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*TERRITORIAL CHARACTERISTICS OF THE PRE-
BUDDHIST ZHANG ZHUNG PALEOCULTURAL
ENTITY—A COMPARATIVE ANALYSIS OF
ARCHAEOLOGICAL EVIDENCE AND POPULAR BON
LITERARY SOURCES*¹⁷

JOHN VINCENT BELLEZZA

This article will document the territorial extent of the pre-Buddhist paleocultural zone, traditionally known as Zhang zhung,¹⁸ by examining the geographic distribution of its hallmark monumental remains. Using a comprehensive inventory of pre-Buddhist archaeological sites compiled in Upper Tibet between 1993 and 2002, I will provisionally establish the cultural frontiers of Zhang zhung. The assemblage of monuments in Upper Tibet with their highly distinctive morphologies and design traits serve as an index for

¹⁷ I wish to thank the various institutions that have provided funding over the last decade for my inventory of pre-Buddhist sites. These include: the Shang Shung Institute, The Spalding Trust, the Tibetan Medical Foundation, the Asian Cultural Council, and the Rubin Foundation. I also want to express my gratitude to the many provincial, prefectural, county, and township government officials of the Tibet Autonomous Region, People's Republic of China, who aided my research. I particularly want to thank the Ngari Zhangzhung Cultural Exchange Association and the Tibetan Academy of Social Sciences for their excellent collaboration.

¹⁸ A survey of Tibetan literature illustrates that the appellation Zhang zhung is applied to describe cultural (religious phenomena, customs, social organisation), linguistic (a discrete language) and political (a separate kingdom) components of pre-Buddhist civilisation in Upper Tibet. While the archaeological data thus far assembled is reflective of all three overlapping facets of pre-Buddhist life, it is most applicable to defining the cultural system.

gauging the areal configuration of pre-Buddhist culture in the region. In particular, the unique pillar monuments of Upper Tibet distinguish Zhang zhung from the archaeological heritage of adjoining regions.

In Section One of this article, I will inspect excerpts from two Bon literary sources that have proven to be popular reference material in the elucidation of Zhang zhung geography. These sources are: the pilgrimage register, the *Ti se'i dkar chag* by Dkar ru grub dbang bstan 'dzin rin chen (born 1801),¹⁹ and a Bon religious history (*bstan 'byung*) by Lopon Tenzin Namdak (born 1926).²⁰ Both provide listings of chief Zhang zhung's strongholds and royal residences and to some degree describe their locations by referring to toponyms still in use.

A key objective of the comprehensive inventory of pre-Buddhist sites in Upper Tibet that I have compiled over the last decade was to survey ruins located at these sites. In this article, I assess the validity of the claims made in the two Bon texts by presenting the archaeological evidence associated with them. The geographic correlation of archaeological sites with those in the literary record is made on the basis of the explicit mention of their location in these sources and/or in the oral tradition of Upper Tibet.²¹ The locations, however, of some places in the literary records have been lost or are unclear. In these cases, likely candidates have been selected as set forth in the discussion of individual archaeological sites. As we shall see, the Zhang zhung sites of the

¹⁹ *Dzam gling gangs rgyal ti se'i dkar chag tshangs dbyangs yid phrog zhes bya ba dbus phyogs bzhugs so*, in *Mdzod phug rtsa ba dang spyi don dang gangs ti se'i dkar chag*, (491–657). Tibetan Bonpo Monastic Centre: Dolanji, 1973.

²⁰ *G-yung drung bon gyi bstan pa'i byung khungs nyung bsdus zhes bya ba bzhugs so*, by Slop dpon Bstan 'dzin rnam dag, *Bka' brten* 270: 553–670. Lhasa: Sog sde Bstan pa'i nyi ma, 1998.

²¹ In the course of the comprehensive survey of pre-Buddhist archaeological sites about 5000 residents of Upper Tibet were questioned. Individual interviews and group meetings were held to query local elders about the locations, lore, function, and contemporary economic exploitation of archaeological assets.

literary tradition frequently correspond with significant aggregations of ruins, which can be assigned to the pre-Buddhist period.

In Section Two of this article, all pre-Buddhist monuments surveyed within a 50 km radius of each of the chief Zhang chung sites are indexed. This exercise demonstrates that rather than existing in isolation, the centers of pre-Buddhist settlement are found in association with a variety of other monuments, revealing affiliated aspects of early culture and civilisation in Upper Tibet. In Section Three, I outline the geographic compass of Zhang chung by examining the spatial distribution of its two hallmark pillar types. By charting the territorial bounds of these *sui generis* archaeological monuments, the frontiers of the Zhang chung paleocultural entity are established to be largely in accord with indications given in the Tibetan literary record.

The focus of this article is pre-Buddhist Upper Tibet, a region that corresponds with the Zhang chung kingdom of the literary sources. It is, by and large, placed north and west of central Tibet.²² In Bon religious conceptions, Zhang chung was a powerful kingdom with its own culture and language that existed before the rise of Buddhism in Tibet.²³ As a historical attribution, the pre-Buddhist period ends with the introduction of Buddhism to Tibet in the 7th and 8th centuries, which, according to Tibetan literary sources, coincided with the demise of the Zhang chung kingdom. However, the term also has a broader

²² The localisation of Zhang chung in western Tibet (or in both western and northern Tibet) has been widely acknowledged by Tibetologists. See Stein (1959^a: 51–54); Snellgrove and Richardson (1968: 26, 99); Haahr (1969: 106, 276, 318); Tucci (1971: 548); Uray (1972: 44, fn. 95); Hoffman (1973: 39); Hummel (2000: xiii, 1, 72–75) and Tshe ring thar (1989: 91–93) are of the opinion that Zhang chung extended into north-eastern Tibet as well. It must also be noted that in Tibetan historical literature, Zhang chung commonly refers to Buddhist dominated far western Tibet (especially Gu ge).

²³ According to Beckwith (1987: 14), the Zhang chung confederacy under the Lig myi dynasty ruled much of Tibet in the time of the Tibetan feudal lord Dgu gri zing po rje and the Tibetan King Gnam ri slon mtshan. Hoffman (1973: 39, 40) characterises Zhang chung as the most powerful military power of its time on the Tibetan plateau.

import, to include the characterisation of cultural phenomena whose origins lie in earlier times, but which persisted after the Buddhacisation of Tibet. In this ethnohistorical context, even archaic customs and traditions that have survived to the present day can be referred to as ‘pre-Buddhist’.

In this article, I use the label pre-Buddhist as an archaeological denomination to designate the class of archaic monuments and rock art. This attribution should not be construed as denoting a specific time period except in the widest of terms. This will remain as such until this temporally flat perspective can be remedied by the requisite chronometric data. Cultural and historical indications suggest that some of the pre-Buddhist archaeological assets may have been fashioned as late as the 11th or 12th century, especially in areas isolated from intense Buddhist missionary activity. The duration of the Zhang zhung political entity will remain an unknown quantity until systematic excavation and analysis of archaeological sites can be conducted in Upper Tibet. For the purposes of this study, pre-Buddhist archaeological sites are treated as synonymous with Zhang zhung culture. The founding of a number of ‘Zhang zhung’ sites enumerated in this article therefore probably postdates the disappearance of the Zhang zhung kingdom by as much as several centuries. Monuments and rock art created as early as the First Millennium BC are located at the other end of the chronological spectrum, as attested by cross-cultural archaeological comparisons with other regions of Inner Asia.²⁴ The likely existence of archaeological sites dating to the First Millennium BC, however, does not necessarily evince the commensurate antiquity of the Zhang zhung proto-state.

Tibetan historical and legendary sources indicate that a variety of foreign cultures (such as the Himalayan Mon, and Central Asian Hor, Stag gzig and Sog po) were active in Upper Tibet in pre-Buddhist and early Buddhist times. At this preliminary stage in pre-Buddhist studies, Zhang zhung cultural

²⁴ Cross-cultural archaeological comparison of Upper Tibet monuments and rock art is the focus of study in Bellezza (2002³).

sites are not readily distinguishable from what potentially comprise alternative types of archaeological resources in Upper Tibet. Monuments produced as the result of external contacts, foreign incursions or colonisation, exhibiting varying ethnological dimensions, may well be interspersed in the archaeological record. At any rate, the bulk of the assemblage of early monuments and rock art in Upper Tibet possesses a uniform range of physical and aesthetic characteristics, consistent with production by a dominant indigenous culture. The recurrence of primary architectural forms and artistic motifs over a wide area, displaying sundry minor variations, also suggests that a singular pre-Buddhist culture endured for a relatively long period of time.

I have attributed sites to the pre-Buddhist period using a process of inference that relies on a set of criteria that are, as yet, uncorroborated. As soon as is feasible, these attributions must undergo chronometric verification, which entails empirical study based on the science of archaeometry. The assignment of archaeological sites as pre-Buddhist therefore remains unconfirmed, as non-direct means have been formulated for their identification. Despite the inherent scientific uncertainties, the 513 sites I have inventoried to date generally represent the archaic phase (Metal Age) in the civilisation of Upper Tibet. This earlier archaeological epoch is distinguished from the historic Buddhist phase of civilisation by distinctive locational, architectural and artistic features that constitute a unique paleocultural formation.

In brief, archaeological sites are provisionally attributed to the pre-Buddhist period on the basis of the following criteria:

- 1) Places cited in Tibetan literature as having been centers of settlement in the Zhang chung kingdom.
- 2) Ruins ascribed in the oral tradition to ancient non-Buddhist groups such as the early Bon po, the aboriginal-like Bskal mon, the Hor pa of epic times, and the people of Zhang chung and Stag-gzig.
- 3) Sites presenting non-Buddhist morphological and constructional features such as arrays of pillars, elaborate burial structures and all-stone semi-subterranean buildings.

- 4) Location of sites in geographical settings such as high mountain peaks, islands, headlands, and in dry valleys, representing patterns of settlement which were relinquished in the Buddhist period.
- 5) Cross-referencing sites with those that have been archaeologically investigated in other parts of Tibet. This criterion of identification is most applicable to burial tumuli (*bang so*) that are found throughout much of Tibet.
- 6) Cross-cultural comparisons with archaeological sites in adjoining regions and countries. This study approach demonstrates that the pre-Buddhist archaeological record of Upper Tibet shares substantial cultural affinities with that of the Scytho-Siberian cultures of Central Asia, Mongolia and South Siberia.
- 7) Art and artifacts that exhibit antediluvian design attributes such as certain *thogs lcags* (metallic talismans), *gzi* (precious stone beads) and rock art. Prominent pre-Buddhist motifs include ithyphallic portrayals, graphic hunting scenes and anthropomorphous figures with zoomorphic elements.

An important methodological tool for the corroboration of pre-Buddhist territorial characteristics is literary in nature. This approach demonstrates that in general or schematic terms, the Zhang zhung paleocultural zone corresponds to Upper Tibet. This territorial expanse of approximately 700,000 km² includes the Byang thang and Stod regions in the north and west of the plateau. In traditional Tibetan accounts of Zhang zhung it is placed between Tibet and Central Asia and west or above the old country of Sum pa.²⁵ In Buddhist religious history circa the 12th century (*chos 'byung*) *Mkhas pa'i lde'u*, the spatial arrangement of Zhang zhung is described in an enumeration of its administrative units called *stong sde* (communities/divisions of one thousand) during the

²⁵ The precise ambit of the Sum pa paleocultural region and kingdom has not been established. It appears to have been centered in the eastern portion of Nag chu prefecture and to have extended into northeastern Tibet. For scholarly opinions on the geographic extent of Sum pa, see Stein (1959^a: 41, 42); Haahr (1969: 225, 276, 300, 347, 425); Hoffman (1973: 39); and Beckwith (1987: 20, 22).

reign of King Srong-btsan sgam-po (605?–650 AD). These subdivisions formed one *khri sde* (communities/divisions of ten thousand).²⁶ The account reads:²⁷

At the juncture of Tibet (Bod) and Gru gu²⁸ there were the five *stong sde* of Upper Zhang chung: 'O co bag, Mang ma bag, Snye ma bag, Rtsa mo bag, and Ba ga stong bu chung, these five. At the juncture of Tibet and Sum pa there were the five *stong sde* of Lower Zhang chung: Gug ge, Gu cog, Spyar rtsang, Yar rtsang, Spyi ti stong bu chung, these five.

In Bon tradition, the fate of Zhang chung is very closely tied up with that of the Bon religion; they are seen as having flourished and declined together. The traditional view holds that Zhang chung, like early Tibet (Spu rgyal), was dominated by the Bon religion with its superior doctrines and priests. Pride in their historical and legendary achievements has motivated the Bon po over the last millennia to enshrine the memory of Zhang chung in their literature. According to the Bon po, the collapse of Zhang chung occurred in the late 8th century, in the time of the Tibetan King Khri srong lde btsan and the rival Bon priest Snang bzher lod po. A synopsis of the rise and fall of early Bon and its Rdzogs chen practitioners is found in the 14th century *Zhang chung snyan rgyud*.²⁹

²⁶ The same overall geographic arrangement of Zhang chung is maintained in various Bon works, yet with the *stong sde* administrative unit often being replaced by the *khri sde*. For example, the Bon cosmological text *Mdzod sgra 'grel* (attributed to Dran pa nam mkha') notes that the territories of the four horns (*ru bzhi*) of imperial Tibet were situated below the *khri sde* of high Zhang chung, and above the *stong sde* of low-lying Sum pa (Bellezza 2002^a: 10).

²⁷ *Mkhas pa lde'us mdzad pa'i rgya bod kyi chos 'byung rgyas pa*, by Mkhas pa lde'u. *Gangs can rig mdzod*, 3 (ed. Chab spel tshe brtan phun tshogs): 259. Bod ljongs mi dmangs dpe skrun khang: Lhasa, 1987.

²⁸ This territory probably corresponds with regions in eastern Turkestan.

²⁹ See *Rdzogs pa chen po zhang chung snyan rgyud kyi bon ma nub pa'i gtan tshigs* in *the Zhang chung snyan rgyud*, by Spa btsun Bstan rgyal bzang po. Delhi edition: 321–29, 322 ll. 1–5.

