

CONCLUSION

This conclusion reviews the general characteristics of the culture and environment of ancient Upper Tibet, in order to highlight the thematic thrust of the bulk of this study. Firstly, it should be observed that determining the particular mix of cultural and environmental determinants imprinting each of the archaic sites surveyed is well beyond our present sphere of knowledge. It will be some time before the unique set of factors that distinguishes monuments of the same typology can be pieced together, facilitating the modeling of localized social and economic processes operative in archaic Upper Tibet.

It is quite feasible, however, to set forth the formative cultural and environmental processes likely to have governed large swathes or the whole of ancient Upper Tibet. This reconstruction of the character of early Upper Tibetan civilization is enabled by analyzing the qualitative and quantitative attributes of its monumental and artistic traces. These attributes, in turn, can be subjected to interpretation based on Tibetan oral and literary traditions (some of which are also relevant to Central Tibet and other quarters of the Plateau) and viewed from an ethnoarchaeological perspective. Using this inferential approach, I have formed theories regarding the makeup, localization and relative geographic distribution of archaeological sites in Upper Tibet. This affords a panorama of the Upper Tibetan archaic cultural horizon. Elaborations of the keystone features noted below, adduced from archaeological, ethnographic and literary data, are interlarded throughout the study.

The cardinal human and environmental themes that helped shape ancient Upper Tibetan culture can be subsumed under the following discursive headings:

- 1) A civilization displaying uniform physical characteristics over a wide area
- 2) A warlike polity
- 3) A people in active contact with their neighbors
- 4) An enduring way of life
- 5) An economic regime in environmental retreat
- 6) A stage of development marked by advanced technological capabilities
- 7) A society with sophisticated religious and lifeway traditions

1 A Civilization Displaying Uniform Physical Characteristics Over a Wide Area

The monuments of the archaic cultural horizon constitute enduring evidence of its spatial organization. The patterns of monument distribution reflect cultural ecological processes at work in early Upper Tibet, including the manner in which the inhabitants perceived and exploited their physical environment. The distribution of all-stone corbelled residential structures and special types of ritual pillar complexes in much of Upper Tibet (but not in adjoining regions of Tibet or other territories) delineates a unique paleocultural formation. With the exception of the far eastern Byang-thang, lower Pu-rang and lower Gu-ge, these types of monuments are distributed throughout the permanently inhabitable zones of Upper Tibet, furnishing proof of the cultural integrity of the region in ancient times. Relying on the oral and literary traditions, we might label

this distinctive cultural and physical entity (as illustrated by its archaic monuments) as ‘Zhang-zhung’. This paleoculture, in its various chronological phases, was centered in the ‘core’ area of Upper Tibet situated between 89° 27’ N. lat. and 79° 40’ E. long, below the 34th parallel and north of the Transhimalaya ranges. South of the Transhimalaya ranges, the core area encompassed all the Tibetan uplands west of Sa-dga’.

Even outside this geographic band, in the far eastern Byang-thang and lower Gu-ge, the same traditions of rock art are fairly well represented. There is evidence for all-stone corbelled residential sites in these outer regions of Upper Tibet as well, demonstrating that they were closely related to the cultural fabric of the core region. The sui generis funerary pillar monuments, however, are absent from the far eastern Byang-thang, lower Pu-rang and lower Gu-ge. I have proposed that the variable but interrelated archaeological assemblage of the eastern Byang-thang may be evidence of the proto-tribal state known in Tibetan historical and ritual literature as Sum-pa (Bellezza: in press). In Bon quasi-historical texts, Sum-pa is portrayed as having close political and cultural connections to Zhang-zhung. The differences in the monumental assemblage of the badlands (highly dissected canyon lands) region of Gu-ge must also evince a degree of cultural variation, the nature of which is somewhat obscure. As a point for discussion, I shall propose (based on local folklore, toponymic affinities and geographic position) that lower Gu-ge came under stronger (but still not well understood) Transhimalayan cultural influences than other regions of Upper Tibet.

