

Edited by
T. B. Subba



Orient BlackSwan



North-East India

Handbook of Anthropology

North-East India

A Handbook of Anthropology

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INTRODUCTION

T. B. SUBBA

North-East India has attracted a lot of anthropological, missionary and administrative attention, and much has been published during the last one hundred years or so. But when one searches for books that could be used as a handbook by students and teachers of anthropology of the region, one is frustrated. Hence, on many occasions, many teachers have legitimately voiced the need for such a handbook. It was only in March 1999 that anthropologists working at the Anthropological Survey of India, Kolkata and those teaching at North-Eastern Hill University, Shillong, jointly organised a seminar to discuss the contents of the earlier edition of the book, which was titled *The Anthropology of North-East India: A Textbook*, edited by G. C. Ghosh and me (2003).

The present revised edition of the book brings together nineteen highly important and comprehensively written chapters on the region, prepared by mostly very senior and a few young anthropologists, with the objective to fulfil the requirement for a handbook of anthropology of North-East India. The pre-revised edition of this book pretty much served the same objective, but there were some gaps. Despite its weaknesses, which I have tried to overcome in this revised edition, the book was much used by students of anthropology of the region, which is evident from the issue slips pasted on the copies kept in some libraries of the

region. Even my personal copy was borrowed so frequently by both students and colleagues that I finally lost it, and had to procure a new copy from the publisher for consultation at the time of revising it.

The success of this book encouraged me to bring out a revised and enlarged version. While doing so, I have kept in mind the feedback I received from teachers as well as students. It is in response to their feedback that I have strengthened the section on Prehistoric North-East India with two new chapters and the section on Colonial North-East India with one additional chapter. I have also dropped some chapters that were not much used by students and replaced them with some new ones. For instance, I have dropped the chapter by Amitabha Basu because the focus of his chapter was not North-East India. I also dropped the chapter by Farida Ahmed Das because the contents of her chapter were covered in the chapter by Bapukan Choudhury and Gulrukh Begum. Further, the chapter by R. Khongsdier on measuring genetic drift was of limited interest even to students of physical anthropology, prompting me to drop that chapter and to request him to write two new chapters that are included in this revised edition, which are of direct interest to students and researchers. I also requested Sarthak Sengupta to broaden the scope of his chapter, included in the 2003 edition. It was again on the basis of the feedback that I have included in this edition a chapter on population genetics by Late Shyamacharan Singh and a chapter on dental anthropology by Dhruba Kumar Limbu.

The section on Social-Cultural Anthropology in North-East India has also been changed drastically for the revised edition. I wanted Lucy Zehol to write a chapter on gender that could replace her chapter on the status of women, but perhaps for reasons beyond her control she was unable to finish the proposed chapter. I also decided to exclude the chapter by R. P. Athparia in view of its limited scope. The other five chapters in this section are retained, but after considerable revision, expansion and updating. This section also has two new chapters, one on the history of social-cultural anthropology of North-East India

by A. N. M. Irshad Ali and the other on shifting cultivation in the region by Jonali Devi.

In fact, I requested all the contributors of the volume to write or rewrite their chapters purely from a pedagogical point of view, give examples wherever possible from the entire North-East region, and provide as much information on the subject as possible for the maximum benefit of both teachers and students of anthropology of this region. I am glad to record that most of them did the best they could and what is presented here is a lot more useful book for classrooms and libraries than the previous one or any other book on the subject (e.g., Danda et al. 1997; Raha and Ghosh 1998; Sengupta 1994, 2002; Barua et al. 2002).

Though primarily for students and compiled in the form of a handbook, this edition is organised in such a way that it can also cater to a wider audience as a standard reference book on the region. The contributors have taken a lot of care to see that information given here are clear and unambiguous, and they have refrained from making any value judgements. The book also tries to raise the curiosity of the students about the huge biological and cultural variation in North-East India, and how to study this variation. The book provides the most up-to-date and competent review of literature on the region in the hope that doctoral students of anthropology are also able to use the book for identification of their research problems in prehistoric archaeology, physical anthropology and social-cultural anthropology of the region.

An effort has been made in this book to provide a range of concepts, methods and techniques that students of anthropology may choose from in order to carry out their researches. The present volume is an attempt to give the next generation a carefully crafted book covering all the important aspects of anthropology in the region today, written by experts in the field.

NORTH-EAST INDIA AS A REGION

It is important to dwell briefly on the question of identity of North-East India as a region. In 1998, I published an article in

which I argued that the existence of North-East India as a region is a myth. Of course, it has its historical and even mythical antecedents in Pragajyotishpur, and later Assam. The region is also distinct from the rest of India because it has an extremely long international border, surrounded as it is, almost from all directions, by foreign countries and bounded together internally by the state of Assam. It consists mostly of hills and mountains interspersed by the three large and densely populated valleys of Brahmaputra, Barak and Imphal of which the former two are in Assam.

