium, they have dispersed all over the world in the shape of the accordion, the harmonium, the concertina and the harmonica. Unlike other reeds, the free reed does not overblow, and as a consequence, instruments have a limited range. The solution to increase the range was thus to find a way to sound a number of pipes of different length.

Photo 84. Kuki mouth-organ

Source: DBCIC photo

The mouth-organ consists of a series of graduated pipes, each one with an individual free reed producing a different pitch. These pipes are inserted into a wind-chest and either end inside it or pierce it. The player blows into an embouchure connected to the wind-chest which forces air through all the pipes simultaneously. The pipes have a fingerhole above the wind-chest and by stopping this hole, the sound of the pipe is muted. Thus to play an individual note, all pipes must be stopped except one. As a consequence, the mouth-organ lends itself to playing chords and various types of polyphony and this constitutes its typical sound.

In SE Asia there are many instruments based on the free-reed principle, but NE India represents the westernmost extension of this technique of construction and only a single instrument is known, the seven-pipe mouth organ with a gourd resonator. The seven pipes are divided into two rows, or three and four pipes. Photo 84 shows a seven-pipe mouth-organ played by the Kuki people.

6. Lamellophones

Lamellophones are instruments where the sounding element is a flexible tongue which is fixed at one end; a musical box is an example of a lamellophone. The only lamellophone in use in NE India is the jews' harp. The tongue vibrates within a frame and the air-gap between the frame and the tongue amplifies the sound. The jews' harp is resonated in the mouth and by changing the shape of the mouth, the player can elicit a variety of harmonics and thus create a melody. In Asia there are two types of jews' harp, those made of bamboo or wood, and

Photo 85. Mog metal jews' harp

Source: DBCIC photo

Photo 86. Bengali jews' harp

Source: DBCIC photo

those made of metal, usually iron or bronze. In the bamboo instruments, the vibrating tongue is set in motion by a cord attached to its protruding tip. The jews' harp is played throughout the region, both among the Naga and some of the populations of Arunachal Pradesh. Photo 87 shows a bamboo jews' harp played by the Hruso people in Sakhrin village. Photo 86 shows a wooden Bengali jews' harp and Photo 85 a metal jews' harp played by the Mog or Arakanese people in Tripura.

7. Electrophones

Electrophones are all modern instruments where the sound is generated electronically, rather than by direct vibration of the air. Many such instruments have been developed in Europe and America but the only ones regularly in use in Northeast India are electronic organs and pianos. These are used in churches and in urban popular music ensembles, but do not yet play a role in village music. Amplified instruments do not usually count as electrophones.

Photo 87. Hruso jews' harp

Source: Author photo

8. Musical ensembles

8.1 Introduction

Musical instruments are generally played in ensembles and it is important to document such ensembles, to describe which instrument is played with which others and for what purpose. Unfortunately, so far this an area for future research in Northeast India, rather than an area where existing descriptions can be drawn upon.

8.2 Ensemble types

8.2.1 Introduction

8.2.3 Distribution in Northeast India

8.2.3.2 Flute and zither ensembles

Photo 88. Garo flute and zither ensemble

Source: DBCIC photo

8.2.3.3 Shawm and drum ensembles

A type of ensemble typical of both mainland India and the Sinosphere is the shawm and drum ensemble. Paired shawms

Photo 89 shows a typical Khasi shawm and drum ensemble.

9. External influences

9.1 The influence of Buddhism from Tibet

9.2 Secular European influences on music in Northeast India

Photo 89. Khasi shawm and drum ensemble

Source: DBCIC photo

9.3 The impact of Christianity

Christianity has been a major force for religious change in much of the northeast, especially in Arunachal Pradesh and Nagaland.

9.4 Interaction with classical Indian traditions

9.5 Technology and the rise of the recording industry

10. Conclusions

Bibliography

Ao, A. Lanu ed. 1999. *Naga cultural attires and musical instruments*. New Delhi: Concept Publishing

Shama, Manorma 2004. *Folk India. Volume 9. Northeastern States.* New Delhi: Sundeep Prakashan.

Pandey, B.B. 1994. *Musical instruments of Arunachal Pradesh (Adis).* Itanagar: Government of Arunachal Pradesh.

Syiem, L. 2005. *The evolution of Khasi music: a study of the classical content*. New Delhi: Regency Publications.

Discography

Videography

Websites