The history of the spread and decline of the Doctrine (Bstan pa) is demonstrated as follows: the early times were governed through Swastika (G-yung drung) Bon, and [the Kingdom and Doctrine] expanded. Accomplished noble scholars (*mkhas btsun*) preserved the Doctrine. The divinely blessed practitioners (*grub pa*) held the Doctrine. The great and powerful ones who possessed profound religious teachings (*man ngag*) protected the Doctrine. In both Tibet (Bod) and Zhang zhung there was Bon and nothing else. There was not even the intimation of another religion (*chos kyī skad tsam med*). In that time, there was the Zhang zhung adept (*grub thob*) Tso men gyer chen and, in Tibet, Spa ji phrom dkar po, Stong rgyung mthu chen and [the other] Four Scholars.³⁰ In the later part of the life of Bla chen dran pa nam mkha' there were four emanations (*sprul pa*): Zhang zhung bkra shis rgyal mtshan, Gu rub stag wer shing slags, Ma hor stag gzig, and Tshe spungs zla ba rgyal-mtshan. The great Bon teacher (Gyer spungs) Snang bzher lod po was conferred teachings by Ta pi hri tsa, and he thoroughly mastered both worldly and spiritual attainments (*mchog dang thun mong*). When he was alive, the Bon of the Swastika declined: a casualty of the wheel of³¹ time (*dus kyī 'khor lo*).

I. The castles and royal residences of Zhang zhung in oral and literary tradition

We begin with an account of the strongholds and kings of Zhang zhung, found in Lopon Tenzin Namdak's religious history of Bon (*bstan 'byung*).³² It commences by stating that Zhang zhung was divided into supra-geographical outer, inner and middle regions.³³ It is within the outer (*sgo*) division that the four great castles (*mkhar*) and six great fortresses (*rdzong*) of the kingdom of Zhang zhung were located. These were spread out across northern and western Tibet, as far east as Dwang ra (Dang ra g-yu mtsho, Nyi ma county) and Skyid grong (paragraphs i and ii). Two of the citadels were also situated in the western Tibetan borderlands of Glo Dol po (northwestern Nepal) and Rbal te (Baltistan

³⁰ Mkhas pa mi bzhi: Stong rgyung mthu chen, Se bon sha ri dbu chen, Lde bon gyim tsha rma chung and Me nyag lce tsha mkhar bu.

³¹ In the text, the instrumental particle *kyis* is used here where there should be *kyi* (of).

³² *G-yung drung bon gyi bstan pa'i byung khungs nyung bsdus*, 620 ll. 4 – 625 and l. 5.

³³ For a discussion of these divisions, see Dagkar (1997: 687–90).

on the northwestern fringe of the Tibetan Plateau, in Pakistan's Northern Areas). Lopon Tenzin Namdak's statement that, in addition to the ten main installations, there were many other castles and fortresses (*gzhan yang mkhar dang rdzong mang po yod 'dug*), would appear to be no exaggeration. Over the last decade, I have documented around 100 early citadels and other types of residential complexes built on top of ridges and mountains in Upper Tibet.³⁴

In his *bstan 'byung*, Lopon Tenzin Namdak goes on to enumerate several regions in Zhang chung and, using the text *Khro* as a reference, he fixes the [southeastern] border between Zhang chung and Tibet (Bod) in the vicinity of Gtsang kha rag (para iii).³⁵ He also notes that Zhang chung Kha yug, which he identifies with Gu ge (centred in Rtsa mda' county), was itself partitioned (paragraph iii). Lopon Tenzin Namdak observes (in personal communication) that the nature of this geographical division is not clear. However, the

³⁴ What may be the most extensive list of Zhang chung fortresses remaining is found in the *Kun 'bum*. For the names of these 18 subsidiary installations (*mkhar phran*) see Dagkar (1997: 694, fn. 38) and Bellezza (2002^a: 21, fn. 9). The identification of these strongholds is hampered by the fact that, in many an instance, idiomatic appellations in the oral tradition of Upper Tibet have supplanted old names.

³⁵ According to Lopon Tenzin Namdak, the region in the vicinity of the well-known mountain Rtsang lha phu dar/Gtsang lha phu dar. In Bon tradition, this deity is the leader of the group of thirteen guardian mountains known as Mgur lha bcu gsum. Gtsang lha phu dar is located in the range of mountains dividing the Yar lung gtsang po and Ra kha gtsang po drainage systems, approximately 25 km southwest of Bzang bzang (Zang zang), in the old district of La stod, Ngam ring county (approximately 86° 30" E. longitude). The text entitled *Lha rgod drag dar* (546, ll. 1f) describes this mountain deity and his geographical position as such: “*Bswo!* At the upper Rtsang country of Kha rag is the mighty Rtsang lha phu dar, who wears a resplendent *ral ga* (gown) on his body. He rides a thoroughbred horse mount. In his hand he holds a spear with a white flag attached. We call him the mighty wild *lha* of upper Rtsang”. (*bswo yul ni kha rag rtsang bstod (= stod) na / rtsang lha phu dar gnyan po ni / sku la 'od kyi ral ga gsol / chibs su lchang shes rta la cibs (= bcibs) / phyag na mdung dar dkar po bsnam / rtsang stod gnyan gyi lha rgod 'bod*).

inventory carried out of pre-Buddhist archaeological sites has shown that the architectural record of the deeply dissected valleys of the Sotlej (Glang chen gtsang po) drainage basin that form the bulk of the Gu ge territory, differs from that of other regions of Upper Tibet. Areas peripheral to Gu ge such as the Sgar valley (in Sgar county) and Gangs ri mtsho gsum (Ti se, Mtsho ma pang and Spos ri ngad ldan, in Pu rang county) are characterised by the same assemblage of stone monuments found throughout much of Upper Tibet. Conversely, the two hallmark pillar feature-types, which distinguish other areas of Upper Tibet, east to Gnam ru and Sa dga', are missing in the badlands country of Gu ge. These significant differences in the monumental assemblage may reflect a cultural or administrative divide of some kind in Gu ge, in the pre-Buddhist period.

Lopon Tenzin Namdak fixes the northeastern border of Zhang zhung at Sum pa'i stong bu chung (paragraph iii), which is thought to be a locale in 'Bri ru county.³⁶ By his reckoning, the Zhang zhung kingdom covered upwards of 800,000 km² and stretched 1,200 km across the western half of the Tibetan plateau to the Indo-Iranic cultural regions. The archaeological record, however, paints a rather different picture. The two pillar feature-types characteristic of the Upper Tibet paleocultural zone, only extend as far east as Shen rtsa county (88° 30" E. long.), a good indication that variable ethnohistorical factors were at play further east. The possibility of a paleocultural variation is supported by the widespread presence of a certain kind of terraced tomb in Dpal mgon, A mdo and Nag chu counties, a monument type not found in more western regions. As for the eastern fringes of the Byang thang (Gnyan rong County), no pre-Buddhist archaeological sites have been reported or yet surveyed. The archaeological record of Sog, 'Bri ru and Sbra chen also appears to be relatively scant. While scattered gravesites are found in these three counties,

³⁶ It is reported that 'Bri ru was under the jurisdiction of Sum pa until it was incorporated into the empire of King Srong btsan sgam po. In ancient times, 'Bri ru county (Rgyal shod) was known as Sum pa'i stong bu chung and was part of Zhang zhung sgo pa. See Phuntso Tsering Sharyul (2003: 110–19).

there are no reports of the existence of large pre-Buddhist citadels or temples. Moreover, rock art sites are absent, or very limited, and the region seems to be devoid of pre-Buddhist stela. These observations establish that the eastern third of the Byang thang had a far-less developed sedentary residential infrastructure than the western regions. Physical and ecological factors accounting for this discrepancy are not readily apparent. The respective regions have the same elevation range: height cannot have played a significant role. In fact, the eastern Byang thang enjoys higher rainfall, more extensive steppe grasslands and, currently, has a significantly higher population density than the west.³⁷

While the archaeological perception of eastern Byang thang in relation to more westerly regions proffers many differences, the areas share strong cultural affinities. This is particularly true in the bordering counties of Shan rtsa, Dpal mgon and 'Dam gzhung, where there is comparable pre-Buddhist rock art, residential architecture and isolated pillar types. For example, the rich rock art tableau of Gnam mtsho ('Dam gzhung and Dpal mgon Counties) provides an excellent picture of the general paleocultural traits of the eastern Byang thang.³⁸ It demonstrates that the same types of early Bon shrines and other archaic motifs: hunting scenes and zoomorphic and anthropomorphic compositions, were produced across Upper Tibet and, even beyond, to Ladakh and Indus Kohistan. We can therefore surmise that all of Upper Tibet was culturally interrelated in the pre-Buddhist period, and, that contrasts in the archaeological record between the east and west are due to political and/or relatively minor ethnological variations, not a major ethnical or linguistic watershed.³⁹ The Tibetan historical tradition favours the view that the

³⁷ For a comparative GIS study of Upper Tibetan settlement patterns—based on contemporary township population densities and in relation to the locations of pre-Buddhist archaeological sites, see Bellezza (2008).

³⁸ For Gnam mtsho rock art see Bellezza (1997; 2000; 2001; 2002^a; and 2002^b) and Bsod nams dbang 'dus (1994).

³⁹ It is worth noting that the divide between the eastern and western Byang thang monumental assemblages closely corresponds with the contemporary linguistic boundary

archaeological demarcation between the eastern and western Byang thang correlates with the partition of the Zhang zhung and Sum pa kingdoms. Further archaeological and ethnological research, however, is needed to expound upon the nature of this boundary.

Lopon Tenzin Namdak's *bstan 'byung* upholds the prevailing belief among the Bon po that their religion and the Zhang zhung kingdom are 18,000 years old (Upper Paleolithic) (paragraph iv). This mythic understanding of historical origins has dissuaded non-native scholars from accepting Bon notions about the political and territorial nature of Zhang zhung. Nevertheless, one cannot discard materials that may have historical validity: such accounts must be scrutinised more closely utilising independent means of verification, which is precisely the aim of the present article. According to the Bon po, among the most important religious centers in Zhang zhung was the holy mountain Gangs ti se and the sacred lake Mtsho ma pang, the place where the founder of Bon, Lord Gshen rab, propagated his Doctrine (paragraph iv). Archaeological evidence does indeed ascertain for the exceptional pre-Buddhist cultural importance of these places, likely to have been so in the Tibetan Iron Age (approximately 500 BC to 600 AD), rather than the Old Stone Age.

When delineating the territorial extent of Zhang zhung, Lopon Tenzin Namdak notes the toponyms of Gangs mu wer, Phu wer, Pra phud and Yo phya, which are said to be south and north of the holy place of La seng (paragraph iv). It would appear that La seng has some geographical correspondence with the Seng stod and Seng smad, regions in the erstwhile Tibetan district of 'Brong pa dpon, which is now situated in Dge rgyas county. It is not at all clear, however, how large an area La seng denotes in Zhang zhung geography. It is certainly possible that it encompassed extensive areas along the banks of the Indus river (Sengge Gtsang po) as far downstream as Ladakh.

between the Hor skad and Stod skad regions where dialect is spoken. In the interest of an improved understanding of the ethnohistorical make-up of Upper Tibet, it is vital to determine if there is a paleolinguistic basis for the formation of these dialects.

Phu wer, Gangs mu wer, Pra phud, and Yo phya are also the names of Zhang zhung deities, which appear to have ruled over eponymous geographical entities. Phu wer is the patron of divination in the first vehicle or systematised branch of Bon teachings (*theg pa*) known as Phya gshen.⁴⁰ In the *Lha rgod drag dar*, a text that primarily contains invocations to the group of royal divinities known as *mgur lha*, accounts of Gangs mu wer (Mu wer sad wer), Yo phya and Pra phud (as well as Mu thur) are found. They are described displaying the typical martial characteristics of the native *yul lha* (gods of the locale):⁴¹

Bswo! At Zhang zhung nyi ma⁴² is the *lha* called by the name Mu wer sad wer (King of the Sky King of the Gods), the *lha* of existence. On your body you wear a *slag* (robe) of dragon [skin]. You ride a spirited turquoise dragon mount. In your hands you hold a lasso of lightning and a thunderbolt. You are Mu wer sad wer, the *lha* of existence. *Bswo!* Mu thur, Pra phud and Yo phya. *Bswo!*

⁴⁰ The Bon texts expounding the Phya gshen and tantric roles of Phu wer are examined in Bellezza (2005).

⁴¹ See *Lha rgod drag bdar bzhugs pa'i dbu phyogs legs so* (*Bskang 'bum*, II: 541–55, hidden by Stong rgyung mthu chen, Sha ri dbu chen, Dran pa nam mkha', and Li shu stag ring (8th century), discovered at Lhasa g-yer pa, 544, l. 5 – 546, l. 1: *bswo* (= *bswo*) *yul ni zhang zhung nyi ma ru / lha la de ni mtshan gsol pa / mu b̄er* (= *wer*) *sad b̄er srid pa'i lha / sku la 'brug gi slag pa gsol / chibs su g-yu 'brug ngar ba cib* (= *cibs*) / *phyag na klog* (= *glog*) *zhags thog lce bsnams / mu b̄er* (= *wer*) *sad b̄er* (= *wer*) *srid pa'i lha / bswo mu thur pra phud yo phya bswo / bsrid* (= *srid*) *pa'i lha rgod yo phya ni / sku mdog dkar ljang sprin ral gsol / chibs su seng ge dkar mo cib* / *phyag na shel gyi ral gri bsnams / srid pa'i lha rgod mi bzad pa / bswo srid pa'i lha rgyas mu thur bswo / sku la dar dmar ral ga gsol / chibs su lchang shes shug* (= *shugs*) *chen cib* / *phyag na dngul gyi lding* (= *'dan*) *dkar bsnams / srid pa'i lha rgod mi bzad pa / bswo srid pa'i lha rgyal pra phud bswo / sku mdog mthing nag kha* (= *ga*) *gsol / chibs su bya rgyal khyung la cib* / *phyag na gser gyi ral gri bsnams / srid pa'i lha rgod gnyan rum khyed / zhang zhung gnyan gyi lha ru brten* /

⁴² This may be reference to Rgya nyi ma (in Rtsa mda' county). In any event, Nyi ma is a location in western Tibet.

The wild *lha* of existence Yo phya⁴³ has a light green colour and wears a *ral [ga]* (gown) of clouds. You ride a white lioness mount. In your hand you brandish a crystal sword. You are the fierce wild *lha* of existence. *Bswol!* Mu thur, *lha* king of existence. *Bswol!* On your body you wear a red silk *ral ga*. You ride a very powerful *cang shes* (thoroughbred horse) mount. In your hand you hold a silver *'dan dkar* (staff). You are the fierce wild *lha* of existence. *Bswol!* Pra phud, *lha* king of existence. *Bswol!* On your dark blue body you wear a *ral ga*. You ride the king of the birds, the *khyung* mount. In your hand you brandish a golden sword. You [all] are the *gnyan*⁴⁴ womb wild *lha* of existence. We attend the mighty *lha* of Zhang chung.