Tribes who live in the hills have, with the exception of those in Arunachal Pradesh, broadly embraced Christianity during the last one and a half centuries. There are of course Hinduised tribal populations living in the valleys and foothills, which are otherwise mostly inhabited by caste Hindus and Muslims. In terms of economic pursuits, settled cultivation is practised in the valleys and river-banks whereas in the hills there is widespread practice of shifting cultivation in some of the less populous states. It is a food deficit region with growing unemployment problems due to the absence of any significant industrial activities, which in turn, is due to insurgency, tribal land laws and the lack of infrastructure development. Even the tea gardens and other entrepreneurial efforts in the region are under great stress due to various forms of harassment in the hands of non-state actors and the lack of external funding.

Much hope is pinned on the Look East Policy of the Government of India. Trade with neighbouring countries is expected to benefit the region phenomenally and even solve its problem of insurgency and backwardness. But there are others who are sceptic about the benefit the East-West corridor might bring to the people of the region and some even suspect that it may bring more woes than wealth. In their view, the region is ill-prepared to participate in international trade due to its limited infrastructure development and entrepreneurial skills.

The languages of the region are classified into Tibeto-Burman, Indo-Aryan, and Austro-Asiatic families, with poor mutual intelligibility even between two languages of the same family. Religion-wise, Hindus and Christians are the two major religious

groups in the region. Other religious groups like Buddhists, Muslims and Animists are also important in certain states of the region.

It may be noted further that the region's international boundaries are highly porous, which makes it difficult for the states to control infiltration of people from across the borders or to keep their own population within the political boundaries of the nation. In fact, several communities of this region have their members living across international borders from ancient times. Despite ethnic, cultural and linguistic differences, most people of the region see themselves as a group, share a sense of fraternity and perceive themselves as distinct from the rest of India, especially when they visit or stay in other regions or large cities of India.

If there is anything that binds this region, it is perhaps a widespread sense of economic exploitation and racial discrimination. On the other hand, people of other regions of India feel that the people of the North-East are over-pampered at the cost of tax payers' money. They cite the Ministry of Development of North Eastern Region (hereafter DoNER), North Eastern Council, and North-East Zone Cultural Centre as examples. On the other hand, the local elites see most of the fund meant for the region flowing back to India's large cities and benefitting the people outside the region more than those living here. They even see themselves as being overwhelmed demographically and exploited economically by people of other regions of India.

ORGANISATION OF THE BOOK

The nineteen essays in this volume are divided into four sections. Section I deals with the prehistoric archaeology of the region. The first chapter in this section is written by Harish Sharma, who was a leading prehistoric archaeologist of the region, and had discovered several sites of prehistoric interest and had contributed immensely to research in this field. He discusses the status of archaeological research in the region and shows how pottery excavations show a remarkable continuity of the present with the prehistoric past.

Sharma also shows how archaeological finds from the region do not give us sufficient data for reconstruction of the cultural history of the region. He gives details of archaeological finds in each state of the region except Sikkim, which is added to his chapter by his student Quinbala Marak.

The second chapter in this section is on the ethno-archaeology of the region written jointly by Abdullah Ali Ashraf and Late Sankar Kumar Roy, two leading ethno-archaeologists. They discuss the progress in this field and bring out the problem of interpretation in ethno-archaeology due to the perishable nature of material culture and absence of archaeological events in North-East India.

The last chapter in this section by Quinbala Marak deals with the megalithic culture of this region. She has profusely drawn examples of this culture from the region, including Sikkim. The chapter is perhaps the first ever exhaustive attempt to classify the megaliths of the region on the bases of morphology and function.

Section II deals with the colonial period. The first chapter, by P. K. Misra, reconstructs the colonial context in the light of the then socio-economic scenario in the country in general and the region in particular, the evolution of various colonial policies towards the tribes of the region, and J. H. Hutton's perceptions of the people of India. A brief biographical sketch of Hutton and a rather critical reading of his ethnography of the Nagas is discussed in detail.

The second chapter in this section, by B. R. Rizvi, is on J. P. Mills. This chapter begins with an exposition of the colonial context, giving a description of the works of Mills' predecessors. Rizvi starts with a brief biography of Mills followed by a detailed discussion on his ethnography. Unlike the previous chapter on Hutton by P. K. Misra, Rizvi makes a sympathetic reading of Mills as an academic and an administrator.

The third chapter in this section, by Jelle J. P. Wouters, makes theoretically rich appreciation of the colonial literature on the region in general and on the Nagas in particular. Wouters classifies colonial ethnography into three phases, viz., the explorative phase, the consolidative phase and the phase of academic anthropology—

the last beginning with the entry of Fürer-Haimendorf into the region.

Section III deals with the physical anthropology of the region. The first chapter in this section, by R. Khongsdier, provides an overview of approaches and models in physical anthropology of North-East India. This chapter lays the conceptual and methodological foundation for understanding human variation and micro-evolutionary processes of the region. While discussing the various paradigms, like racial, micro-evolutionary, molecular and bio-cultural, he advocates the use of the bio-cultural paradigm and selection of socially relevant problems of research.

The second chapter in this section, by Bapukan Choudhury and Gulrukh Begum, focuses on understanding human growth. This comprehensive chapter deals with conceptual aspects of growth, phases of growth, methods and techniques of studying growth and various factors that affect it, and provides a thorough review of growth and development studies in North-East India in general and Assam in particular.