The congruous monumental and artistic makeup of much of Upper Tibet is consistent with the development of large tribal formations in various regions of Inner Asia in the Iron Age. These began as regional centers that sometimes went on to encompass huge areas of the Eurasian landmass. An excellent case in point is the Scythic Arzhan tribal union of southern Siberia and the Altai, which sprung up circa the ninth century BCE. Similarly, chronometric findings from residential and ceremonial sites suggest that much of Upper Tibet was culturally homogeneous, and perhaps politically cohesive, by the middle of the first millennium BCE. This should come as no big surprise, for the rapid spread of horse-riding cultures over large territories is a hallmark feature of Iron Age Inner Asia. The cultural developmental homogeneity of Iron Age Upper Tibet and north Inner Asia was most plausibly caused by one or more of the following factors:

- 1) Antecedent paleocultural and paleolinguistic interrelationships
- 2) Ethnic commonalities initiated through a process of genetic dispersal beginning no later than the Bronze Age
- 3) Similar alpine and steppe ecogeographic settings
- 4) A mixed agrarian and pastoral economy (with the hunting of big game remaining an important activity)
- 5) Iron Age acculturative processes pertaining to social structures and religious beliefs
- 6) The widespread geographic transfer of technological innovations such as the smelting of copper and iron ore and the concomitant development of implements like the horse bridle, saddle and broad sword

It appears that Iron Age culture and technology continued to define the Upper Tibet of the protohistoric period (as part of anachronistic social and technological systems), only to be superseded with the coming of the imperial period by a pan-Tibetan polity in the seventh century CE. The cultural and technological uniformity of archaic Upper Tibet over time resulted in similar sets of residential and ceremonial sites arising in identical geographic niches throughout the region. This geographic distribution is also closely related to functional responses to environmental challenges. In harsh, high-altitude Upper Tibet the siting of residential monuments was dictated

by the availability of scarce vital resources, which tended to be located in relatively moist valleys sheltered from the desiccating effects of the open plains. Cave complexes, especially when wed to good water sources, became choice loci of permanent settlement, where major religious centers thrived. High limestone and granite mounts standing apart were preferred for the establishment of citadels (particularly when springs were located at the base of the formations). Temples and hermitages were often clustered in and around large bodies of water (this settlement pattern must be closely related to the sacral status of Upper Tibetan lakes). Waterless plains and shelves were the places of choice for funerary monuments, and were the locations stipulated for them in the Tibetan archaic funerary tradition.

2 A Warlike Polity

Of paramount importance is the fact that most archaic residential facilities in Upper Tibet were built on unassailable high ground, on inaccessible islands, or hidden in out-of-the-way spots. This seems to indicate that defense was a huge preoccupation of the population from around the early first millennium BCE onwards. A cultural proclivity is implied in this locational bias, for the inhabitants of Upper Tibet must have constructed these strongholds as an expression of martial necessity. Aside from social and religious factors that may have made high ground a desirable choice for settlement, residential facilities were set on summits to defend against attack. It is clear from the large number of citadels that protection was a particularly large preoccupation in the agricultural enclaves of far western Tibet and Dang-ra g.yu-mtsho in the central Byang-thang, probably throughout the prehistoric epoch. Agriculture may well have generated food surpluses that fostered the development of elite social classes, who took up residence in the citadels and hilltop palaces and vied with one another for political domination.

Military incursions into the agricultural communities of ancient Upper Tibet could have come from sources outside the region. Beginning perhaps in the late Bronze Age or early Iron Age, nomadic invaders from Inner Asia may have impelled the Upper Tibetans to establish fortifications. Tibetan oral and textual sources mention Inner Asian invaders (Hor, sTag-gzig, Sog-po) in what appears to be a prehistoric context, but these accounts are not well historicized. In any event, we know that with the advent of the Iron Age in the Inner Asian steppes, large-scale conflict became inevitable and populations restive.

Given the highly remote and austere environment of Upper Tibet, regional political tensions are likely to account for the majority of fortified and hidden residential centers constructed in the archaic cultural horizon. Inherently scarce resources and the climatic decline of the Late Holocene can readily be seen as motive forces behind the rise of a warlike populace. Based on localized clan and tribal structures, various communities must have enforced their territorial control and expanded their rule by establishing individual strongholds. The Buddhist religious histories (Chos-'byung) describing the well-known semi-mythic rGyal-phran bcu-gnyis, the Twelve Principalities that preceded the Yar-lung kings (see pp. 278–281), certainly allude to the warlike nature of the early settlers of the Plateau. This martial character is reinforced in Bon quasi-historical sources, which speak of a political nexus between the kings and priests. Moreover, in Bon texts, the early Bon priests and sages (*bon*, *gshen*, *dpon-gsas*) of Central Tibet and Zhang-zhung are frequently depicted as possessing arms and being involved in warlike displays of power. The bellicosity of Upper Tibetan society in early times, as recorded in Tibetan historical and ritual literature, is reflected in the later ethnohistory of the region – infamous for its many feuds and skirmishes between contending pastoral, bandit and religious groups.