Lopon Tenzin Namdak goes on to note that there were eighteen celebrated Zhang chung kings: holders of the *bya ru* (bird-horns), a symbol of power and sovereignty.⁴⁵ He mentions some of the places in which these legendary figures resided: Gu ge, Pu hreng, Ru thog, La dwags, Shang and Gu rib (paragraph v). The first four regions are readily recognisable as they still possess the same names. They form a large conterminous area straddling the international border between India and the Tibet Autonomous Region. As for Shang, it must correspond with the locale still known as Shang (also spelled Shangs), centered in Shang rdo ring, the old and contemporary headquarters of Gzhung pa ma mtshan, Dge rgyas county. In contemporary Tibetan geography, the Shang territory is divided into two main areas comprising much of Gzhung pa: Shang smad (extending north from Shang rdo ring to Bar tsho) and Shang stod

⁴³ Yo phya (Yo phyal) is mentioned in the indigenous cosmogony recorded in the *Mkhas pa lde'ur*. 231, as one of the nine gods of Zhang chung begotten by Rong rong rtsol po and his wife Rmu bza' mthing khug sman.

⁴⁴ An ancestral and protective class of deity usually associated with mountains.

⁴⁵ One of the most comprehensive scholarly treatments of the *bya ru* is found in Martin 1991. He cogently argues that the compilation of eighteen *bya ru can* kings found in Grub dbang's *Dkar chag* is a late interpretation of history, based on the conflation of earlier Bon sources. These sources pertain to the use of the *bya ru* by religious masters, Bodhisattvas and King Khri men/Khri lde of Zhang chung. It is also possible, however, that Grub dbang's list is partly derived from a lost textual source or an oral tradition.

(stretching south and east from Shang rdo ring to Sgom 'khor and Da dben). The identity of Gu rib (also a clan name) is somewhat problematic. It probably refers to the Seng 'khor and Ru 'thor regions with a traditional high concentration of the pre-Buddhist Gu rub clan.

Lopon Tenzin Namdak believes that when two or three kings inhabited the same place in Zhang chung they were contemporaneous with one another (paragraph v). He has stated in personal communication that they may have been fathers and sons, or be representative of dynastic struggles. On the other hand, the description of these kings in the *Ti se'i dkar chag* is highly cursory, and it is also possible that these kings do not represent successive rulers.⁴⁶ The *bstan 'byung* also cites a number of Zhang chung kings that are not among the eighteen enumerated in the *Ti se'i dkar chag* (paragraph vi). Lopon Tenzin Namdak's description of Zhang chung concludes with the collapse of the Kingdom during the Tibetan imperial period (paragraph vii):⁴⁷

i) The country and history of Zhang chung is as follows: There were the three territories of *sgo* (outer), *phug* (inner) and *bar* (middle), and the outer part of *sgo* also had three [divisions]: *sgo*, *phug* and *bar*.⁴⁸ There were four great castles (*mkhar*) around the center of inner *sgo*:

- 1) Khyung lung dngul mo mkhar (Khyung Valley Silver Castle), on the east peak of Gu ge;
- 2) Pu hreng stag la mkhar (Pu hreng Tiger Hill castle), in the middle of Pu hreng;

⁴⁶ Namkhai Norbu (1996: 83) believes that the two or three kings of certain Zhang chung centres are indicative of a dynastic lineage.

⁴⁷ Bon sources chronicling the destruction of Zhang chung are studied in Snellgrove and Richardson (1968: 99, 100); Karmay (1972: 72–104); and Norbu (1995: 32, 33).

⁴⁸ Inner *sgo* corresponds with Ti se and Ma pham (Ma pang) g-yu mtsho, middle *sgo* with Rta sgo (Rta rgo) and Dang ra g-yu mtsho, and outer *sgo* with Gnyan chen thang lha and Gnam mtsho phyug mo. These three subdivisions circumscribe much of Upper Tibet. For a discussion of this system of classification see Norbu (1996: 86).

- 3) Ma pang spos mo mkhar, on the east side of Ma pang [g-yu mtsho]; and
 4) La shang g-yu lo mkhar, north of the Snow Mountain (Ti se).

Some [also] count Gad gi byi ba mkhar located around upper Gro shod [among the castles].⁴⁹

ii) There were six great directional fortresses (*phyogs kyi rdzong*): Dwang ra khyung chen rdzong, a little below (east) of north; Ra bzhi seng ge rdzong, a little above (west) of north, in the north of Ru thog; Mang yul stag mo rdzong, a little below (west) of south, in Spyi rong (Skyid grong); Se rib 'brug mo rdzong, a little above (east) of south, in upper Glo Dol po; Rbal te rta mchog rdzong of the west;⁵⁰ and Gyim rngul glang chen rdzong of the north. These are the famous and great ones but there were many other castles and fortresses.

iii) The place that was called Zhang zhung kha yug is at this time known as the Gu ge region. Zhang zhung kha skyor was probably the area of Gangs ri mtsho gsum. According to the explanation in *Khro*⁵¹ by Skyabs [ston rin chen 'od zer], generally, in the early period, the border between Zhang zhung and Tibet was around Gtsang kha rag. [Zhang zhung] was partitioned in the vicinity of Kha yug. It is thus written that in the time of Lig mi skya,⁵² Zhang zhung was with

⁴⁹ The Bon texts *Rnam bshad gsal sgron* and *Mdzod sgra 'grel* localise Gad gi byi ba mkhar in Kha yug (Dagkar 1997: 693). Kha yug, therefore, must have included areas around the headwaters of the Brahmaputra.

⁵⁰ Paul Pelliot (Femeles, in *Notes on Marco Polo*, Librairie Adrien-Maisonneuve, Paris. 1963, 2: 699) reports that the early 8th century Chinese traveler Hui-chao, located Yang t'ung (Zhang zhung) east of Great Po lû (Rbal te/Sbal te/Baltistan). See Martin (2003^a).

⁵¹ Commentary for the *spyi spungs* tantric cycle of the *yi dam* (tutelary deity) Khro bo gtso mchog mkha' 'gying. See *Khro bo dbang chen ngo mtshar rgyas pa'i rnam bshad gsal ba'i sgron ma* by Skyabs ston Rin chen 'od zer (born 1353), p. 91, l. 4: *spyir zhang zhung dang bod gnyis dang po sa bgos la gtsang kha rag yon man la*.

⁵² Also spelled Lig mi rhya. A late king of Zhang zhung known on the ancient seal (*phyag tham*) in the custody of Sman ri khri 'dzin by the Zhang zhung language equivalent of the Tibetan appellation: Thams cad dbang bsgyur srid pa'i rgyal po (All-Conquering King of Existence). For an illustration of the Zhang zhung language inscription see Norbu (1996: 106).

an army of 990.000 *stong sde* (divisions of one thousand), and he ruled all the way to Sum pa'i stong bu chung.⁵³ Also from that text (*Khro*) it is written that Mar pa, Stag lo, Gu rub, Khyung byid, Khyung po, 'U sangs, Sum pa, and Zhang zhung⁵⁴ altogether comprised the divisions of an army, which in ancient times was led against Ta mi.⁵⁵ They quickly collapsed⁵⁶ [in the attack] against this terrific and powerful [master].

iv) The history of Zhang zhung country is as follows: In early times, about 18.000 years ago, the lineage of Gsas chen hos⁵⁷ spread to the middle of the world. The upper regions of Gangs mu wer, Phu wer, Pra phud, Yo phya, etc., south and north of the holy place of La seng, all the way to the lower regions of Sum pa glang gi gyim shod,⁵⁸ were the eighty *khri sde* (divisions of ten

⁵³ See *Khro bo dbang chen ngo mtshar rgyas pa'i rnam bshad gsal ba'i sgron ma*, no. 91: ll. 4f.

⁵⁴ These eight entities (*sde brgyad*) appear to represent clan-based regions. In the contemporary period, the Gu rub clan is concentrated in two enclaves. These are contiguous Seng 'khor and Ru 'thor (in Sger rtse and 'Brong pa county), and Gshen sger (in Dpal mgon county).

⁵⁵ The pre-Buddhist master Ta mi/Da mi thad ke. The first part of his name, Ta mi, appears to be the ethnonym of an ancient people of the Great Western Himalaya, or western Great Central Himalaya. They may share an ethnic correspondence with the Thang mi/Mtha' mi: a contemporary tribal group residing in eastern Nepal who speak a language genetically related to the Kiranti and Newar languages. For background information on this group see Turin (2002).

⁵⁶ In the text, *rengs pa* (collapsed) is misspelled *rings pa*.

⁵⁷ One of the six great clans of the mythic land of 'Ol mo lung ring.

⁵⁸ According to Lupon Tenzin Namdak, located in the general vicinity of the sacred mountain of Steng chen, Khyung po ri rtse drug. Sum pa glang gi gyim shod is the old name for Steng chen county, which became known as Khyung po after the migration of Dmu khyung Shes rab rgyal mtshan to the region circa the 10th century (Phuntso Tsering Sharyul 2003: 164). A list of 18 Shod regions are found in *Srid pa rgyud kyi kha byang chen mo* (Dagkar 1997: 695). The ca. 13th century *Dbu nag mi'u 'dra chags* (folio 29b, ll. 1f), a text preserving clan lore and an enumeration of clan branches (*rus mdzod*), notes that Sum pa glang controlled Za ma ring rgyud rdzong. This was one of

thousand) of outer Zhang chung, which were controlled by the ruling lineage of the Hos lord, Khri wer gnam thug. At the time Gshen rab propagated the [Bon] doctrine, it is said that the Zhang chung king known as Hos rje khri wer nor 'dzin ruled over most of the world. According to the *Mdo 'dus*, in the time after Gshen rab returned from Kong yul, he proclaimed the '*Bum chen sde bzhi*'⁵⁹ teachings at Gangs ti se, Mtsho ma pang and other places. According to the *Bdud 'dul* root text, at that time the Zhang chung King of Existence⁶⁰ obtained the oral transmission of the Great Wrathful Secret Ge khod.⁶¹

the six fortresses supporting the foundations of the dominion of the Se khyung dbra (*dbra chab sna brtan pa'i rdzong*) clan, often associated with Zhang chung.

⁵⁹ These four texts contain general Bon doctrines, as taught by Gshen rab. They include: *Padma klong gi 'bum chen*; *Rin chen spungs pa'i thugs 'bum*; *G-yung drung bdal 'bum*, and *'Khor lo rtsegs pa'i rgyud 'bum*. See *Gangs ri mtsho gsum gyi kar* (= *dkar*) *chags* by Kadam ye shes rgyal mtshan (14th century), (*Mdzod phug rtsa ba dang spyi don dang gang ti se'i dkar chag*, nos. 445–89), nos. 466, 467.

⁶⁰ The Zhang chung King of Existence, [Khri wer la rje] gu lang gser gyi bya ru can, and the adept Hri tsa mu wer dkar po are recorded as preparing texts of the Me ri and Ge khod cycles for concealment. The texts were combined with a wish-fulfilling jewel (*dgos 'dod phun sum tshogs pa*) made of nine types of precious substances, a sun crystal of fire and a moon crystal of water. Aromatic medicinal substances were applied to the treasures and they were wrapped in silk of the five colours of the deities of primordial existence. Next they were placed in an octagonal receptacle (*ga'u*) made of sapphire, primarily, as well as nine other types of precious materials, by the blacksmith of primordial existence. In order that the contents would not be spoiled by the five elements (space, wind, fire, water, and earth), five different sacred symbols (diamond thunderbolt, iron wheel, copper lotus, pearl jewel, and gold swastika) were drawn on the *ga'u*. It was hid in the chest (south base of massif) of Gangs ri chen po (Ti se) in a secret formation with a raised swastika, in a heart-shaped hole as large as the heart of an eighteen year old boy. See *Dkar ru grub dbang*, nos. 522, ll.5 – 525, l.2.

⁶¹ Ge khod gsang ba drag chen. A main ritual practice for the Bon tutelary god Ge khod. The text *Gsang drag tshogs bskangs* (= *bskang*) *yod* (*Ge khod sgrub skor*, nos. 287–92) by Gshen gyi *drang srong* (*dge slong*) Tshul khri ms rgyal mtshan (enthroned as 6th abbot of Sman ri in Iron Sheep Year, 1511), no. 288, ll.1f., records, “These *gshen*

v) According to the *Me ri gsang ba 'khor lo*, afterwards there was the king of Gu ge Slas tra 'od kyi bya ru can and others, who were the eighteen kings that possessed the bird-horns. Some of them actually came from Gu ge, Pu hreng, Ru thog, La dwags, Shang and Gu rib, while others miraculously came about. The names of the kings who possessed the bird-horns are shown in detail in [Dkar ru] Grub dbang's *Gangs ri'i dkar chag*. The manner in which they came is that in some periods two or three would appear together, while in some periods they came one at a time.

vi) Khri ldem lcags kyi bya ru can and King Mu wer stag sna (from the same period as the Tibetan king Gnya' khri) were in the latter part [of the lineage]. According to the Ge khod cycle, subsequently, there was Mu wer khri 'od gsal⁶² and according to both the Me ri and Ge khod cycles, there was Mu khung gnam rje, Mu wer seng ge 'gram and Mu la khyung gi rgyal po. Other generations of main Zhang zhung kings were Mu wer btsad po, Lig mi skya, Mu la khung sang rje, and the priest (*gshen*) Rgyung yar mu khod.⁶³ Others were the king of La dwags, the King of Shang, the King of Se rib, as well as many minor kings.

vii) In the end, during the time of the Tibetan kings Srong btsan (629–50) and Khri srong (755–97), King Lig mi skya of Zhang zhung and King Lig mi rgyal of Dang ra were killed by the Tibetan Lords. As a result, Tibet ruled most of central and eastern Zhang zhung. The south and west of Zhang zhung declined as well, and there was no one left in the royal dynasty capable of securing the future [of the kingdom].

(Lord Gshen rab and the Zhang zhung King of Existence) are the *gshen* lineage holders of the mind *yi dam* (Ge khod). [King] Khri men, holder of the iron horns of the bird, and the Zhang zhung king Stag sna at Gting brag bdud 'dul temple (*gsas khang*) [were also lineage-holders of Ge khod]”.

⁶² An untitled text for prostration practice by Tshul khrims rgyal mtshan (made abbot of Sman ri in 1511), found in the first volume (*stod cha*) of Ge khod texts (*Bka' brten* 242: 215.3), mentions King Khri 'od gsas in conjunction with various lamas and deities. *Sman chang kha bskang* (*Bka' brten* 242: 227.4) renders his name Khri 'od gsal as part of an enumeration of Ge khod deities and lineage holders in an offering ritual.

⁶³ The father of the renowned Bon saint, Dran pa nam mkha'.