The third chapter in this section is on anthropometric assessment of growth and body composition with special reference to selected indices for the measurement of nutritional status. In this chapter, R. Khongsdier identifies several areas that need further research or attention in the region.

This is followed by another valuable chapter on population genetics by T. Shyamacharan Singh, who is no more alive to see the publication of this book. This chapter begins with the meaning and scope of population genetics, followed by an exposition on the Hardy Weinberg Law and its application. The chapter also shows how to calculate recessive allele frequency, and heterozygosity and allele frequencies of the ABO blood group system. Almost half the space in this chapter is devoted to a review of population genetics studies in North-East India, which will be highly valuable for both postgraduate and doctoral students of the region.

The fifth chapter in this section is on dental anthropology by Dhruba Kumar Limbu. This chapter is an important addition to the emerging significance of dental anthropology. The widespread habit of chewing tobacco, betel leaves and areca nut, and of eating

meat, among the people of the region, makes this chapter an essential reading. The chapter traces the history and development of dental anthropology as a growing field of study within the sub-discipline of physical anthropology. It also provides data on dentition and dental caries among the boys and girls of the region.

The last chapter in this section is on dermatoglyphics. Sarthak Sengupta makes an exhaustive review of dermatoglyphic research in the region and identifies several gaps. The dermatoglyphic data on various tribes of the region have been compared on the basis of standard indices, which do not clearly establish the population affinity of the tribes. In fact, the physical affinities based on dermatoglyphic indices are not always supported by other biological indices and it is therefore extremely difficult to generalise on population affinities in the region. Gender differences create further difficulties in this respect.

The last section deals with the social-cultural anthropology of the region. The first chapter in this section, by Jayanta Kumar Sarkar, focuses on the contribution of the Anthropological Survey of India—one of the largest government-controlled research organisations in India—to the field of social-cultural anthropology of the region. Sarkar presents the findings of some of the important projects completed by this organisation in the region. He particularly mentions the studies on social structure, tribe-caste and tribe-peasant continuum, urban anthropology, Himalayan tribes, ethnic movements and so on. Sarkar also presents the findings of the 'People of India' project on most states of North-East India. The following chapter by A. N. M. Irshad Ali gives additional inputs on the subject, by referring to developments related to the teaching of anthropology as a subject. Irshad Ali reviews some of the important publications on the region and identifies recent publishing trends on North-East India.

The next chapter by R. K. Kar is on tribal social organisations. Kar, with the help of a fairly detailed ethnography of some tribes, delineates some patterns in the way various tribes of the region organise their societies. He also shows how an individual member of a tribe combines in him/her a number of social roles

simultaneously without any apparent conflict. This chapter deals with the social organisation of almost all the major tribes of the region, in particular the Mishing tribe of Assam and Chote tribe of Manipur.

The fourth chapter in this section, by Sarit K. Chaudhuri, focuses on the lesser-known tribes of the region. Chaudhuri highlights the problems of these lesser-known tribes through the case studies of the Sulungs of East Kameng district, the Membas of West Siang district, and the Akas of West and East Kameng districts of Arunachal Pradesh. He also presents a detailed study of the little known Miji tribe of Arunachal Pradesh. This chapter, in a sense, compensates for the extra attention paid to dominant tribes of the region in both colonial and post-colonial ethnography.

The next chapter by S. B. Chakrabarti deals with agrarian relations, which are admittedly one of the most complex in the region. Chakrabarti gives a brief historical background of the agrarian history of the region, which is followed by an account of agrarian relations in the seven states of the region. He also brings out some of the major hurdles in engineering agrarian transformation like variation in landownership and lack of cadastral survey of the region. Finally, he deals with some of the ambivalences like customary versus legal rights, shifting versus settled cultivation, and communal versus individual ownership that the societies in the region are experiencing today.

The penultimate chapter in this section is written by Anungla Aier and Sapu Changkija. This chapter contains a detailed account of the indigenous knowledge systems of various tribes of the region regarding the management of their natural resources, particularly *jhum* fields. The chapter also raises the emerging issues of bio-piracy, intellectual property rights and protection of indigenous peoples' rights over their natural resources.

The last chapter by Jonali Devi has been added in view of the immense interest that scholars have shown in an ancient but culture-friendly agricultural practice in North-East India called *jhum* cultivation. Being one of the few to have done a PhD on the subject, Devi has very competently handled the various

aspects of shifting cultivation in the region, as is clearly evident from her chapter.

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PART I
PREHISTORIC NORTH-EAST INDIA

PREHISTORIC ARCHAEOLOGY OF
NORTH-EAST INDIA

H. C. SHARMA

INTRODUCTION

- N**orth-East India has the following five broad geophysical divisions:
- (1) The hilly areas with high mountains to the north with the east-west ranges formed by the rocks of the tertiary period.
 - (2) The Meghalaya or Shillong plateau on the south composed of Archaean and Precambrian sediments and above which the younger sediments of tertiaries and quaternaries are deposited.
 - (3) The Cachar plains which basically constitute Neogene fold ridges comprising sub-flysch and molasse sediments of the Mio-Pliocene age.
 - (4) The Brahmaputra valley in the middle, which is formed of recent alluvium intercepted occasionally by archaean sediments exposed in the form of denuded hillocks.
 - (5) Lastly, the Mizo hills, which continue up to the Arakan Yoma of Burma, composed mainly of the tertiary formations.