The numerous fortresses and citadels of Upper Tibet, some of which must have formed shifting strategic networks in prehistoric and early historic times, may also be evidence for the formation of a coherent polity. The fortified nature of many of the permanent residential complexes indicates that society was highly regimented and organized, with a dominant military component. This is exemplified by the great proliferation of rock art hunting compositions glorifying the use of arms and equestrian skills. This type of society could customarily field a relatively large and mobile military force at fairly short notice. The proliferation of citadels, in which only a fairly small group of local inhabitants could possibly reside, suggests that this polity was in large measure founded on a hierarchical social order and deference to centralized authority. The diverse mortuary archaeological record, with burial sites ranging from rudimentary to grandiose, also shows that ancient Tibetan society was highly stratified. The nature and extent of the political disposition, however, is not at all clear. The extensive defensive network overlying the agricultural regions does not shed light on whether prehistoric Upper Tibet was governed by an overlord or divided between a number of regional power-bases. Whatever citadels were occupied in the expansionist Tibetan empire period must have been organized under a unified imperial command. Nevertheless, tribal feuds and localized conflict may have continued to influence the ways in which fortifications were built and manned.

Regarding the prehistoric epoch, I tend to see the existence of strongholds in virtually every agricultural enclave as mirroring a polity organized along the lines of a confederation, rather than being ruled from a single location. Textual accounts indicate that even the fabled Zhang-zhung capital of Khyung-lung dngul-mkhar held sway over only far western Tibet, as few if any of the 18 branch fortresses associated with this castle seem to have been built farther east.¹ A society built on a high degree of clan organization, combined with the fiercely independent nature of its people, would probably have resulted in considerable regional autonomy. Rather than centralized rule, a clan-based polity is more likely to have brought about a political system of *primus inter pares*, whereby power was dispersed among a class of chieftains operating in various regions. The lack of sufficient arable land in any one agricultural enclave to serve as an interregional bread basket also worked against a political structure in which all roads lead to a single capital. Furthermore, the wide geographic dispersal of Upper Tibet's strongholds and the absence of any capital citadel (as identified in Bon accounts of the Zhang-zhung kingdom) much larger and more prominent than others hints at the existence of a confederacy of clans and regions. In the early historic period, viable fortresses must have been reoccupied and perhaps new ones built as part of the unification of Tibet under the sPu-rgyal emperors. In this period, a hegemonic political structure arose and formerly independent Upper Tibetan factions were subjugated to it.

3 A People in Active Contact with their Neighbors

Prehistoric Upper Tibet, with its distinctive identity and large territory, was probably well disposed to contacts with neighboring cultures, particularly during the Iron Age Inner Asian migrations. Contacts could have been of a cooperative nature (trade, cultural dissemination, marital alliances, etc.) or conflictive (war, subjugation, slavery, etc.). In the long tenure embodied by the archaic monuments of Upper Tibet, interregional cultural and political associations of various types are

¹ See annotated translation of the Bon text *Kun 'bum* in Bellezza 2002a, pp. 21, 22. According to Lopön Tenzin Namdak's *g.Yung drung bon gyi bstan pa byung khungs*, Khyung-lung dngul-mo mkhar was one of four great castles (*mkhar-chen*) in prehistoric Zhang-zhung (Bellezza: in press).

bound to be indicated. Tibetan literary accounts describe the invasion of prehistoric Upper Tibet by Inner Asian groups, and we may take this as allegorical evidence of interregional clashes.

Foreign invasion from the north is likely to have occurred in two geographic areas. One point of entry into Upper Tibet involved the sweep across the northern steppes of Tibet from east to west by groups coming through the Mongolian steppes and Gansu Corridor. The body of Tibetan literary evidence best supporting this hypothesis comes from the *mi'u rigs*, a well elaborated tradition concerning the proto-tribal entities of the northern tier of the Tibetan Plateau, and the manner in which they interacted over a long but indeterminate time. As Vitali (2003b) comments, the basis of the *mi'u rigs* tradition reveals that the early inhabitants of northern Tibet were economically and ethnically distinct from the peoples of the southern portion of the Tibetan Plateau, and geographically and vocationally more akin to the peoples of the Central Asian steppes. A second point of entry into Upper Tibet may have entailed the penetration of northwestern Tibet (Ru-thog) by groups originating in Eastern Turkestan and beyond. This hypothesis is encouraged by a body of oral tradition in Ru-thog, which speaks of the invasion of the region in antiquity by Central Asians of Turkestan origin. A northwestern access point during the protohistoric or early historic period is also suggested by the discovery of six tombs at Nga-lung in Ru-thog, which have been dated (utilizing non-chronometric methods) to the fourth to eighth century CE (Huo Wei 1995: 45-48). Textile eye covers, a mortuary practice mirrored in Eastern Turkestan burials of the time, were discovered in these tombs.