The central castle recorded in Lopon Tenzin Namdak's *bstan 'byung* is Khyung lung dngul mo mkhar (Khyung Valley Silver Castle). It is also mentioned (Khyung lung rngul mkhar) in the 11th paragraph of *Old Tibetan Chronicle* (Pelliot 1287), a work composed prior to the tenth century.⁶⁴ *Old Tibetan Chronicle* records that Khyung lung is considered the capital of Zhang zhung or the country (*yul*) of Chab gyi ya bgo (Upper Reaches of Rivers), as do various Bon sources.⁶⁵ It recounts how King Srong btsan sgam po sent an envoy to Khyung lung with a message for his sister Sar mar kar, the wife of the King of Zhang zhung, Lig mi rhya. When he arrived, she was not there as she had gone to fish at Lake Ma pang, so the envoy went there too. As the Tibetologist Uray (1972: 44) deduced, Khyung lung must be in the general vicinity of Ma pang g-yu mtsho. However, his belief that this account proves the traditional identification of the ancient Zhang zhung capital as being the Mngul (Dngul) mkhar in Khyung lung village, contradicts the identification made some 70 years ago by a well-known Bon lama.

Khyung sprul 'jigs med nam mkha' rdo rje (d. 1956) saw Khyung lung dngul mkhar and a place called Zhang zhung khyung chen spungs pa'i ri (Great Eagle Heaped Mountain of Zhang zhung, known in the vernacular as Mkhargdong (Fortress Face)), as being synonymous (Bstan 'dzin dbang grags: 310; Bellezza 2002^a: 37–39).⁶⁶ He must have partly based his assumption on a description found in Dkar ru grub dbang's *Ti se'i dkar chag*, which states that the sage (*drang srong*) G-yung drung tshul khriims propagated the Bon doctrine to countless Bon adepts at Khyung chen spungs pa'i ri, more recently known as Mkhargdong (Bellezza 2002^a: 60). In his account, Dkar ru grub dbang notes that this site is found at what was the Zhang zhung city (*grong khyer*) of Gyal

⁶⁴ This account of the *Old Tibetan Chronicle* comes from Uray (1972: 44).

⁶⁵ In Bellezza (2002^a: 21–23, 39–43), I studied quasi-historical Bon sources relating to Khyung lung dngul mkhar including: *Kun 'bum*, *Mdzod sgra 'grel*, *Rgyung yar khod spungs kyi lo rgyus*, and *Bon thams cad kyi yang snying gtan tshigs nges ba*.

⁶⁶ This site was surveyed on the 2000 Upper Tibet Circumnavigation Expedition. See Bellezza (2002^a: 37–44).

ba mnyes [pa] (Happy Victorious Ones), a settlement cited in various Bon works as being the location of Khyung lung dngul mkhar. According to Khyung sprul, Mkhar gdong must be the place commonly known by this name in the oral tradition of the region (elevation 4.400 m to 4.500 m). It is situated near the Bon monastery of Gu ru gyam (Sgar county, Mon 'tsher township) he founded, approximately 15 km up the Sutlej valley from the village of Khyung lung. According to his chief disciples I have spoken to, Khyung sprul believed that a stone statue of Dran pa nam mkha' that he unearthed from Mkhar gdong, positively verified the location as being that of Khyung lung dngul mkhar. The refurbished statue is now enshrined in a small temple on the site.

The survey of ruins in the environs of Khyung lung village conducted in 2001, has determined that the site known as Dngul mkhar (Mkhar rtse) is in fact clearly a Buddhist monastic complex. No anterior structural traces were detected at the site. Dngul mkhar was established no earlier than the Bstan pa phyi dar (Second Diffusion of the Buddhist Doctrine), although the 200 caves hewn from the conglomerate cliffs at the locale are likely to have had a much longer period of human occupation.⁶⁷ This monastic complex is somewhat vulnerable to attack from the large esplanade rising above the site, an uncharacteristic position for a pre-Buddhist citadel. Moreover, Khyung lung village is not on any major trade route. Movement through Gu ge circumvents it for more expeditious high plateau routes. Dngul mkhar specifically refers to the largest and uppermost complex: a mostly mud-brick three-tiered structure and 15 small caves comprising less than 500 m², hardly large enough for a capital.

There are two residential complexes at Khyung lung that potentially date to the pre-Buddhist period: Mkhar sngon (Blue Fort) in Yul stod, and Brag chag Khong kha (sp?) in Yul smad. However, both of these sites are far smaller than Mkhar gdong and appear to have only been of local importance. It must

⁶⁷ I carried out surveys of Khyung lung in April, September and October of 2001, on the Upper Tibet Antiquities Expedition. This expedition was sponsored by the Mnga' ris prefectural government and the Shang Shung Institute, Italy. A detailed report of my findings is published in *Zhang Zhung* (Bellezza 2008).

also be noted that Khyung lung village is set at the bottom of a deep gorge, largely isolated from neighbouring centers of settlement and subject to incursion without much prior notice. Mkhar sngon, towering 80 m above the principal village of Khyung lung, is so called because of the blue-grey earth from which some of its walls were constructed. Like many of the badlands archaeological sites further down the Sutlej River, the largest ridge-top structure (7 x 4 m) was made of adobe, which has disintegrated into a lump of earth topping a revetment. Faint traces of stone walls seem to indicate that there were once a number of other small buildings on the 3 m to 7 m wide ridge-top. To the south and east of the ridge-top walls are around three dozen caves, many with fire-blackened ceilings. Like their counterparts at the Dngul mkhar monastery complex, these were hewn out of the conglomerate escarpment, and contain the characteristic oblong niches and domed recesses of Gu ge caves. Many of the caves have the remains of façade walls and outer rooms around them. Brag chag khong kha is comprised of a contiguous group of residential ruins perched on the flat top of a small hill, covering an area of approximately 500 m². Unfortunately, in recent years many of the structural vestiges have been dismantled and carried off in order to build a wall around the agricultural holdings of Yul smad. This has seriously degraded the site and precluded a detailed assessment of its make-up.

Not only is there a lack of compelling archaeological evidence to suggest that the Zhang zhung capital was situated in the Khyung lung village, but there is a substantial body of physical data indicating that the identification of the Zhang zhung capital made by Khyung sprul is the correct one. One factor complicating positive identification is the very poor condition of the structural remains, the majority of which are fragmentary wall-footings. The material evidence supporting Khyung sprul's attribution can be summed up as follows:

- 1) The sheer size of the Mkhar gdong dispersion (more than 20.000 m²)
- 2) The approximately 1 km length of stone rampart walls surrounding the complex and its aspect atop a highly defensible formation, both features indicative of a 'castle' or fortified settlement.

- 3) The very strategic location of the facility at the physiographic juncture of the badlands of Gu ge and the high elevation plains and valleys of southwestern Tibet. Important trade routes must once have been controlled from this point. Additionally, the site enjoys a powerful geomantic position at the confluence of four rivers (Chu nag, Chu dkar, Dkar 'dred, and Sutlej).
- 4) The presence of a very large pre-Buddhist cemetery near Mkhargdong, reflecting the special importance and populous nature of this locale in early times.⁶⁸

As previously discussed, a castle of the cardinal directions of Zhangzhung, noted in Lopon Tenzin Namdak's *bstan 'byung*, is Pu hreng stag la mkhar, said to be in the center of Pu hreng (Pu rang). In the oral tradition, this castle is variously called Stag lha mkhar (Tiger God Castle) and Stag mo ri bkra stag lha mkhar (Female Tiger Striped Tiger God Castle) (Bellezza 2001: 102). This site, known as Sman gyi rgyal mo stag ri rong (Tiger Hill Valley of the Queen Sman), is identified as being the hilltop (elevation 4.150 m) on which the Dge lugs pa monastery of Bshad 'phel gling was constructed, as well as an earlier monastery belonging to the Sa skya sect (*ibid.*: 102). This same hill also supported the old Tibetan government headquarters (*rdzong*) of Pu hreng (*ibid.*: 102). It is situated 250 m directly above the modern county seat and Karnali river (Rma bya gtsang po).

⁶⁸ This cemetery was discovered on the High Tibet Circle Expedition (sponsored by the Tibetan Academy of Social Sciences) in October 2002. This is the largest burial ground discovered to date in Upper Tibet. It covers approximately 30.000 m² and consists of several groups of quadrangle and ovoid tomb superstructures, constructed of double coursed walls of cobbles. In the oral tradition of Upper Tibet, such enclosures are frequently attributed to the Mon. In addition, there is a rectangular burial mound (*bang so*) aligned according to cardinal directions (17,8 x 15 x 2–3 m) and memorial stela erected inside two large rectangular enclosures. A report in Chinese by my colleague Dondrup Lhagyal detailing such archaeological discoveries is scheduled to be published soon. The complete survey of the cemetery has appeared in *Zhang Zhung* (Bellezza 2008).

The establishment of the monasteries and other facilities on the Pu hreng hilltop has all but obliterated any earlier architectural legacy. On the very summit of the ridge there is just one highly eroded, rammed earth structural fragment (12m in length, maximum 6m in height, as much as 1m thick) that some Tibetans identify as once belonging to the Zhang zhung citadel. However, the construction of these wall segments is not very different from those of the Sa skya monastery, nor is there any other definitive morphological confirmation of a Zhang zhung origin. While physical evidence is very limited and inconclusive, what is clear is that Tiger Hill was a nexus of political and cultural life in Pu hreng for at least several centuries. What is also undeniable is that the hill occupies a highly strategic and defensible placement in the Karnali valley. These endowments circumstantially support the oral tradition of a Zhang zhung regional center at Tiger Hill and with no other contending sites in Pu hreng, the existence of a pre-Buddhist citadel at this location seems most plausible.

Another of the castles of the four quarters of Zhang zhung is Ma pang spos mo mkhar, reported to be on the east side of Ma pang [g-yu mtsho]. With the assistance of various elders, I was able to reconnoiter this site in April 2001. The oral tradition identifying Ma pang spos mo mkhar may have considerable historical depth, representing a tradition kept alive by local elders over many generations. These Tibetans are Buddhists by faith and do not seem to have had any exposure to Bon literature and historical lore. Their knowledge of the site cannot therefore be easily attributed to such sources. The physical evidence for Ma pang spos mo mkhar is extensive and convincing. Nor are there other hilltop ruins on the east side of Lake Ma pang that could qualify as a large regional center.⁶⁹ Also known as Mkharr chen (Great Castle), the citadel site is found on the left bank of the Brag gtsang po river, approximately 15 km

⁶⁹ On the west side of Lake Ma pang there are the remains of two other ruined complexes that may date to pre-Buddhist times: a so-called Sing pa'i mkhar and the traces of a fortress on the same summit occupied by Byi'u monastery.

upstream of where it debouches into Lake Ma pang. It occupies the summit of a white limestone hill, which is perched 50 m above the Brag gtsang po (elevation 4.730 m).⁷⁰ The very poorly preserved ruins consist of wall footings made of igneous, as well as other type variations of cobbles. No standing walls remain (save for a few small fragments of 1m high revetment), so it is difficult to assess the type and size of the buildings that once stood. There are both south (65 x 10–15 m) and north (37 x 6–13 m) summits blanketed in rubble.

The amount of structural debris and the size of the Ma pang spos mo mkhar site indicate that this was in itself a significant facility. However, an extensive pre-Buddhist burial ground on the right bank of the Brag gtsang po provides more crucial corroborating archaeological evidence for the importance of this locale in the ancient period. Spread over a distance of roughly 1 km, on a sandy flat opposite the fortress, are no less than 60 well-built superstructures of tombs. This common tomb type in Upper Tibet consists of neatly built double-coursed cobble walls forming rectangular enclosures. These large examples range in size from 100–400 m. The walls are between 50 cm and 1 m thick and protrude slightly above the current ground level. Some of the grave enclosures are subdivided in halves, quarters and other configurations.

⁷⁰ Interestingly, the geographical aspect of so-called Ma pang spos mo mkhar bears some resemblance to a description of the Zhang zhung period temple, G-yung drung lha rtse'i gsas khang. This temple, founded by the Zhang zhung adept G-yung drung tshul khriṃs, was erected on the crystal formation (*shel brag*) of Dkar rtse rdzong (White Summit Fortress), located east of Spos ri ngad ldan (Bellezza 2001: 45). White limestone outcrops, such as those found at Ma pang spos mo mkhar, are often poetically referred to as 'crystal formations' in Tibetan writings. It seems more likely however, that G-yung drung lha rtse'i gsas khang is an alternative site. Among possible candidates is a white limestone formation known as Bon po phug, situated 2 km away. It is directly in view of the east face of the conical Pos ri ngad ldan and includes two small ruined residential complexes. These ruins are said to be those of a Sa skyā pa monastery built after the site was abandoned by the Bon po.

Among the castles of the four quarters of the inner *sgo* territorial subdivision of Zhang zhung is La shang g-yu lo mkhar, stated to be north of Ti se. The identification of this site does not appear to have survived in oral tradition. As noted, its relative position and name correspond with Shang, located 100 km north of Ti se. Shang rdo ring, at the heart of the Gzhung pa ma mtshan region, was an important pre-Communist cultic site with more than one dozen pillars in various groupings and associated structures (Bellezza 2001: 166, 167). These appear to have formed an extensive pre-Buddhist funerary complex. Located 12 km north of Shang rdo ring are the remains of an ancient stronghold called Shang klu btsan pho brang mon mkhar, which sits on top of a limestone outcrop overlooking well-watered pasturelands (Bellezza 2001: 99, 100). In oral tradition this small fortress and proximate ruins are associated with the ancient Mon pa. Without more conclusive evidence, equating La shang g-yu lo mkhar with the fortress at Shang is a rather moot point to stress. There do not, however, appear to be any other ancient citadels in Gzhung pa, an important region in the pre-Buddhist period as demonstrated by its many stela and funerary sites.⁷¹

Another castle associated with the four quarters is Gad gi byi ba mkhar, which can be found in the proximity of upper Gro shod. Upper Gro shod, known in modern administrative terms as Hor pa township, is located in the southwest of 'Brong pa county. Unfortunately, the identity of this castle remains obscure. Lupon Tenzin Namdak opines that it is probably identifiable with a very large ruined complex in Hor pa township, now known as Dbang phyug mgon po mkhar. This citadel consists of a dense collection of ruined stone buildings covering 6,000 m² of a hilltop and its southern flanks (elevation 5,000 m). The sheer size of the complex (around 60 individual buildings) and the quality of construction, clearly show that this was once the premier facility

⁷¹ See map in Bellezza (2002^a: 284). Just north of Gzhung pa, in the Tshwa kha region, two pre-Buddhist hilltop fortresses have been surveyed: Zhing chen mon mkhar (Bellezza 2001: 98, 99) and Mon mkhar ser nag (Bellezza 2002^a: 27, 28). The latter stronghold is of significant size.

in Upper Gro shod, and one of the most important in all of Upper Tibet. No other sizable ancient fortresses are reported in the region.⁷² All structures were built of locally quarried blue limestone cut into flat blocks, which were laid in random-work courses. There are also a few rammed-earth walls at the facility. Many of the buildings consisted of two stories and contain wall sockets in which stone corbels were inserted. Wooden rafters must have once rested upon these corbels or, in some cases, on top of a stone band constructed around the corbelling. There are also surviving examples of rooms with corbelled all-stone ceilings at Dbang phyug mgon po mkhar.