Prehistoric studies were a major interest in the pre-independent era but no explicit cultural structure was visualised. By far the

region was ignored even by archaeologists. In his survey, Lord Cunningham, the founder of Indian archaeology, covered almost the entire length of India but did not venture to set foot on the formidable forest-clad hilly terrain of North-East India. Therefore, the archaeological research in this part of India remained at the level of antiquarians. If one looks at the archaeological map of India of that time, one is surprised to see that the whole of North-East India is blank. Although the geographical location, geo-archaeological features, ethnic composition and many other such considerations of the region did attract archaeological and anthropological researchers, archaeological evidence from this vast and extremely strategic region of India is still meagre. Therefore, any attempt to trace the development of human history of the unrecorded past is a difficult task. In this regard, Dhavalikar (1973: 137) states that archaeologically Assam is still *terra incognita*. He further points out that the post-independence era witnessed remarkable archaeological activities in different parts of the country, but Assam has not yet received the attention it merits.

Until now, very little has been done in the area of archaeological research in this region. However, what research has already been done in this field can broadly be divided into pre-independence and post-independence periods.

PRE-INDEPENDENCE PERIOD

In the pre-independence period, prehistoric antiquities were acquired from the houses of tribal people inhabiting different states of North-East India. The tribal people of the region, living particularly in the hill areas, collected and preserved ground stone axes considering those as the axes of the Thunder God (Indra), and possessing supernatural power. They used these for various magico-medicinal purposes (Goswami 1961: 17–24).

Research into the prehistoric past of this part of India was initiated by British administrators/scholars and the first collection was made in 1867. Sir John Lubbock of the University of London reported the evidence of prehistoric culture from this region in

the *Athenaeum* under the heading 'The Stone Age Tools in Upper Assam' in its issue (22 June) (Lubbock 1867: 822). Since then, reports of sporadic finds of polished stone tools from different parts of North-East India found place in journals and periodicals published in India and abroad. Some of the early collectors of stone tools were E. H. Steel (1870: 267–68), Lt. Barron (1872: 61–62), and J. H. Hutton (1924: 20–22, 1928: 228–32) from Nagaland; J. Cockburn (1970: 133–43) and Godwin-Austen (1875: 158) from Khasi Hills; John Anderson (1871: 410–15) and R. D. Banerjee (1924–25: 102) from Arunachal Pradesh; H. C. Dasgupta (1913: 291–93) and Brown (1914: 107–9) from Assam; G. D. Walker (1931) from the Garo Hills, and so on. During this period, the first systematic attempt to study the prehistoric cultures of North-East India was made by J. H. Hutton in his report titled 'Prehistory of Assam' (1928: 233–32).

K. L. Barua (1939), a reputed historian, made an attempt to systematise the available data on prehistoric Assam. However, in none of the reports there is any reference to systematic explorations and excavations. Till now, we are completely in the dark about the geology, palaeontology and archaeology of the Pleistocene period of Assam. In 1875, Godwin-Austen is reported to have observed features of a glaciated topography over the tertiary ranges in south-eastern Assam (1875). Since then, no study has been made to examine his information. This important aspect of Pleistocene geology has been completely neglected even by geologists.

P. C. Choudhury (1944: 41–47), in his article 'Neolithic Culture in Kamarupa', has focused on the neolithic cultural development in ancient Kamarupa. E. C. Worman (1949: 181–200) of the Washington Academy of Sciences, in his brilliant essay on 'The Neolithic Problem in the Prehistory of India' paid special attention to the neolithic cultures of Assam with a view to support his theory of Eastern-Asiatic origin of the neolithic celt-making tradition in India.

Almost all the prehistoric antiquities collected from different parts of North-East India by British scholars/explorers are preserved in the Pitt-Rivers Museum of University of Oxford.

POST-INDEPENDENCE PERIOD

No institution took up pre-historic studies of North-East India until the establishment of the Gauhati University in Assam, although there were a few monographs and research articles, as seen in the previous section. Gauhati University introduced anthropology in 1948 but a postgraduate course of study started only in 1956. The founder head of the department, M. C. Goswami, made a rich collection of ground stone tools from different parts of the region. His greatest contributions were from the Garo Hills of Meghalaya and a neolithic site at Daojali Hading in the North Cachar Hills of Assam. Both the sites were explored and excavated, the latter twice (Goswami and Bhagabati 1959a, 1959b; Goswami and Sharma 1963). All these collections are now preserved in the Anthropological Museum of Gauhati University. T. C. Sharma (1966) studied some of these collections for his PhD thesis titled 'Prehistoric Archaeology of Assam: A Study of Neolithic Culture'.