Cultural exchanges between north Inner Asia and Upper Tibet, especially in the Iron Age, are strongly indicated by funerary monuments in which pillars play a prominent role, the rock art record, and certain types of copper alloy ornaments. These archaeological media show that there were associative and/or parallel relationships between constituent parts of Inner Asia. Transhimalayan contacts may also be indicated, effected by the movement of peoples over the Himalayan barrier. This communication seems to be supported by the existence of long-established Bodish languages on both sides of the Himalaya. Moreover, the complementary range of natural resources found on either side of this montane divide may well have acted as an impetus to Transhimalayan trade from early times. Cis-Himalayan medicinal plants, bamboo and perhaps food grains were possibly traded northward, while animal products and minerals from the Plateau would have been in demand by Himalayan communities. In any case, this certainly was the pattern of commerce that emerged in the historic epoch.

4 An Enduring Way of Life

The lasting and stable nature of certain aspects of the Upper Tibetan way of life is mirrored in its coherent monumental assemblage, rock art record, systems of economic production, and unique ecogeographical situation. Chronometric data derived from all-stone corbelled edifices and associated structural remains indicate that this tradition of construction was established by the middle of the first millennium BCE. Given their eminently practical qualities, all-stone corbelled edifices probably prevailed in Upper Tibet until well into historic times (Bellezza 2002a). There is and was little wood (especially in the Byang-thang) that could be used for building projects, underlining the adaptive utility of robust all-stone construction. Similarly, it appears from chronometric and cross-cultural archaeological evidence that the characteristic pillar types of Upper Tibet were being erected by the first third of the first millennium BCE. They too are likely to have endured as funerary forms of architecture (perhaps as late as the close of the imperial period), becoming the signature ceremonial monuments of Upper Tibet. There are no clear signs

of further stages in the development of funerary ritual monuments until the advent of Lamaist types (reliquary *mchod-rten* and *tsha-tsha* receptacles known as *gdung-rten*).

Similarly, enduring rock art motifs are much in evidence in Upper Tibet and include swastikas, ungulates with bi-triangular bodies, big game hunting scenes, and the characteristic solitary depiction of wild animals. As per the rock art chronology I have devised (see pp. 162, 163), it would appear that such motifs were produced over a wide period of time, spanning both the prehistoric epoch and early historic period. While much of the rock art attributed to the early historic period is more crudely rendered and less imaginatively executed, the basic themes, and perhaps their symbolic value, endured. This pattern of pertinacity is also reflected in small copper alloy objects known as *thog-lcags*, amulets in the form of lions, raptors, caprids, and horsemen that seem to have been manufactured from prehistoric times onwards. The metallurgical and casting techniques used to make these objects may have changed over time, as did the styles of the motifs, but the subject matter itself remained fairly constant.

Temporal continuity in Upper Tibetan culture is also supported by the absence of evidence for catastrophic foreign intrusion (such as inscriptions in alien languages, aberrant monumental forms and rock art, etc.). This seems to signal that certain aspects of the archaic cultural horizon were very long-lived. While we might postulate an innate conservatism in the population to account for such a phenomenon, other factors are liable to have played a more pervasive role. The Byang-thang is a remarkably homogeneous area with fairly consistent elevational, topographic and hydrological characteristics, as well as similar floral and faunal components throughout. These common biotic and abiotic elements served as the physical foundation for the development of a common system of pastoralism (cross-cultural archaeological evidence suggests that it was in place by the middle of the first millennium BCE). Likewise, the lower-elevation valleys of far western Tibet have much in common in terms of their physical environment (save for the badlands of Gu-ge, which constitute a separate physiographic province). Agriculture, as a supplemental or primary system of production, developed in far western Tibet wherever environmental conditions permitted. These shared regional economic patterns (which have endured to the present day) may have acted to preserve certain monumental forms and aesthetic expressions throughout the Upper Tibetan archaic cultural horizon.