According to local legend, Dbang phyug mgon po was the powerful *bdud* (a class of indigenous demon/deity) ruler of the region. He came under attack from a Tibetan army who laid siege to his castle. For a few months, the castle withstood the assault, but its water supply was finally exhausted. Not wanting the Tibetans to become aware of this crucial fact, Dbang phyug mgon po ordered that his troops smear butter on their hair to simulate that they had just bathed. This ruse had the intended effect: the Tibetan king believed that the castle still possessed ample water reserves. Furthermore, the king's army had used up their salt supply: retreat seemed imminent. Yet he was still impatient to storm the stronghold. That night, Gu ru rin po che manifested in the dream of the Tibetan king as two yellow ducks, and led him to a nearby salt mine. The next morning, using geographic cues provided in his dream, a minister of the Tibetan king was able to find the salt mine. The attack of the castle could now go ahead. It proved successful, leading to the defeat of the *bdud* King.

This legend, claiming that Dbang phyug mgon po mkhar belonged to the *bdud*, suggests that it was significant during the pre-Buddhist cultural phase of the region. The castle also possesses archaic architectural features such as stone roofs, small windowless rooms (3,5–12 m²) and low entranceways (1,1–1,4 m in height). Its great height is another indication of considerable antiquity,

⁷² South of the Brahmaputra river, in Bar yangs township, is the well-known Buddhist era monastery/fortress of Rkyang 'bum rdzong.

as no major facilities were built at 5.000 m during the historical period of Upper Tibet. Yet another excellent clue pointing to the pre-Buddhist origin of Dbang phyug mgon po mkhar, is the lack of contemporaneous Buddhist monuments on the site. Only a single *mani* wall and *mchod rten* are found north of the complex and these were probably constructed at a much later date.

Of the six directional fortresses of Zhang chung recorded in Lopon Tenzin Namdak's *bstan 'byung*, the only one that is explicitly identifiable in oral tradition is Dwang ra khyung chen (Dang ra khyung rdzong). Still bearing the same name, Dang ra khyung rdzong is located on the east shore of Dang ra g-yu mtsho. It consists of three archaeological sites located on different limestone formations. The largest of the sites comprises three ruined building foundations, each occupying a different level (elevation 4.770 m – 4.790 m). They measure 10 x 5,5 m, 15,5 x 8,5 m and 10 x 6 m. In addition to these structures are the remains of a buttressed stairway at the main Khyung rdzong site. Poorly preserved wall footings of what appears to have been another small building, are found on the summit of a 4.880 m high outcrop to the east known as Rgod tshang brag (Vulture Nest Formation). The third site is situated on a nearby small pass called Khyung la. It comprises defensive walls more than 50 m in length and various other wall segments (Bellezza 2001: 93). While the dispersions at Dang ra khyung rdzong are not very extensive, they are one of a chain of residential sites found on the east shore of Lake Dang ra that are attributed to the Zhang chung period in local oral tradition.⁷³

The directional fortress of Ra bzhi seng ge rdzong is described as being situated north of Ru thog, precisely the location of a sacred site known as Ra bzhi brag dkar/Ra rjes brag dkar. The site consists of a large cave complex and ruined Buddhist hermitages inside a large, light-coloured formation in Rdo dmar township. However, no signs of an ancient fortress were discovered

⁷³ For a large-scale map of these sites see Bellezza (2001: 402).

here.⁷⁴ The other four directional fortresses mentioned in the text (Mang yul stag mo rdzong, Se rib 'brug mo rdzong, Rbal te rta mchog rdzong, and Gyim rngul glang chen rdzong) have not been identified. These four *rdzong* appear to be situated in regions outside of Upper Tibet. Further reconnaissance work is needed if these sites are to be pinpointed.

A list of eighteen kings of Zhang zhung and their places of residence are found in Dkar ru grub dbang's *Ti se'i dkar chag*.⁷⁵ The description begins and ends with the hyperbolic claim that their rule extended to eighteen great countries (paragraphs i, ix). The concluding statement, that these kings lived for more than 2000 years, also emphasises the legendary qualities of the narrative. While the existence of the eighteen kings⁷⁶—in terms of historical fact—cannot be confirmed with the available evidence, it is now known that most, if not all, of their ten residences were key loci of pre-Buddhist settlement. The account mentions the following royal locations: Gyang ri g-yu lo ljon (paragraph i), Khyung lung rgyal ba mnyes yul (paragraph ii), Pu mar hring (Pu rang) (paragraph iii), Tsi ṅa (paragraph iv), Ta rog (paragraph v), Sta sgo (paragraph vi), Kha skyor (paragraph vii), Kha yug (paragraph vii) La dag (La dwags) (paragraph viii), and Ru thog (paragraph viii):

- i) The great kings [of Zhang zhung] had sovereignty over the eighteen great countries⁷⁷ particularly, the eighteen *khri-sde* of Zhang zhung. The Zhang zhung king of existence, appointed from the sky of existence, Khri wer la rje, holder of the golden horns⁷⁸ of the bird (*bya ru*); the subjugating Zhang zhung King Rlabs

⁷⁴ There are what appear to be three pre-Buddhist strongholds in northern Ru thog county: Chu mkhar gyam (Rdo dmar township), Me long mon mkhar (Rtsa phug township) and Sdings leb sngon po (Rtsa phug township). See Bellezza (2002^a: 32–35).

⁷⁵ See nos. 599, l. 2 – 601, l. 4.

⁷⁶ The Bon sources *Bka' stod* and the biography of Spa nyi ma 'bum gsal mention a successive line of 40 Zhang zhung kings (Dagkar 1997: 693).

⁷⁷ For standard textual lists of 18 to 20 countries see Martin (1991), notes 61 and 63.

⁷⁸ The Zhang zhung word for gold (*gu lang*) is used in conjunction with the Tibetan equivalent *gser*.

chen, holder of the *khyung* horns of the bird; and Hri do gyer spungs rgyal po kang ka, holder of the crystal horns of the bird, were the three who stayed at the castle of Gyang ri g-yu lo ljong (= ljon), in front of Gangs ri chen po (Ti se).

ii) Similarly, at Khyung lung rgyal ba mnyes yul there were these three: King of Gu ge Sras (= Slas) kra⁷⁹, holder of the resplendent jewel horns of the bird; King Rgyung yar mu khod rgyal po, holder of the resplendent rainbow horns of the bird; and Gu ge King Kyi le, holder of the precious conch horns of the bird.

iii) At the country of Zhang zhung Pu mar hring there were these two: King of Spungs rgyung gyer, holder of the resplendent coral⁸⁰ horns of the bird; and King Nye lo wer ya, holder of the resplendent *phra men*⁸¹ horns of the bird.

iv) At the country of Zhang zhung Tsi ña there was these two: King Stag sna gzi brjid, holder of the iron horns⁸² of the bird; and King Dzo dmar this spungs, holder of the resplendent fire-ball horns of the bird.

v) At the country of Zhang zhung Ta rog there were these two: King of Bdud 'dul dbal, holder of the resplendent solar crystal horns of the bird; and King of Li wer gyer, holder of the resplendent lunar crystal horns of the bird.

vi) At the country of Zhang zhung Rta sgo there were two: King Shel rgyung hri do, holder of the resplendent red *dzwo*⁸³ horns of the bird; and King of Lig mur nam mkha, holder of the resplendent beryl horns of the bird.

vii) At the country of Zhang zhung Kha skyor there was King of Mu wer nor, holder of the resplendent turquoise⁸⁴ horns of the bird. At the country of Zhang

⁷⁹ The intended meaning of the use of the word King with the preposition 'of' (*gyi rgyal po*) in this name and in other occurrences in the text is not very clear and can probably be treated as a proper name, rather than just a descriptive title.

⁸⁰ *Bya ru* (sic. *Byu ru*).

⁸¹ A kind of semiprecious stone.

⁸² The Zhang zhung word for iron (*zom shang*) is used in conjunction with the Tibetan equivalent *lcags*.

⁸³ *Dzwo/dzo/tso/tswa* often denotes a kind of magical bomb that was used by various Zhang zhung masters and deities against their adversaries.

⁸⁴ The word for turquoise (*ga ljang*) refers to an especially precious type of the stone.

zhung Kha yug there was King of Sad hri gyer, holder of the resplendent blue poppy horns of the bird.

viii) At the country of Zhang zhung La dag there was King Nye lo wer ya, holder of the celestial iron (*gnam lcags*) *dbal*⁸⁵ horns of the bird. At the Zhang zhung country of Ru thog there was King Mu mar⁸⁶ thog rgod, holder of the resplendent *Eṇṭa*⁸⁷ horns of the bird.

ix) During the period of these eighteen kings of Zhang zhung, possessors of the bird-horns, the eighteen great countries as well as the eighteen *khri sde* (divisions of ten thousand) of Zhang zhung were subjugated. The Swastika Bon Doctrine spread in the ten directions. Some of them had life-spans of two thousand years and did not leave mortal remains behind but achieved enlightenment.

In his *Ti se'i dkar chag*, Dkar ru grub dbang identifies Gyang ri g-yu lo ljon with Rgyang grags, the well-known monastery in the inner circuit (*skor ba*) of Ti se. This is also supported by Lupon Tenzin Namdak in his guidebook *Bod yul gnas kyi lam yig* (Bellezza 2002^a: 58, 63). This was the capital of the first king of Zhang zhung, Khri wer la rje (*ibid.*: 63–65). The Buddhist monastery, built atop a prominent rock outcrop in the middle of a large amphitheatre, probably replaced any palace or fortress that once stood here. Nevertheless, in close proximity to this 'Bri-gung bka' brgyud monastery are the ruins of various all-stone residential complexes that belong to the pre-Buddhist cultural phase.⁸⁸ Additionally, all around Ti se are other sites that can be attributed to the anterior milieu and include: the Se lung *rdo khang*, the cliff dwellings of Shel 'dra; the tiny fortress, or surveillance post, of Ti se'i Bon mkhar; and the residential ruins at Mchod rten gangs bzung. In total, these sites and others

⁸⁵ The word *dbal* connotes great wrathfulness, power and sharpness.

⁸⁶ *Mu mar* (Tibetan = *gser rgod*) denotes [previously unworked] gold in the Zhang zhung language (Martin 2001^b). The inclusion of the word *mu* (sky) with *mar* (gold) seems to indicate that like the sky, this gold is pure and of celestial origins.

⁸⁷ *Eṇṭa*, derived from the Sanskrit *Indranīla*, can probably be identified with sapphire.

⁸⁸ A survey of this site is found in Bellezza (2002^a: 62–75).

more recently surveyed⁸⁹ demonstrate that Ti se was indeed one of the most substantial centers of pre-Buddhist sedentary settlement in Upper Tibet.

As does Lopon Tenzin Namdak's *bstan 'byung*, the *Ti se'i dkar chag* singles out Khyung lung and Pu mar hring as principal Zhang zhung sites, enumerating the five kings that are supposed to have resided there. According to Lopon Tenzin Namdak (in personal communication), the next location cited in the *Ti se'i dkar chag* Tsi ṅa, geographically more or less coincides with Gro shod. In a description of Zhang zhung religious centers, the *Ti se'i dkar chag* states that Bye ma g-yung drung tshal (Sand Swastika Grove), located at the headwaters of the Brahmaputra river (Yar lung gtsang po) and still known as Bye ma g-yung drung, is in Tsi ṅa (Bellezza 2002^a: 59). In this same account of Zhang zhung religious centers, the location of Tsi ṅa'i shod is where the golden castle of Drum pa tshal was situated, the residence of King Gu wer nor. Another Tsi ṅa religious center mentioned in the *Ti se'i dkar chag*, is Stag sna gling, which is now known as Stag sna rong.⁹⁰ Bye ma g-yung drung and Stag sna rong are positioned 80 km from one another on an east-west trajectory, providing some idea of the minimum geographical compass of Tsi ṅa.

In 2001, three ruined, all-stone houses (*rdo khang*) were discovered on a ridge overlooking the hot springs at Stag sna rong (elevation 4.960–4.990 m). In addition, the *Ti se'i dkar chag* speaks of a fortress at this location called Stag

⁸⁹ Descriptions of these sites are found in Bellezza (2002^a). On subsequent expeditions to Ti se, archaic all-stone complexes of significant size were documented at A dbang, Lung btsan phug, Sman lha pho brang, and Gnyan po ri rdzong. All of these sites are situated at levels well above the circumambulatory trail around Ti se. Details of them have been published in *Zhang Zhung* (Bellezza 2008).

⁹⁰ Also simply called Stag rong, this is a celebrated Bon pilgrimage site in Bar yangs township, 'Brong pa county. A brief description of this gorge is found in Bellezza (2001: 120). According to sacred geographical traditions preserved by local elders, the main Stag rong site, a place of geothermal activity, contains three vertically oriented mythical castles of popular types of Tibetan deities: Nub brag mkhar dkar po of the *lha*, Mkhar ser po of the *gnyan*, and Gtsang chab sngon mo of the *klu*.

sna dbal rdzong, the traces of which were not detected. Yet some 40 km to the west are the remains of a pre-Buddhist stronghold that in local oral tradition is known as Stag gzig nor rdzong and named after one of the legendary cycles in the Ge sar epic.⁹¹ The site consists of a network of defensive walls criss-crossing the south face of two rocky ridges (elevation 4.860–4.890 m). At this stage in the investigation there is no way of recognising whether Stag sna dbal rdzong and Stag gzig nor rdzong are interrelated.