Systematic exploration and research into the prehistoric archaeology of North-East India began with the introduction of prehistoric archaeology in the Department of Anthropology, Gauhati University, in 1966. The launching of this sub-discipline of anthropology offered an opportunity for conducting regular explorations and excavations by students as well as teachers of the department. Despite intensive and strenuous explorations by the archaeological exploration team of the department covering the entire North-East (except Mizoram and Tripura), only the Garo Hills of Meghalaya proved to be a fertile field in terms of prehistoric cultural heritage. In the following pages, I shall try to review the works done so far in the region.

Assam

After the reorganisation of states in North-East India, Assam became much smaller in area covering mainly the Brahmaputra and Barak valleys. However, the available data on Assam show that the cultural relics of the palaeolithic and mesolithic periods are yet to be discovered. The most remarkable discovery site

so far made in Assam is Daojali Hading of the North Cachar Hills district (Ghosh 1965: 3). This was the first prehistoric site excavated in the region by M. C. Goswami in 1963 with the assistance of T. C. Sharma. The excavators found stone tools, mullers, pestles, grinding stones or hewns, cord-marked pottery, bone fragments and a piece of tortoise shell. Later, T. C. Sharma made an elaborate study of the materials and linked Assam with South-East Asia in the neolithic period (Goswami and Sharma 1962, 1963). Further, he stated that Daojali Hading contained a single phase of cultural deposition of neolithic period characterised by ground and polished stone tools, shouldered celts and cord-marked pottery. He also remarked that the Daojali neolithic was influenced by Eastern Asiatic neolithic traditions (Sharma 1979: 279–94; Sharma 1981: 41–52). But the present writer with his team of explorers excavated a small trench at the site in 1990, which yielded a different result. In contrast to T. C. Sharma's single-layer deposits, there were three different layers of depositions—layer 1 (L1 = 0–31 cm), layer 2 (L2 = 31–54 cm) and layer 3 (L3 = 54–65 cm)¹. These are segregated on the basis of colour of the soil, contents and geo-archaeological characteristics. These layers contain cultural materials like stone tools and cord-impressed potteries but bones were not found either on the surface or in the trench.

Another site, Sarutaru, located in the south-eastern corner of the Kamrup district, Assam, was discovered and excavated by the Department of Anthropology, Dibrugarh University, in 1973. S. N. Rao (1973) reported the collection of many ground and polished stone tools and cord-marked pottery. Though he claimed that this site belonged to the neolithic period, the only sample tested for radio-carbon dating by the Tata Institute of Fundamental Research earmarked the site as modern (Possehl 1988: 178). Later Sarutaru and Marakdola in the same area were thoroughly explored by the present writer but except late medieval potteries, no celts and cord-impressed potteries were found. P. C. Saikia of the Department of Anthropology, Dibrugarh University, also conducted an exploration in the Dibru River Valley in 1988. He claimed to have collected a number of neolithic tools from

there. He declared that he found a few choppers too (Saikia 1988: 1-45).

Recently, a few ethno-archaeological works have been conducted in Assam. Roy (1977) did his doctoral study on the ceramics from neolithic to medieval periods of Assam, taking Daojali Hadin, Garo Hills potteries of the neolithic period, and Ambari (Guwahati) pottery of the medieval period under consideration. The present author also conducted a typo-technological study of pottery in an Assamese village near Nalbari town.

Medhi (1992) made an elaborate study of the ceramic tradition of Assam. She also evaluated the ceramic traditions of Ambari and Daojali Hading. She successfully reconstructed the ceramic tradition and its evolution in Assam from the prehistoric period to the present day. According to her, the contemporary pottery tradition of Assam owes its origin to the neolithic period, passing through a flourishing stage in the medieval period and still continuing among the Hira potters (hand potters) and the Kumhars (the wheel potters), with reasonable technological dexterities.

Arunachal Pradesh

Arunachal Pradesh is in the extreme North-East of the Indian subcontinent and adjoins China and Myanmar. Through the mountain passes of the hills of this state, India has maintained contact with Tibet, China, Myanmar and other South Asian countries over the ages. The eastern Himalayan states, therefore, hold the key to the South Asian cultural contact that seems to have existed since prehistoric times.

In the pre-independence period, only a few stray neolithic finds from different parts of Arunachal Pradesh have been reported. Like other parts of North-East India, research on the prehistoric archaeology of this state was initiated mostly by British scholars/administrators. For instance, John Anderson reported the presence of stone tools in Arunachal Pradesh for the first time in 1871. In 1924, R. D. Banerji found a stone adze on the left bank of the river Dibong in a village called Mebo in Siang district. J. P. Mills

and J. H. Grace made a good collection during 1933–35, which is now preserved in the Pitt-Rivers Museum.

Sharma (1966) made a scientific analysis of the materials preserved in the above museum and reviewed Dani's (1960) observations. Sharma et al. (1972) reported on the collection of neoliths from Kameng district. Bopardikar (1972: 1–8) of the Archaeological Survey of India brought to light a discovery of palaeoliths for the first time in the Daphabum area of Lohit district. Sarkar (1982: 11–15) also reported a few neolithic celts from various parts of Arunachal Pradesh. Duarah (1979) reported three neolithic celts from Parsi-Parlo in the Lower Subansiri district. A. A. Ashraf, then Assistant Director of Research, Arunachal Pradesh, carried out a thorough and systematic survey of the Kamala River Valley. He opened four trenches at Parsi-Parlo in 1982–83. In his excavations, four cultural layers were identified of which the upper two layers contained ceramics and the lower two were pre-ceramics associated with the neolithic culture (Ashraf 1990: 1–154). The discovery of this stratified neolithic site at Parsi-Parlo gives a new dimension to the prehistoric past of Arunachal Pradesh.