The geographic isolation of the region must also have encouraged the conservation of old cultural ideologies and materials. Upper Tibet is set apart from all adjoining regions by high mountains, a decisive geographic factor in the development of its unique paleocultural identity. Geographically isolated populations tend to perpetuate relict cultural patterns. This cultural and geographic detachment from conterminous regions is underscored by the lack of epigraphic evidence for other peoples occupying Upper Tibet datable to the first century BCE or later. This situation contrasts with neighboring Indus Kohistan and Ladakh, where inscriptions in six or seven different paleographic traditions are known. The absence of foreign inscriptions in the rock art tableaux of Upper Tibet seems to indicate that formative inter-cultural communications waned from the protohistoric period onwards.

5 An Economic Regime in Environmental Retreat

The relentless degradation of much of the northern hemisphere's climate in the Late Holocene (beginning around 4000 years ago) appears to have had an especially pronounced effect on the environment of Upper Tibet. Paleoclimatological studies indicate that, by the advent of the Iron

Age, the climate was becoming critically colder and drier in Tibet, wetter pulses notwithstanding. These climatic trends would continue through much of the first millennium CE. With an average elevation of 4600 m and subject to a multiple rain shadow effects (due to being on the leeward side of the Himalaya, Karakorum, Pamirs, and various Transhimalaya ranges), Upper Tibet must have borne the full brunt of Late Holocene climatic change. The development of well-built sedentary sites in the first millennium BCE, spurred on by the technological and cultural changes affecting much of Eurasia, may have occurred in direct response to these environmental transitions. Nor would Upper Tibet have been immune to territorial struggle and armed conflict as a corollary to the environmental degradation besetting Eurasia in general. This state of affairs appears to be reflected in the network of strongholds and sheltered residential centers that developed in the region.

In addition to generating political strife, the degradation of the environment must have had devastating effects on the systems of economic production. Although it is not certain when agriculture began in Upper Tibet (I continue to argue, given the climatic optimum and comparative cultural data, that it may have been introduced in the Neolithic), at one or more times production declined as irrigation resources diminished. The effect is clear in the many derelict farming areas of western Tibet, but the chronology of the rise and collapse of agriculture in the region is still conjectural. I am inclined to see various long-term patterns of environmental decline, with each area faring somewhat differently. The extent and success of farming anywhere is directly linked to local hydrological resources, which suggests substantial variations in potential from valley to valley. Agricultural resources of varying qualities are observable in the farming enclaves of contemporary Upper Tibet. Agriculture is still practiced near the shores of Lake Dang-ra in the central Byang-thang, and in the favorable environmental niches of Ru-thog, sGar, rTsa-mdā', and Pu-rang in far western Tibet. In some locales, the amount of land under cultivation has expanded in the Communist period, but this is an exception to the general trend of agricultural diminution. Many previously arable lands now lie unused, with few or no perennial sources of water available; these having dried up in an undetermined period. It should also be noted that political and cultural factors may have exerted significant pressure on the practice of agriculture, conspiring towards its abandonment.

Upper Tibet was home to the highest sedentary civilization ever to have existed on Earth. While higher-elevation funerary sites perched on Andean peaks have been documented, no other culture sited its permanent habitations at such a high altitude (up to 5400 m). The probable ubiquitous abandonment of these citadels and religious centers by the second diffusion of Buddhism (late tenth to 12th century CE) must in part be related to cumulative climatic degradation. No longer was it feasible to live and work at such an altitude in such inhospitable conditions (despite several humid pulses, never in the Late Holocene did the higher reaches of Tibet experience mild climatic conditions). The establishment of lofty residential complexes in the archaic cultural horizon can also be attributed to the physical vigor and organizational skills of the society that built them. I have found no literary evidence of any of these high-elevation sites remaining the focus of concentrated sedentary activity after circa 1200 CE, a time of growing dependence on foreign powers in the political affairs of Tibet.