The next royal residence mentioned is Ta rog (Da rog), the large freshwater Byang thang lake situated in northern 'Brong pa county. No hilltop fortress was observed at Ta rog, but along its rugged north shore are a number of pre-Buddhist archaeological sites.⁹² Among them are residential complexes of all-stone, freestanding structures, located at Do yi phug and on the large peninsula near Sle dmar byang. Another residential site of this type is found on the island of Mtsho gling/Mtsho do, a location associated with the 8th century Bon saint Snang bzher lod po (Bellezza 1999: 67, 79–81). Also on the north shore of Ta rog are several cave complexes that were once modified for human habitation, as well as what may be funerary sites, in the form of terraces and on steep rocky slopes, at places such as Skyung mo ri. One of the most important Bon sites at Ta rog, Lha khang dmar chags, dates to the historical period and consists of decorated cave shelters for Rdzogs chen practice. The most valuable painted compositions include an exquisite image on pargetting of Ta pi hri tsa, the 25th member of the Zhang zhung snyan rgyud lineage, and Bon symbols:

⁹¹ The *Rdzogs pa chen po zhang zhung snyan rgyud kyi bon ma nub pa'i gtan tshigs* (*Zhang zhung snyan rgyud*, no. 323, l. 2), notes that Stag gzig nor gyi rgyal po was defeated by King Khri srong lde btsan. A description of his kingdom is found in the *Mkhas pa lde'u* (p. 222), which was located west of Tibet. According to this source, he had a crystal palace of turquoise radiance with a golden roof, upon which the moon shone. As for the people of Stag gzig, “their deeds towards Tibet were like a hawk spying a flock of birds” (*Spyod pa bod la bya khyur khra ltar myul /*).

⁹² For an inventory of Ta rog sites, see Bellezza (1999).

counterclockwise *g-yung drung* (swastika) and rosettes finely studded with lake-shells.

Like Ta rog, two Zhang chung kings are reported to have lived at Rta sgo (Rta rgo). There is a number of pre-Buddhist and early historic archaeological sites on the east or ‘inner’ side of the 40 km long Rta sgo range. The most likely seat of power in early times is known in local oral tradition as 'Bum nang rdzong, or Gangs lung lha rtse rdzong (approx. 4.600 m).⁹³ This site is found at the northern foot of the Rta sgo range, in view of Lake Dang ra. In oral tradition, 'Bum nang rdzong is considered to have been a Zhang chung period stronghold, as reported in an article written by the Nag tshang luminary La stod 'jam dpal (Bellezza 2002^a: 17). This site contained formidable residential buildings, as evidenced by the existence of wall footings covering an area of approximately 2.000 m² and as much as 2 m thick. There are also outlying archaeological elevations and defunct agricultural landholdings at 'Bum nang rdzong. Only one other large residential complex has been detected on the flanks of Rta sgo. This is known as Rdzu 'phrul phug and, according to Lopon Tenzin Namdak, was a religious center belonging to the 'Dzi bon tradition and probably constructed in imperial times.

The precise location of the royal center known as Kha skyor in the *Ti se'i dkar chag* appears to have been lost. As aforementioned, Lopon Tenzin Namdak believes that it is likely to correspond with the Gangs ri mtsho gsum region (includes Ti se, Ma pang mtsho and Spos ri ngad ldan). In addition to the early fortresses already noted in this region (such as Ma pang spos mo mkhar, Ma pang sing pa'i mkhar, Gnyan po ri rdzong, and Byi'u mkhar) there is one large citadel, known in local oral tradition as Nag ra rdzong. Nag ra rdzong overlooks Gung rgyud mtsho (Hor township, Pu rang county) and is connected with the people called Sing pa.⁹⁴ The site is made up of separate

⁹³ A synopsis of the site is found in Bellezza (1996: 72).

⁹⁴ The ethnonym “Sing pa” is employed extensively in western Tibetan oral tradition to refer to the whole gamut of invaders coming in from the northwestern Subcontinent. It is most frequently used to designate Ladakhis (especially in the context of the 17th

residential complexes astride three steep limestone outcrops. The Upper Complex is the largest and boasts five different building groups reduced to crumbling foundations that cover some 1.500 m² (elevation 5.040 m).

One Zhang chung king is reported to have dwelled at Kha yug, a region that is more or less synonymous with Gu ge. The remains of many castles (*mkhar*) are found rising above the deeply cut valleys of the region. The great Buddhist citadel at Rtsa rang is generally thought to be where the Zhang chung fortress was located, but this has yet to be verified. Like many of the other so-called castles of Gu ge, this site was completely reoccupied, and was transformed into a Buddhist cultural centre from the start of the Second Diffusion period. More than one dozen hilltop sites with earthen walls have been inventoried in Gu ge. If, in fact, there were pre-Buddhist facilities at some of these Gu ge locations, surface traces were largely erased by resettlement. Most of the buildings in Gu ge were constructed with mud-brick or rammed-earth walls, which are subject to fairly rapid decomposition. This kind of advanced deterioration hampers typological identification of anterior remains. There are also hilltop fortresses built of cobbles or hewn stones in the region. Edifices that supported all-stone roofs constructed in an archaic style are uncommon in Gu ge. Two of the most notable examples in the region are the great citadel at Jo mo ri rang (elevation 5.000–5.110 m) near Rgya nyi ma, and Ar jag mkhar (elevation 3.660–3.750 m) in Za rang. Both of these sites appear to date from the pre-Buddhist period.

In Dkar ru grub dbang's account, one Zhang chung king is chronicled as having lived in La dag (La dwags). In the early 20th century, A. H. Francke reconnoitered a number of castles, which he reports as having belonged to the Mon of pre-Buddhist times. A recent study of these sites by Howard (1989; 1995) concluded that many of the so-called Mon *mkhar* are in fact Buddhist

century invasion of Gu ge), as well as the Dogra raiders of the 19th century. Lupon Tenzin Namdak, however, observes that the term “La sing”/“Sing pa” can denote the Kashmir of antiquity and perhaps be applied to racial groups extending as far west as Afghanistan.

period edifices. As in regions of lower elevation in western Tibet (Pu rang, Gu ge and Ru thog), it may be that an obvious pre-Buddhist monumental presence at some Ladakh sites was effaced by Buddhist period development. Unlike the high altitude Byang thang, these lower elevation areas remained important foci of sedentary culture in the Buddhist period that inspired an architectural recasting of strategic and desirable sites. Howard identifies several early sites in Ladakh that survived with little or no subsequent architectural modification. They include Dar khung rtse, Suryamati's Castle and Nyar ma.

The final place mentioned in the *Ti se'i dkar chag* description is Ru thog. The castle of the Zhang zhung ruler is commonly thought to have been located at Rdzong ri, which rises above the old settlement of Ru thog. Rdzong ri enjoys a central position in what was once northwestern Tibet's most vital centre of civilisation. The ancient citadel (elevation 4.340 m) is known by a variety of names, including Ru thog bshan pa'i mkhar, Ru thog gnam rdzong and Ru thog khyung rdzong dkar po.⁹⁵ No visible remains of a Zhang zhung citadel are detectable at Rdzong ri, the hilltop having undergone much Buddhist period activity. Oral tradition notwithstanding, there are persuasive geographic factors that support the notion of a habitational legacy at Rdzong ri that extended back to pre-Buddhist times. The hilltop commands a strategic location in the middle of the Ru thog basin: the region's largest and most important agricultural enclave. There are no less than a dozen other hilltop strongholds in the interconnected valleys of Ru thog, extending from Re co (Ri chos) to Ra bang. Many, if not all, belong to the pre-Buddhist cultural phase. In addition to the fortresses, the remains of substantial agricultural villages that are attributed to the Bskal mon (an aboriginal group?) in regional oral tradition, can be found. The wealth of archaeological sites in Ru thog clearly alludes to a larger population and more extensive sedentary cultural presence in early times.

⁹⁵ A survey of this site is provided in Bellezza (2001: 102–104).

II. Pre-Buddhist sites clustered around castles and royal residences of Zhang zhung

The inventory of pre-Buddhist archaeological sites demonstrates that there is a positive correlation between the distribution of early monuments, rock art and the Zhang zhung strongholds and royal residences cited in Tibetan literary and oral tradition. In order to illustrate the manner in which archeological sites aggregate around the Zhang zhung centers of the Tibetan tradition, hubs have been chosen for their geographic correspondence to places mentioned in the *bstan 'byung and dkar chag* excerpts. This correspondence is based on indications found in both oral and literary tradition, as expounded in Section One. One of the hubs, Klu btsan pho brang mon mkhar, was formulated on assumptions made by the author as detailed above.

In the following list, the names of sites found in the literary record precede a selected hub which is given in parenthesis. A hub for Kha yug/Gu ge is not provided due to the special difficulties encountered in this region in trying to assess which sites can be assigned to the pre-Buddhist cultural milieu. Nor is a point of reference given for Kha skyor, as the castle of Ma pang spos mo mkhar, and Rgyang grags, appear to be situated in this region and are listed separately as hubs. Hubs are not furnished for Skyid grong, nor border regions such as Ladakh and Dol po: the inventory of pre-Buddhist sites has not yet extended this far. Zhang zhung sites mentioned in literature in addition to selected hubs discussed in this article, are listed as follows:

- 1) Khyung lung dngul mkhar (Mkhar gdong)
- 2) Pu hreng stag la mkhar (Pu hreng stag la mkhar)
- 3) Ma pang spos mo mkhar (Ma pang spos mo mkhar)
- 4) La shang g-yu lo mkhar (Klu btsan pho brang mon mkhar)
- 5) Gad gi byi ba mkhar (Dbang phyug mgon po mkhar)
- 6) Dwang ra khyung chen (Dang ra khyung rdzong)
- 7) Gyang ri g-yu lo ljon (Rgyang grags)
- 8) Tsi na (Stag sna rong)
- 9) Ta rog (Ta rog north shore)
- 10) Sta sgo ('Bum nang rdzong)
- 11) Ru thog (Rdzong ri)

In order that these eleven hubs can be effectively compared with the various pre-Buddhist archaeological sites found in their proximity, I will outline the feature-types that characterise the Upper Tibet monumental and rock art assemblage. The considerable morphological, functional, and locational variability of the 513 sites inventoried, is adequately expressed in this outline of archaeological typologies. Pre-Buddhist feature-types can be generally classified as follows:⁹⁶

I. Residential Monuments

- 1) Residential structures occupying summits (fortresses, palaces and related edifices)
 - a. All-stone corbelled buildings
 - b. Edifices built with wooden rafters
 - c. Solitary rampart networks
- 2) Residential structures in other locations (religious and lay residences)
 - a. All-stone corbelled buildings
 - b. Other freestanding building types
 - c. Buildings integrating caves and escarpments in their construction

II. Ceremonial Monuments

- 1) Stelae and accompanying structures (funerary and non-funerary sites)
 - a. Isolated pillars (*rdo ring*)
 - b. Pillars erected within a quadrate stone enclosure
 - c. Quadrate arrays of pillars with appended edifices
- 2) Superficial structures (primarily funerary superstructures)
 - a. Single-course quadrangular, ovoid and irregularly shaped structures (slab-wall and flush-block constructions)
 - b. Double-course quadrangular, ovoid and irregularly shaped structures (slab-wall and flush-block constructions)
 - c. Heaped-wall enclosures
 - d. Rectangular mounds (*bang so*)
 - e. Terraced structures
- 3) Cubic-shaped mountaintop tombs

⁹⁶ For general descriptions of these feature-types, see Bellezza 2003).

- 4) Minor stone constructions
 - a. Stone registers (*tho*)
 - b. Tabernacles (*lha gtsug, gsas mkhar and rten mkhar*)

III. Agricultural Structures

- 1) Stone irrigation channels
- 2) Terracing

IV. Rock Art

- 1) Petroglyphs
- 2) Pictographs
- 3) Ciphers and inscriptions

In order to demonstrate the significance of the eleven hubs to early patterns of settlement, I have elected to tally all known pre-Buddhist archaeological sites located within a 50 km radius of each of them (fig.1). These constitute eleven geographic units. A site is defined as a discrete geographic tract containing monuments and/or rock art. The listing of sites is done on the basis of the aforementioned feature-types. The enumeration of pre-Buddhist sites in each geographic unit illustrates the way in which the sites are spatially clustered around the Zhang zhung castles and royal residences cited in Tibetan literary and oral tradition. A radius of 50 km has been chosen, as this produces relatively compact zones (7.850 km²) in the vast stretches of Upper Tibet, yet is still sufficiently large to show the positive correlation between Zhang zhung hubs and other archaeological resources within their ambit. A 50 km radius is also a useful benchmark for appraising spatially linked sites because 50 km is the habitual distance covered by a mounted rider in one day (natural barriers such as lakes and mountains notwithstanding).

The limitations of this analytical approach are quite clear: the temporal orientation of individual sites is not addressed, thus the dates of the founding of respective monuments forming a geographic cluster remain unknown. As a result, social and economic interactions between the various ceremonial and residential facilities cannot be posited in a time-line fashion. Despite this fundamental drawback, the geographic concentrations of pre-Buddhist assets that do

occur tend to reinforce the cultural significance of the hubs. They also show that the hubs did not exist in a spatial vacuum, but were rather part of an extensive infrastructure of monuments.

The cultural interactivity of at least some of the sites that make up the geographic units is indicated by their complementary functions. At most of these spatial groupings there is a mix of residential and ceremonial loci, which characterises the pre-Buddhist monumental assemblage of Upper Tibet. In addition to residential complexes on hilltops and in other locations, are cemeteries and commemorative pillars. These represent important aspects of Upper Tibetan ceremonial life. They are the fixed material holdings pertaining to the life and death cycle in pre-Buddhist culture. The integrated function of multiple sites bespeaks a temporal relationship within the prevailing cultural framework of early times.

The eleven geographical units that compose a 50 km radius around the selected hubs, each encompass 7850 km². Altogether (excluding overlapping areas and sectors that fall outside the territorial jurisdiction of TAR), they comprise approximately 75,000 km², or around 12% of the total area of Upper Tibet. In total, 191 pre-Buddhist archaeological sites are found in the eleven geographical units, 37% of the 513 sites inventoried to date.

In the groupings of sites that follow, the hub number (1–11) corresponds with those specified in the list of Zhang zhung centers, and the feature-type codes with the typological outline of monuments and rock art (Roman numeral followed by a standard numeral and letter). On account of the lack of structural evidence, the tertiary level of feature-type classification cannot be provided for certain sites.

1) Mkhargdong (20 sites):

This cluster of archaeological sites encompasses the important physiographic divide between the high plateau and the badlands country of southwestern Tibet. Within a 50 km radius of Mkhargdong are a variety of pre-Buddhist residential and ceremonial archaeological sites. These include the all-stone

citadel of Jo mo ri rang on the high plateau, as well as various strongholds built with wooden rafters located down the Sulej valley. All three pillar feature-types and several significant cemeteries are also represented in the region. The only possibly pre-Buddhist pictographic resource in the vicinity of the eleven Zhang zhung hubs, is found in this cluster of sites.