Manipur

Manipur is a crucial area as far as archaeological research is concerned. Yumjao Singh, who collected some copper objects and other antiquities from an old palace area in Imphal, discovered the first cultural relics of Manipur (Singh 1935). The next attempt to dig up the past cultural heritage of Manipur was made by him in 1969. He collected a series of limestone caves at Khang Khui Khullen in the Ukhrul area of Manipur near the Indo-Myanmar border. He argued that the bone tools found there were similar to those found in the Kurnool cave in Andhra Pradesh and chronologically placed them to the late Pleistocene age. T. C. Sharma, a noted archaeologist, was quite excited about this find (Sharma and Singh 1969: 36–48) but subsequently doubted the authenticity of the Ukhrul collection. Later, Singh discovered two other Stone Age sites in Manipur, one of which is Napachik located

on the right bank of the Manipur river. Typo-technologically, the cultural materials from Napachik can be divided into two phases: (a) edge-ground knife of the Hoabinhian character, and (b) fully-ground celts and hand-made cord-marked pottery and tripod wares of the neolithic period (Singh 1983: 1–26). The other site located is at Nongpok Keithelmanbi on the left bank of the Thoubal River. The archaeological remains discovered from three locations in Nongpok Keithelmanbi are divisible into palaeolithic, Hoabinhian, corded ware and curved paddle-impressed ware cultures (Singh 1986: 1–86).

Meghalaya

After 1956 several attempts were made by the teachers and students of the Prehistoric section of the Department of Anthropology, Gauhati University to discover Stone Age sites and antiquities from this state. They carried out investigations in the Garo Hills every year and discovered a large number of Stone Age sites. A part of this collection was reported jointly by Sharma and Sharma (1968: 73–84). Another report was published jointly by Sharma and Singh (1968: 36–50) in the *Journal of the Assam Science Society*, Guwahati. In 1967, another important discovery was made by them, which was reported in *Indian Archaeology-A Review* (1967–68).

T. C. Sharma, in his article titled 'Assam in Prehistoric Times', published in *Kamarupa*, mentions two implements which seemingly have some palaeolithic characteristics (Sharma 1967: 830). The first report of the discovery of palaeolithic stone tools in the Garo Hills was made jointly by Sharma and Sharma in the *Journal of Assam Science Society* in 1971 (Sharma and Sharma 1971: 18–24). The Stone Age sites discovered in the Garo Hills after 1966 are mainly concentrated in the valleys of Rongram, Ganol and Simsang rivers. About 19 sites—1 in the East Garo Hills, 17 in the West Garo Hills and 1 in the Khasi Hills district of Meghalaya—have been discovered so far.

Several eminent Indian and foreign scholars/archaeologists who have visited most of these sites and carried out geomorphological and archaeological investigations jointly with the Department of

Anthropology, Gauhati University are K. B. Codrington of London University and H. D. Sankalia, V. N. Misra, R. V. Joshi, R. S. Pappu and S. N. Rajaguru of Deccan College, Pune.

The present author studied stone tools collected from the Garo Hills and belonging to the palaeolithic and mesolithic periods. He incorporated these materials in his thesis titled 'Prehistoric Archaeology: Stone Age Cultures of Garo Hills, Meghalaya'. He also, for the first time, brought to light various quaternary formations developed in different river valleys of the Garo Hills and gave firm stratigraphic support to the palaeolithic cultures (Sharma 1972: 77–93). Rajaguru et al. (1981) conducted a survey of quaternary formations in the Garo Hills jointly with the Department of Anthropology, Gauhati University, with a view to foster quaternary geological background for the Stone Age culture reported earlier. They took keen interest in the work done by the research team of the department and made their expertise available for working out chronological sequences of the prehistoric cultures of North-East India. Reports regarding two Pleistocene mammalian fauna helped in establishing the above chronologies (Badam 1974: 75–78).

The Stone Age sites discovered so far in Meghalaya yielded cultural materials of different phases of this age. Earlier, the Neolithic cultural phase was considered to be the only culture of the prehistoric period. Sankalia, who visited the Garo Hills in 1969–70, was convinced that some of the sites discovered there earlier had yielded palaeoliths. He included all these materials in his book *Prehistory and Protohistory of India and Pakistan* (1974). Another interesting and important tool tradition—the Chopper tradition—was discovered in 1978 by the present author at Nangalbibra in Simsang-Nangal Valley of East Garo Hills District. In the same environmental situation, another lithic tradition, with flake tools and a few microliths on chert and jasper, was found, which justified the presence of Levallosian and Microlithic traditions. Sonowal, on the other hand, studied some of the sites discovered in the river valleys of Rongram, Ganol and Didami of the West Garo Hills. Her study was mainly based on typotechnology of the stone tools of palaeolithic periods. She included

these materials in her PhD thesis titled 'Studies on the Flake and Blade Industries of the Garo Hills, Meghalaya' (1987).