Not only were most of the agricultural enclaves and high ground sites probably deserted by 1200 CE, but most of the lakeside locations as well. Across the breadth of Upper Tibet from east to west, there is a great chain of lakes, the chief among them having been important foci of prehistoric and early historic settlement. The headlands, cliffs, capes and islands of gNam-mtsho, Dang-ra g.yu-mtsho, bKra-ri gnam-mtsho, Da-roq mtsho, Ngang-la ring-mtsho, and other lakes were choice

locations for high-status dwellings. The elite character of these residential sites is illustrated by the size and extent of the habitations (most of which are of the all-stone corbelled type), which stand in sharp contrast to the portable shelters in which the herdsmen presumably resided (such as the black yak-hair tent). Moreover, the lakeshore dwellings were often physically set apart from the main zones of pastoral and agricultural production. These exclusive settlements could be maintained only by drawing vital resources from the production capacities of the population at large. Tibetan historical accounts indicate that, by the time of the second diffusion of Buddhism, these residential sites were no longer the object of sustained high-level occupation. Many sites at gNam-mtsho are rather depicted as the station of solitary ascetics from the 11th to 13th century CE, before descending into cultural oblivion (see p. 209, fn. 8). Bon literary accounts indicate that some of the high elevation and lakeside sites were focal points of settlement in the early historic period, but these are also portrayed as belonging to ascetics who were not involved in large-scale social transactions and building projects. The settlement of these specialized niches during Tibetan imperial expansion, therefore, was probably less intensive than in the prehistoric epoch, when environmental factors were more amenable to the occupation of marginal mountain and lake domains.

Despite sedentary sites filtering across Upper Tibet in an awe-inspiring variety of locations, my survey work demonstrates that there are two notable geographic zones that remained free of this form of human settlement. One of these zones lies in the extremely high valleys and basins of the Transhimalaya (gNyan-chen thang-lha, Gangs ti-se and A-yi-la ranges) in the south. Many of the valleys and basins nestled in these ranges lie above 5100 m to 5400 m, the upper limit of sedentary occupation. Moreover, sedentary settlement in the Transhimalaya was retarded by the severe climate of these glaciated ranges and the scarcity of winter pasturage. The other geographic zone without clear signs of early sedentary settlement is the northern Byang-thang above the 34th parallel. It would appear that this highest, driest and coldest tier of the Byang-thang was so environmentally degraded by the Iron Age that permanent settlement did not take hold there. The areal distribution of archaic monuments illustrates that altitudinal and climatic obstacles to Transhimalayan and northern Byang-thang colonization posed insuperable physiological and economic constraints. These inevitably shaped the overall extent of archaic cultural settlement patterns in Upper Tibet. The general effect of these environmental barriers to settlement expansion was to concentrate sedentary occupation into more favorable regions. These actively colonized regions can be grouped as follows:

- 1) The southern and central great lakes belt of the Byang-thang
- 2) The upper rTa-mchog gtsang-po valley (Brahmaputra)
- 3) The relatively low-elevation (3200 m to 4500 m) valley systems of far western Tibet: sGar, rMa-bya gtsang-po (Karnali), Glang-chen gtsang-po (Sutlej), Sengge gtsang-po (Indus), and the Ru-thog basin and its affluents

6 A Stage of Development Marked by Advanced Technological Capabilities

The construction of large (up to 20,000 m²) and extremely durable citadels and burial grounds, with substantial structures spread out over an area of up to 1 km², point to a culture with considerable technological and engineering sophistication. This is also borne out by copper alloy and iron artifacts recovered from Upper Tibet that can be attributed to the protohistoric and early historic periods. Among these are intricate fibula cast with pairs of birds, lions and other animals, finely crafted copper-alloy amulets in the form of wild ungulates, zoomorphous figurines, armaments,

horse tackle, and vessels of various kinds, all of which demonstrate a high degree of manufacturing proficiency. Bon scriptures tell us that the priests and rulers were lavishly attired in white wolf, tiger and lynx skin robes, and that they wore turquoise (*g.yu*) and patterned agate (*gzi*) jewelry as well as meteoric iron (*gnam-lcags*) talismans. The weaving of woolen cloth and possibly carpets may also have reached a stage of significant refinement. Pottery shards I have seen on the surface are of a rudimentary kind (unglazed, thin-walled monochrome redware and greyware), but cord-marked amphorae with lug handles have also been excavated from Iron Age tombs in Gu-gce (see p. 114, fn. 117).