L-103 – Byang sdong gong kha (II.1c)	L-310 – Spyil bu dgon pa (I.2a)
L-106 – Mtho po mar rang (II.1c)	L-354 – Grib rwa (II.2b)
L-182 – Gu ru gyam (I.2a, I.2c)	L-382 – Mar mchod rdo ring (II.1a)
L-256 – Rgya nyi ma mkhar (I.1b)	L-426 – Smyon pa lhas rdo ring (II.1b, II.2)
L-257 – Jo mo ri rang mkhar (I.1a)	L-449 – Tham kha can (IV.2)
L-258 – Brag chag khong kha (I.1)	L-493 – Spre mo mkhar (II.3)
L-259 – Mkhar sngon (I.1, I.2c)	L-500 – Chu nag (II.1b, II.2b, II.2d)
L-260 – Nag rtsog mkhar (I.1b)	L-501 – Rin chen chu 'ded rdo ring (II.1b)
L-261 – Ha la mkhar West (I.1b)	L-502 – Rta ra rdo ring (II.1b)
L-262 – Ha la mkhar East (I.1b)	
L-309 – Jo mo ri rang (I.2a)	

2) Pu hreng stag la mkhar (4 sites):

This geographic unit is centered in Pu rang smad, a relatively low elevation agricultural district in the Karnali river valley, bounded in the south by the Great Himalaya. Sectors of the 50 km radius that extend into the Sle mi region of Nepal were not surveyed.⁹⁷ Only four loci have been found in this region, none of which can be confidently assigned a pre-Buddhist cultural identity. The lack of demonstrable pre-Buddhist surface archaeological sites in the general proximity of the purported Zhang zhung center, is probably related to the continued importance of Pu rang smad as an intensively cultivated area. More than 30 agrarian villages lace this valley system. The dense settlement in the district may well have been the cause of the obliteration and redevelopment of pre-Buddhist sites.

⁹⁷ There may be surviving pre-Buddhist sites in Sle mi, such as Rgan mo rdzong/Gad mo rdzong and G-yung drung dkyil ba (Bellezza 2001: 103).

L-393 – Chu 'khor rdo ring (II.1a)

L-392 – Kya'o rdo ring (II.1)

L-448 – Gu ru bum pa (II.4b)

L-513 – Dung dkar mkhar (I.1)

3) Ma pang spos mo mkhar (12 sites):

The sacred lakes Ma pang g-yu mtsho, La ngag mtsho and Gung rgyud mtsho dominate this geographic unit. Sectors of the 50 km radius that extend into Nepalese territory were not surveyed. A fairly broad variety of early archaeological sites are detectable in the general proximity of the Zhang zhung hub. Of the major feature-types, only the large arrays of pillars and all-stone buildings with a religious function are conspicuously missing. The relative paucity of major pre-Buddhist elevations may be connected to the redevelopment of Lake Ma pang as a Buddhist pilgrimage center, and the consequent effacement of earlier monumental traces.

L-24 – Mu ti (I.1)

L-333 – Brag gtsang po (II.2b)

L-33 – Chu phug (I.2c)

L-353 – Byi'u mon dur (II.2)

L-96 – Chu phug rdo ring (II.1b)

L-377 – Rdza ri rag pa (II.3)

L-285 – Byi'u mkhar (I.1)

L-394 – Glang chen mche ba (II.2a)

L-300 – Bon po phug (II.1b)

L-395 – Rdo rang lung rdo ring (II.1a)

L-328 – Byi'u sing pa'i mkhar (I.2)

L-403 – Glang chen rdo phur (II.1a)

4) Klu btsan pho brang mon mkhar (20 sites):

The hub of this territorial unit is found near Shang rdo ring, the geographical heart of the valley system traditionally known as Gzhung pa ma tshan, which at one time contained nine subdivisions (*tsho pa*). This cluster of sites is dominated by mountaintop tombs and pillars, which are erected within quadrangle enclosures. Factors explaining the lack of significant strongholds and other types of residential complexes in this region of unmistakable pre-Buddhist significance, are not yet clear.

L-58 – Rdza ra dkar gyam (I.2b)

L-90 – 'A 'go rdo ring (II.1b)

L-69 – Mon pa nag po (II.3)

L-180 – Btsag tig (I.2c)

L-72 – Khro thung (II.3)

L-207 – Sman lcam dkar mo (II.2b,

L-73 – Rdo khra zlum (II.3)

II.2d)

L-89 – Khang dmar rdo ring (II.1b)

L-217 – Rdo phur (II.1a)

- | | |
|-------------------------------------|--------------------------------|
| L-218 – Nag tshogs rdo ring (II.1a) | L-240 – Gnam gyi ka ba (II.1c) |
| L-219 – Srib ra rdo ring (II.1a) | L-368 – 'Bron chung (II.3) |
| L-231 – Rdo ring dkar mo (II.1b) | L-369 – Smyug ri (II.3) |
| L-232 – Me 'bar rdo ring (II.1b) | L-370 – Brag ral lcog (II.3) |
| L-233 – Smon lam rdo ring (II.1b) | L-371 – Sgom 'khor (II.3) |
| L-234 – Zhing lung rdo ring (II.1b) | |

5) Dbang phyug mgon po mkhar (4 sites):

The generally high elevation of this Brahmaputra headwaters region appears to be the most likely ground for the absence of related archaeological sites. Two of the sites listed (L-253 and L-409) overlap with the much better developed Stag sna rong geographic unit. While just falling within a 50 km radius, Rgyab lung rdo ring is located on the west side of the lofty Ma yum la (Doe Pass), in the Gung rgyud mtsho basin. However, a residential complex of archaic all-stone buildings at Bye ma g-yung drung (source of the Brahmaputra river) is situated slightly more than 50 km from the fortress hub of Dbang phyug mgon po mkhar.

- | | |
|---|--------------------------------------|
| L-253 – Stag gzig nor rdzong (I.1c) | L-409 – A ser chung rdo ring (II.1b) |
| L-381 – Rgyab lung rdo ring (II.1b,
II.2b) | L-411 – 'Ug pa lung rdo ring (II.1b) |

6) Dang ra khyung rdzong (55 sites):

This geographic unit is dominated by the great lake Dang ra g-yu mtsho. Some of the 50 km radius around the hub also extends into the Dang chung and Ngang rtse lake basins. This unit contains the largest cluster of sites located in the vicinity of a center attributed to Zhang zhung. The sheer number and diversity of sites situated near the shores of Lake Dang ra, clearly point to the exceptional importance of this region to pre-Buddhist culture and settlement. In particular, the frequent occurrence of all-stone residential complexes, strongly suggests that the population of the Dang ra catchment area was at one time considerably larger than in contemporary times.

Lopon Tenzin Namdak writes:

Most people of Zhang zhung pursued a pastoral way of life and lived in yak-hair tents (*sbra*) and caves. At Dang ra, however, agriculture was practiced. Traces of farm fields (*zhing las*) and irrigation channels (*chu yur*) from that period are still visible, as are the ruins of old fortifications and castles. Though mainly made by the inhabitants of Zhang zhung, local residents also attribute them to the Sog po (*Snga rabs bod kyi byung ba brjod pa'i 'bel gtam lung gi snying po*, p. 16).

- | | |
|--|---|
| L-4 – 'Om bu rdzong (I.1) | L-54 – Dar chen khang khrog (I.2, III.2) |
| L-6 – Gyam pa'i rdzong (I.1a, III.2) | L-55 – Dmar khyams (I.2) |
| L-7 – Ar po rdzong (I.1a) | L-56 – 'Om mo (I.2) |
| L-8 – Brag chung dbu rtse rdzong (I.1) | L-57 – Sog po (I.2, III.2) |
| L-9 – Gyang pa'i gtsug rdzong (I.1a) | L-66 – Dar chung (II.2b) |
| L-10 – Phyug tsho grog po rdzong (I.1a) | L-75 – Blon po rdo ring (II.1a) |
| L-11 – Tsan rag (I.1) | L-82 – Mon ra yar rked (II.1b) |
| L-12 – Ser mdzod rdzong (I.1) | L-83 – Mon ra'i rdo ring (II.1b) |
| L-20 – Hang thal rdzong (I.1) | L-84 – Lam lung rdo ring (II.1b) |
| L-26 – Brag mthu bo che (I.2c) | L-98 – Rta rgo rta 'dogs sa (II.1c, I.2a) |
| L-27 – Gnas kun bzang (I.2c) | L-109 – Ba ma (III.1) |
| L-28 – Am nag (I.2c) | L-110 – Dar chung (II.2, III.1) |
| L-29 – Sgo bdag (I.2b, I.2c, III.2) | L-111 – Lu sngon (III.1) |
| L-30 – Sad ne ga'u sgrub phug (I.2c) | L-134 – 'Bum nag rdzong (I.2) |
| L-31 – Rdzong dkar po (I.2c) | L-174 – Skyid phug bsam gtan gling (I.2c) |
| L-36 – Ba ma dgon ltag (I.2a) | L-175 – Stag brag khung (I.2c) |
| L-37 – Mgon po nmam gsum (I.2a) | L-176 – Lha lung brag dkar gsang ba'i gnas (I.2c) |
| L-38 – Dgon ltag ltag mgo (I.2a) | L-184 – Smon lam rdzong (I.2a) |
| L-39 – G-yung drung brag rtse (I.2a) | L-193 – Rnya la sngo ril (II.2a) |
| L-40 – Lha lung brag dkar (I.2a) | L-194 – Chabs thog (II.2a) |
| L-41 – Phyug tsho grog po dgon pa (I.2a) | L-195 – Gram phyag (II.2a) |
| L-42 – Rwa skye brag (I.2a, III.2) | L-196 – Mon ra yar rked (II.2c) |
| L-43 – Dgos 'dod brag khung (I.2) | L-222 – Tshar skam byang ma (II.1b) |
| L-52 – Bong chen (I.2) | L-223 – Dung rtse rdo ring (II.1b) |
| L-53 – Ba ma khang khrog (I.2) | |

L-224 – A chen rdo ring (II.1b)

L-276 – Lhun 'bur rtse (I.1)

L-225 – Rnya shing rdo ring (II.1b)

L-346 – Gnyan dmar (II.2d)

L-226 – Ra ser khog rdo ring (II.2b)

7) Rgyang grags (26 sites):

This geographic unit embraces much of La ngag mtsho and Ma pang g-yu mtsho, as well as the headwaters of the Indus river. The hub is found in the lap of Mount Ti se, and the predominance of all-stone residential sites around it highlights the importance of this sacred mountain in pre-Buddhist religious tradition. The archaeological evidence makes manifest that antecedent sedentary settlement was significantly more advanced than that realised in the Buddhist period, with its six well-known monasteries. The earlier infrastructure of all-stone complexes was also uniformly established at higher elevations in comparison to the Buddhist facilities. Most striking is the manner in which awareness of the pre-Buddhist monument legacy has been suppressed in the many Buddhist accounts of Ti se. In addition to the residential centres at Ti se, there are several funerary sites, pillar monuments, and outlying strongholds that all fall within a 50 km radius. Eight archaeological sites in the Rgyang grags geographic unit (L-285, L-328, L-353, L-354, L-377, L-394, L-395, and L-403) are shared in common with those found in the general proximity of Ma pang spos mo mkhar, and five sites (L-257, L-309, L-310, L-493, and L-501) are also in the Mkhar gdong geographic unit.

L-173 – Gangs ti se'i bon mkhar (I.1)

L-319 – Lung bstan phug (I.2a)

L-183 – Shel 'dra (I.2c)

L-328 – Byi'u sing pa'i mkhar (I.2)

L-187 – Se lung (I.2a)

L-353 – Byi'u mon dur (II.2)

L-191 – Mchod rten gangs bzang (I.2b)

L-354 – Grib rwa (II.2b)

L-257 – Jo mo ri rang mkhar (I.1a)

L-377 – Rdza ri rag pa (II.3)

L-285 – Byi'u mkhar (I.1)

L-394 – Glang chen mche ba (II.2a)

L-306 – Zhabs dkar sgrub phug (I.2a)

L-395 – Rdo rang lung rdo ring (II.1a)

L-307 – Sman lha pho brang (I.2a)

L-403 – Glang chen rdo phur (II.1a)

L-308 – Gnyan po ri rdzong (I.2a)

L-432 – Rgya steng 'bur rdo ring

L-309 – Jo mo ri rang rdo khang (I.2a)

(II.1b)

L-310 – Spyil bu dgon pa (I.2a)

L-471 – Seng ge mi nong (I.2a)

L-472 – A dbang (I.2a)

L-493 – Spre mo mkhar (II.3)

L-494 – Rus sbal smug po (II.3)

L-501 – Rin chen chu 'ded rdo ring

(II.1b)

L-503 – Shar ma rdo ring (II.1b)

8) Stag sna rong (13 sites):

This geographic unit is comprised of Trans-Himalayan valleys and mountains, and the Ne'u gtsang po and Tshwa chu river basins. Like most other places attributed with Zhang zhung cultural activity in the Bon literary record, archaeological sites with both ceremonial and residential functions are distributed in this geographic unit. Sites are spread out to the south of the narrow Stag sna rong valley hub.

L-251 – Gnam rdzong (I.1c)

L-252 – Rdzong pi phi (I.1a)

L-253 – Stag gzig nor rdzong (I.1c)

L-304 – Shel khrab mtshams khang
(I.2a, II.2)

L-318 – G-ya' jus brag phug (I.2a)

L-380 – Rdo ring mtsho bkra (II.1a)

L-407 – Byang sde rdo ring (II.1a)

L-408 – Rta ra rdo ring (II.1b, II.2)

L-409 – A ser chung rdo ring (II.1b)

L-410 – Gra ma nag gu rdo ring (II.1b)

L-430 – 'Thag phur rdo ring (II.1b)

L-431 – G-ya' jus rdo ring (II.1b)

L-512 – 'Brug mo'i rdo ring (II.1b)

9) Ta rog north shore (14 sites):

Unlike other hubs selected to represent Zhang zhung cultural centers, the nexus of this geographic unit is not a specific site, but a baseline represented by the entire northern shore of Lake Ta rog. The unit mainly falls within the Byang ma and Bar ma subdivisions of the old 'Brong pa tsho pa dgu administrative region. No hilltop stronghold was detected near the lake that could be associated with a royal residence. It may be that the inherently defensible residential complex located on the island of Mtsho gling served such a purpose. One substantial hilltop complex, pillar monuments, and several lakeside cave complexes and all-stone residential complexes, are found in this cluster of sites. Yul kham bu, the largest single collection of pillars and temple-tombs in Upper Tibet, is located within this geographic unit.