Sharma reported another microlithic industry at Selbalggre-II in West Garo Hills District. A trial excavation at the site revealed that there was a clear microlithic horizon below the neolithic level. These microliths were predominantly non-geometric in character consisting of micro-scrapers, points, with plain hand-made pottery. He also reported about Hoabinhian (Sumatraliths of mesolithic period) from the Rongram Valley of West Garo Hills (Sharma 1979: 289). Hoabinhian tools were found at Bibragre, Matchakholgre and Ganolgre of West Garo Hills District. Hoabinhians of Bibragre comprise varieties of flake tools, which were also scantily found earlier at the Rongram sites around Selbal River Valley of the West Garo Hills and identified palaeolithic, mesolithic and neolithic traditions in different contexts (Sharma and Mahanta 1993a: 61–72; 1993b: 49–57).

The archaeological exploration conducted by the Department of Anthropology, Gauhati University, since 1968 resulted in the discovery of a number of stratified as well as surface neolithic sites in Meghalaya. Noteworthy among them are Selbalggre, Rongram-Alagre, Chitra-Abri, Ganolgre and Rengchengre in the West Garo Hills. Among these, the Selbalggre and Rongram-Alagre sites were also tested by trial digging. Excavation revealed that Selbalggre had two cultural layers: neolithic layer, which yielded both chipped and ground stone axes, one scraper and plain hand-made grey pottery, and microlithic layer, which yielded a large quantity of microliths, fluted core, hammer stones and a large number of micro-flakes.

The site at Rongram is a typical one as it yielded a stratification, viz., Neolithic above and Hoabinhian below. Chitra-Abri yielded a large quantity of shouldered celts—a typical characteristic of Asiatic Neolithic complex.

The Barapani site discovered by the present author yielded cultural relics consisting of typical axes, flakes and blade tools made on phyllite, which were found exposed on the surface (Sharma 1983: 41–49). The present author also advocated a broad-based ethno-archaeological study on the basis of present-day material,

cultural, settlement-subsistence patterns, and lifestyle of the Garo people to trace the present-past continuum.

Roy made an important contribution by trying to correlate the salient features of material cultural elements of the past and present by studying the shifting cultivation of the Garo Hills. He also tried to trace the Neolithic agricultural patterns (Roy 1981: 193–219).

Mizoram

In Mizoram, archaeological investigation is yet to start. Only one stone axe has been found till now in this state. It is a broad and thin axe made of slate. At the butt-end, it has three broad holes probably for facilitating the hafting of the tool.

Nagaland

Nagaland appears to be a potential area for prehistoric research due to its strategic geographical location but no one has explored this state after independence. Prior to independence Neolithic celts were collected from the Naga Hills but without any reference to sites or contexts where they originally might have occurred. These are now preserved in the Pitt-Rivers Museum of Oxford University, Museum of Archaeology and Ethnology, Cambridge University, State Museum, Guwahati and Anthropological Museum, Gauhati University. These are the only source materials on the prehistory of Nagaland.

Tripura

Tripura, the south-easternmost state of North-East India, is another potential area for archaeological research. Recently, B. C. Poddar and N. R. Ramesh of the Geological Survey of India made important archaeological discoveries (Poddar and Ramesh 1983: 1–4). They found several Stone Age sites in the valleys of Hoara and Khowai rivers near Agartala. The important sites identified by them are Teliamara in Khowai valley, Sonai Bazar, Bairagibari, Sonaram and Agartala in Hoara valley. The Stone Age implements they found were exposed on the eroded surfaces of

the river terraces locally called *tillas*, which have been dated by C_{14} method to the late Pleistocene Age, i.e., BC 35690 \pm 3050. They opine that this date has enabled us to establish firmly, for the first time, the chronology of the palaeolithic period of North-East India (Ramesh 1989: 321). This has not only established the presence of palaeolithic culture but also helped set aside all doubts about palaeolithic man and his culture in the region.

The Tripura assemblages contain prehistoric cultures from palaeolithic to neolithic periods. The most remarkable feature of the Stone Age industries is the utilisation of silicified fossil wood for manufacturing tools, as in the Anyathian culture of Myanmar. The sites have also yielded microliths. The Neolithic cultural phase has been dated to BC 3450 \pm 110 by C_{14} method (Poddar and Ramesh 1983: 1-4). Regretfully, no further work has been taken up after such a remarkable discovery.

Sikkim

Sikkim, the eighth State to be a part of North-East India, also has much potential. In October–November 1980 A. K. Sharma from the Archaeological Survey of India explored some parts of Sikkim and discovered a number of Neolithic sites in North and East districts of Sikkim. In North district, the tools were recovered from the Dzongu area on the right bank of the river Tista. These tools comprised harvesters, knives, axes, adzes, single and double perforated celts and polishers.