While most rock art is elementary in form, it cannot be said with any certitude whether more refined genres of art were expressed in perishable materials. There is little evidence that wheeled transport was ever used in Upper Tibet, but some prehistoric inhabitants of the region appear to have been aware of this tremendous technological innovation originating in the Eurasian steppes (see pp. 195, 196). Archways and columns supporting finely built superstructures were not part and parcel of the architectural canon of Upper Tibet. True urban settlement with its thoroughfares, theatres, plumbing, and many other marvelous features, as found in materially advanced civilizations, did not take root in Upper Tibet. Much of the population remained semi-nomadic and lived in the kind of austerity demanded of a mobile production economy. The inhabitants of the citadels and temples must have enjoyed a significantly higher standard of living than those engaged in farming and herding. We can assume that they had ample animal proteins in their diet, were well protected from the very harsh climate, and were in a position to acquire surplus quantities of food and prestige objects of various kinds.

7 A Society with Sophisticated Religious and Lifeway Traditions

It is in the abstract cultural sphere that Upper Tibet may well have distinguished itself in the arena of world civilization. The great variety of necropoli and cemeteries indicates that intricate beliefs were attached to burial and the afterlife in the prehistoric epoch and early historic period. The all-stone corbelled centers with their warrens of small cells suggest that religious practices connected to secluded and high-altitude locations may have been a fundamental part of life in the archaic cultural horizon (they may also have functioned as communal dwellings). Bon literary accounts would have us believe that the priesthood of Zhang-zhung (and Central Tibet) were very adept in the practice of astrology, divination, magic, and medicine, as well as metaphysical speculations, meditational techniques, and esoteric practices of many persuasions. The Tibetan cultural patrimony that has come down to us from the early historic period onwards certainly leaves room to entertain that such features of cultural life were a reality in earlier times as well.

A study of the cultural history of Upper Tibet provides some idea of the scope of intellectual advancement in the prehistoric epoch and early historic period, but archaeological input is necessary to structure this information. The combination of cultural historical and archaeological methodologies holds the most promise for illuminating the vast cultural universe of archaic Upper Tibet. As we have seen in Parts II and III, while many accounts about Zhang-zhung and other facets of Tibetan ancient cultural life exist (particularly in the Bon scriptures), it remains intractably difficult to assess the accuracy of these textual materials. Temporal continuities in the Upper Tibetan paleocultures from prehistoric times onwards are strongly indicated in extant oral and literary sources, but the origins and chronology of specific traditions, practices and beliefs remain highly obscure due to a paucity of independent documentary evidence.

In past publications (see bibliography), I have correlated Bon religious materials with certain rock art compositions, and have extended this methodological approach to ancient Tibetan metallic amulets (*thog-lcags*) as well. The vivid and powerfully evocative motifs found in these archaeological assets support the view that prehistoric and early historic Tibet boasted rich religious and cultural traditions. The rock art repertoire and collections of amulets provide graphic evidence of divine carnivores and ungulates, the theriomorphic transformation of religious figures, the use of feathers and horned headdresses, the ritual brandishing of weapons, the construction of tiered shrines, and the conduct of rituals using small cake-like objects. These cultural features are also well attested in the Tibetan literary record. On the other hand, evidence for complex metaphysical beliefs, cosmological concepts and experiential systems for the training of the mind – mainstays of archaic religion according to Bon sources – are by their very nature hard to discern in representational and iconic forms of art and design.

For the study of early Tibet to progress further, it is imperative that much more archaeological work is carried out.² The basis of future projects must be the systematic excavation of selected sites in Upper Tibet and other regions of the Plateau. As scientific pursuits gather momentum in the Peoples' Republic of China, along with a drive to open up to the world at large, it seems ever more likely that this objective will be realized. International collaboration holds great potential for increasing our knowledge of ancient Tibet. The intensification of this kind of archaeological exploration should enrich our understanding of the development of world civilizations and could have multiple benefits for the Tibetans. It is now just a matter of taking the right steps. I am confident that those concerned will, for they must if our understanding of ancient Tibet is to advance further.

² I now turn my efforts to compiling an inventory of the more than 400 archaic cultural horizon archaeological sites documented since 2001. This catalogue will furnish uniform sets of statistical data, many images of the sites, and a GIS-based thematic map series. This project, funded by the Henry Luce Foundation/American Council of Learned Societies, is slated to be published in the Tibetan & Himalayan Digital Library (THDL), a worldwide web resource for interactive studies. The contents of the THDL website are easily available to end users in a variety of disciplines, wherever they may be. Its interactive component facilitates the exchange of information and the formulation of interdisciplinary projects. An added strength of publication in a multilayered digital format is that the catalogue database is modifiable as Tibetan studies evolve.