PREHISTORIC CULTURAL SEQUENCE IN NORTH-EAST INDIA

T. C. Sharma (1966: 403), while presenting a thesis on 'The Neolithic Culture of Assam', proposed a prehistoric cultural sequence for North-East India starting with the Early Holocene Hoabinhian period, which was succeeded by the Neolithic, which might be seen as having two distinct phases:

- (1) The Early Neolithic, and
- (2) The Late Neolithic

Sankalia (1974: 298) has corroborated this but the present author, in his thesis (1972), has proposed a different cultural chronology, viz., Early Stone Age—Early Middle Stone Age—Late Middle Stone Age—Late Stone Age on stratigraphical and typo-technological bases. According to him, there is a continuous Stone Age cultural sequence starting from lower palaeolithic and middle palaeolithic upper Pleistocene cultures—Hoabinhian—mesolithic cultural phase—early neolithic and late neolithic—early holocene. Evidences of Copper-Bronze and early Iron Age cultures in North-East are lacking.

During the last decade of twentieth century, research on the Stone Age archaeology of the region has registered a significant advance after the visit of a team of geomorphologists/archaeologists from Deccan College Post-Graduate and Research Institute, Pune. The Deccan College and Gauhati University jointly carried out systematic geomorphological studies in different river valleys of the Garo Hills (Rajaguru 1981: 5). On the basis of stratigraphical evidences provided by Rajaguru et al. and typo-technological evidences of the Stone Age tools from the Garo Hills and other places of North-East India, Sankalia proposed the following Stone Age cultural sequence for Meghalaya (1981: 5):

Early Palaeolithic	c. 200000–50000 BC
Middle Palaeolithic	c. 50000–20000 BC
Late Palaeolithic	c. 20000–10000 BC
Mesolithic	c. 10000–5000 BC
New Stone Age (A)	c. 5000–2000 BC
New Stone Age (B)	c. 2000–1000 BC

The first chronometric dating of prehistoric cultures of the region by C_{14} method was related to Tripura (Ramesh 1989: 224). On the basis of available stratigraphic data and typo-technological evidences corroborated by radio-carbon dates as well as a comparative study of identical materials from adjacent

regions, Ramesh proposed a chronological scheme for Tripura prehistoric cultures as follows:

Modern	165 ±80 BP
Medieval Pottery	1430 ±90 BP
Holocene – Evolved Tripurian = Upper Palaeolithic – Early Neolithic	3450 ±110 BP
Late Pleistocene – Late Tripurian = Late Middle Palaeolithic	35690 ±3050 BP

DISCUSSION

Several Stone Age sites that yielded palaeolithic, mesolithic (microlithic and Hoabinhian) and neolithic cultural relics have been discovered in different parts of this region, but scholars are yet to demonstrate a congruous chrono-cultural sequence. Despite considerable research done by scholars like T. C. Sharma, H. C. Sharma, H. D. Sankalia, S. N. Rajaguru, R. S. Pappu, R. V. Joshi, V. N. Misra, O. K. Singh, B. C. Poddar and N. R. Ramesh, M. Sonowal, B. P. Bopardikar, and A. A. Ashraf an acceptable cultural sequence and chronology for the prehistory of North-East India is yet to develop. Absolute chronology in terms of radiometric dating of the prehistoric sites was not there till the discovery of the Stone Age cultures in Tripura. In the absence of this, it is not possible to draw a clear picture of the prehistoric man and his culture in this part of India. However, future researchers may be able to generate some datable materials from this region.

Considering the C_{14} dates of the Tripurian culture, we have now confirmed that the prehistoric man started living in North-East India from the late Pleistocene time, if not earlier. The joint exploration team of Deccan College, Pune and the Department of Anthropology, Gauhati University, under the leadership of Rajaguru, proposed the same date for the beginning of the prehistoric cultures in Meghalaya on the basis of geomorphological and geo-archaeological data on the Garo Hills. Therefore, the C_{14} dates of Tripura not only confirmed our earlier proposition but

also provided a firm ground for palaeolithic cultures of North-East India and the Garo Hills in particular. This, however, does not preclude the necessity of more systematic archaeological work in future.

It is also important to remember in connection with archaeological research in future that some effort should be made to connect the Stone Age culture with the contemporary cultures of the region and try and solve the question of ancient and medieval period migrations of people in the region. The question of their original habitat is important for the various tribes of the region but there is virtually no scientific basis to their claims of aboriginality as well as nomadism almost until the colonisation of this region by the British. The linguistic research in the region is also not developed enough to answer any of the questions that the people of the region have in their minds. Archaeological analysis should also try and go beyond the tools they have dug out to tell the scientific community the stories of cultural continuities as well as discontinuities and the implications of both for contemporary societies. Archaeologists might also try and answer why there are so few archaeological sites available for excavation in the region. Such efforts will certainly make archaeology relevant and help it grow beyond the confines of museums.

NOTE

1. This is a stratified site showing three layered depositions. The topmost layer (L_1) is upto a depth of 31 cms. This is followed by layer L_2 ranging from 31 to 54 cms. The bottom most layer with cultural deposits is layer L_3 , with a depth of 54 to 65 cms.

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