L-21 – Gra rong mon rdzong (I.1b)

L-61 – 'Bur dkar (I.2)

L-92 – Spyog po rdo ring (II.1b)

L-93 – Shag gang rdo ring (II.1b)

L-94 – Pe gya rdo ring (II.1b)	L-148 – Sha ba gdong lha khang (I.2c)
L-104 – Yul kham bu (II.1c)	L-149 – Sle dmar chang (I.2a)
L-105 – Khang dmar mon dur (II.1c)	L-150 – Sle dmar chang (I.2)
L-145 – Do yi phug (I.2a)	L-151 – Mtshams do dmar ri (I.2)
L-147 – 'Phrang lam (I.2c)	L-152 – Skyung mo ri (II.2e)

10) 'Bum nang rdzong (22 sites):

This geographic unit comprises the Rta rgo range and two-thirds of Lake Dang ra. The importance of Rta rgo to Zhang zhung inhabitancy is emphasised by the diversity and breadth of pre-Buddhist archaeological sites located in the general proximity of the selected hub. Ten of the sites in this geographic unit situated near the shores of Lake Dang ra (L-7, L-8, L-9, L-10, L-11, L-12, L-20, L-224, L-276, and L-346) are also incorporated into the Dang ra khyung rdzong geographic unit. One site located in the Lake Ngang rtse basin (L-75) and two in La stod township, west of Lake Dang ra (L-225 and L-226), are shared in common with the Dang ra khyung rdzong grouping as well.

L-7 – Ar po rdzong (I.1a)	L-76 – Sle kham pa rdo ring (II.2a)
L-8 – Brag chung dbu rtse rdzong (I.1)	L-80 – Rdo rang (II.1a)
L-9 – Gyang pa'i gtsug rdzong (I.1a)	L-132 – Gsum sbug rdo ring (II.1c)
L-10 – Phyug tsho grog po rdzong (I.1a)	L-133 – Lug tug 'phrang (II.1a)
L-11 – Tsan rag (I.1)	L-224 – A chen rdo ring (II.1b)
L-12 – Ser mdzod rdzong (I.1)	L-225 – Rnya shing rdo ring (II.1b)
L-20 – Hang thal rdzong (I.1)	L-226 – Ra ser khog rdo ring (II.2b)
L-35 – Rdo rang (I.2b)	L-276 – Lhun 'bur rtse (I.1)
L-64 – Rtsid ra (II.2a)	L-302 – Shod tram phug (I.2c)
L-65 – Brag dkar nag sdings (II.2)	L-312 – Rdzu 'phrul phug (I.2a)
L-75 – Blon po rdo ring (II.1a)	L-346 – Gnyan dmar (II.2d)

11) Rdzong ri (29 sites):

This geographic unit sits in the center of Ru thog. Occupying an economically and geographically strategic location, its hub appears to have dominated a number of important satellite communities and strongholds. These sites are all found in the network of interconnected valleys and basins at 4,200–4,450 m

elevation, which was clearly a significant zone of sedentary settlement in the pre-Buddhist period. An additional 21 sites in this valley system of Ra bang township, fall outside the 50 km radius (most of these sites are mapped in Bellezza 2002^a: 283). The dereliction of these facilities as well as of the lands peoples depended upon for agriculture, must be closely linked to climatic degradation. Northwest Tibet has had to endure particularly high rates of desiccation over the centuries, and now receives less than 150 mm annual precipitation. Within this geographic unit are three petroglyphic sites.

L-16 – Khu rang mkhar gog	L-296 – Kha gser ra mo rgya mo mkhar (I.1a)
L-18 – Brag gdong (I.1)	L-297 – De'u nag gu mkhar (I.1)
L-60 – Za za (I.2)	L-320 – Sde chos dgon pa (I.2a, I.2b)
L-273 – Dung dkar mkhar gdong (I.1a)	L-321 – Lha lung (I.2a)
L-274 – Sra brtan mkhar (I.1a)	L-322 – Ge khod (I.2a)
L-275 – Skyung mo brag mkhar (I.1a)	L-323 – Dgon pa'i do (I.2a)
L-287 – Spo sa mkhar gog (I.1a)	L-329 – Yul lung (I.2, III.2)
L-288 – Mkhar ru mkhar gog (I.1a)	L-330 – Lung ngag (I.2, III.2)
L-289 – Mkhar po che (I.1a, I.2)	L-331 – Sde chos bskal mon lung pa (I.2, III.2)
L-290 – She rang mkhar lung (I.1a, III.2)	L-416 – Thang ra rdo ring (II.1b)
L-291 – Dbyi lung (I.1)	L-417 – Nag khung rdo ring (II.1b)
L-292 – Ge khod mkhar lung (I.1a)	L-456 – Rdzong chen (IV.1)
L-293 – Chu lung gong ma mkhar (I.1b)	L-457 – She rang mkhar lung (IV.1)
L-294 – Mar lung (I.1)	L-458 – No ba g-yang rdo (IV.1)
L-295 – Lug ri nag kha (I.1a, I.1b)	

III. The Zhang zhung kingdom marked in stone

Let us now turn to two types of monuments that will help us to better quantify the geographical extent of Zhang zhung. Pillars erected within a quadrangle walled enclosure (feature-type II.1b) and quadrangle arrays of pillars with appended edifices (feature-type II.1c) represent two of the most distinctive types of pre-Buddhist monuments in Upper Tibet. They also serve to delineate the paleocultural domain of the region (fig. 2): these kinds of menhirs are not found in

other regions of Tibet. By charting the spatial distribution of these *sui generis* monuments, it is possible to illuminate claims made in oral and literary tradition with regards to the scope of Zhang zhung. Our understanding of its geographic compass can also be further refined. First, a detailed analysis of the two archaeological feature-types that will act as territorial beacons is in order.

Pillars erected within a walled enclosure were built most frequently on plains with wide vistas to the east and sometimes with a panoramic view. They were customarily founded on level or very slightly sloping gravelly or sandy terrain. They are known in both inhabited and uninhabited locales. In some cases, pillars erected inside a walled enclosure overlook lakes and rivers, while other sites are in waterless areas. Pillars are set on the west side of a quadrangle enclosure, whose walls are usually aligned in the cardinal directions. Individual pillars (more than a dozen specimens) can be found standing inside a single enclosure. These pillars are tabular, four-sided, three-sided, or irregularly shaped. They range in height from 30 to 240 cm, with another 40% approx. of the aforementioned height embedded in the ground. If they have two broad sides, these are generally oriented north to south. Some pillars were carefully cut into symmetrical shapes, while at other sites raw stones were used for installation.

At some sites, the enclosures are slightly raised above the surrounding terrain. They are rectangular or, less often, square in shape. The rectangular enclosures regularly have longer east-to-west dimensions. The only exceptions are certain rectangular enclosures in far western Tibet that have longer north-to-south dimensions. This constitutes a regional design variation with no other observed morphological differences. The enclosures vary between 3 and 20 m in length. The perimeter walls contain parallel courses of stones and range between 40 and 80 cm in thickness. They are usually constructed of unhewn upright stone slabs or blocks 10 to 80 cm in length, which are level with, or elevated, 10 to 40 cm, above the ground surface. In some examples, there is an opening in the east wall, which may have functioned as a ritual entranceway. Pillars erected inside a quadrangle enclosure were constructed with a wide variety of locally occurring lithic materials, such as sandstone, granite, gneiss and

volcanic stones. It is not uncommon for more than one type of stone to have been used in construction, creating structural elements of contrasting colours. This feature-type is often found in association with pre-Buddhist funerary monuments such as slab-wall arrays, burial tumuli, and other types of grave superstructures and pillars. It does not appear, however, that these pillars were erected on top of tombs.

Although there is usually only one monument at each site, at some places there are two (spaced 100–1.000 m apart). A hallmark monument of the region would seem to be characterised by the pillars within it: they are frequently found inside a quadrate enclosure in every major area of Upper Tibet. At many sites there are no signs of modern or pre-modern cultural usage of the pillars. A significant minority, however, was used in apotropaic and fortune-bestowing rituals associated with the indigenous pantheon. At these sites, objects inscribed with prayers such as crystals and plaques were placed near the pillars. They were also ornamented with dabs of butter and woolen cords. Sites that assumed a religious function were much less likely to survive the Chinese Cultural Revolution intact. Traditionally, the pillars and enclosures were not disturbed out of respect for history, or fear of upsetting the genius loci. There are several common myths and legends associated with these sites circulating in the oral tradition of Upper Tibet. They include:

- 1) They are pillars that magically appeared with the founding of existence in primordial times (*srid pa chags pa'i rdo ring*).
- 2) The pillars are where the Tibetan epic hero Gling ge sar hitched his magical horse Rta rkyang bo (*rta 'dogs sa*).
- 3) They are funerary monuments belonging to the ancient Mon (Mon dur, Mon pa'i dur khung, Mon rdo, Mon tho).
- 4) The pillars were erected for the worship of members of the local pantheon (*rten pa'i rdo ring*).
- 5) They were raised as a commemorative memorial for local chieftains of yore (*dran gso'i rdo ring*).

Of all these attributions, the last appears closest to the original function of the feature-type. Rather than tombs, these pillars probably served as memorials, which often mark the site of cemeteries. The erection of these monuments must have acted as symbols of temporal power and social status linking the tribal elite with their ancestral rulers (Bellezza 2001: 36). The consistent presence of the monument across the reach of these peoples' territory suggests that it had a localised clan or cult function connected to the levers of social and political power (Bellezza 2002^a: 105). The precedent for this type of funerary pillar monument (called '*balbal*' and 'deer stones') is found at central and north Asian sites belonging to: the Okunev and Tagar cultures of south Siberia (middle of the Second Millennium BC and 8th–6th centuries BC respectively), the various Scytho-Siberian slab-grave, and *kurgan* cultures of Mongolia and the Altai of the First Millennium BC.⁹⁸

The morphological characteristics and geographical aspects of the Inner Asian Bronze Age/Iron Age pillar monuments indicate that they have a significant cultural affinity with the Upper Tibetan variant (the precise nature of which has yet to be determined). Nevertheless, the *rdo ring* sites of Upper Tibet are demonstrative of unique conceptions of design, spatial ordering and ritual practice, and suggest the existence of an ethnohistorical entity distinct from its northern neighbours. Without the requisite chronometric data, the pillars erected within a quadrangle enclosure in Upper Tibet cannot be accurately dated. Cross-cultural archaeological comparisons with the north encourage the view that this feature-type originated some time in the first millennium BC. It seems likely, however, that such pillars continued to be raised throughout the Zhang chung period, perhaps even as late as the end of the imperial period in the mid-9th century. The geographic isolation of Upper Tibet from the epochal cultural movements of Inner Asia, as well as what appears to have been its relatively stable cultural system, argue in favour of the longevity of the monument.

⁹⁸ Cross-cultural archaeological comparisons are examined in Bellezza (2002^a: 105f) and in the volume on *Zhang Zhung* (Bellezza 2008).

Stones erected in rows and aligned in the cardinal directions to produce large formations of stela, share the same geographical range as the pillars erected within walled enclosures. Constructed on level or slightly inclined ground with wide vistas, they are found in plains or on broad esplanades. In most cases they were established in areas remote from human settlements, and many of the sites are devoid of permanent sources of potable water. In a single complex there were between several hundred and 3.000 pillars set into the ground, in more or less evenly distributed rows. These concourses vary greatly in size and cover between 30 and 4.000 m². The stela range in height from 20 to 140 cm, with an average protrusion from the ground of around 40 cm. These pillars were made from either natural pieces of stone or those that were roughly cut into shape. The smaller uncut specimens tend to be pointed, while the larger stela are usually tabular in shape with their broad sides aligned in a north-south direction. They are made from a variety of stones depending on the geological make-up of the locale. The rows of standing stones are positioned 40 to 120 cm from each other, as are the individual stones in each row. At some sites, upright slabs of stone of length 10 to 120 cm, laid in parallel courses, were embedded in the ground around the perimeter of the array of standing stones. These 20 to 40 cm thick slab-walls are flush with the surface, or protrude above it, to a maximum height of 20 cm. Sometimes such slab-walls subdivided the fields of stela into smaller units. There are also instances of double course slab-walls extending 3 to 30 m east of the pillar arrays, which create an extensive grid of surface structures aligned in the cardinal directions.

One to six metres east of each field of pillars lie what appear to have been a mortuary temple and tomb edifice. The lines of pillars appear to have almost reached the tomb, but at many sites proximate rows have been uprooted. Like the pillars themselves, these structures are usually aligned in the cardinal directions. They vary greatly in size and complexity, ranging from 3 to 65 m in length. The tallest surviving edifices are 4,3 m (Yul kham bu) and 3,5 m (Sha sha dpal khang) in height, but when they were fully intact they may have been substantially taller. Although none of the top-most part of these structures has

endured, they were almost certainly built with flat roofs. In the larger buildings the windowless walls are up to 2,5 m in thickness, creating relatively small interior spaces. This clearly indicates that they were not structures built for habitation. Where significant elevations have survived, it can readily be seen that these were four-sided structures, the larger of which were divided into two to five partitions. It would appear that these were burial or reliquary chambers. Taller walls slightly taper inwards in the Tibetan 'fortress' style of construction, a design feature not well articulated in other Upper Tibetan, pre-Buddhist type of monument. Walls were constructed of coursed rubble in stone blocks of varying size, whose exterior faces were sometimes hewn smooth. Masonry courses were laid flat, as well as in a distinctive 'herring-bone' pattern, whereby two intervening courses were set diagonally into the wall.⁹⁹ To reinforce larger walls, courses of thin bond stones were also employed at strategic levels. The interior walls were sometimes built of finer masonry than the exterior walls. Small quartz crystals and pieces of red sandstone are found scattered at some sites that must have been employed as decorative elements.

In local oral tradition the monolithic arrays are often accorded a funerary function associated with the Mon pa. Findings of human skeletal remains are reported from certain sites: an indication that these places did indeed function as pre-Buddhist necropoli. Other types of tombs and pillars are sometimes located in close proximity to the pillar complexes, corroborating this view. It would appear that the edifices appended to the pillars functioned not just as tombs but also as temples, where mortuary and perhaps commemorative rites were conducted. The function in ritual of the fields of standing stones is a mystery. There is some speculation among local residents that each pillar represented a single individual, as in the constituent members of an ancient army. Such an impression emphasises the corporate or community-based functions of the monument.

⁹⁹ This use of intervening diagonal courses of masonry is also found in several of the fortresses inventoried in western Tibet.

The relative scarcity of the feature-type (obliteration of specimens notwithstanding) and its highly elaborate construction, indicate that the monument had a role among social elites. It seems most likely that these necropoli are where the regional priestly and/or ruling classes carried out ritual dispensations and, ultimately, were interred. It can readily be envisioned that such cultural activities were conducted with the large-scale participation of the local community. The existence of great complexes scattered across the territorial delimits of the feature-type, indicates that there were multiple geographic centers of political power in pre-Buddhist times. The wide distribution of major fortresses across the same area strengthens this supposition. Furthermore, the diffusion of dominion is supported by the legends of the Zhang zhung kings, described as having occupied various residences across Upper Tibet. This in turn lends weight to the hypothesis that Zhang zhung functioned as a tribal confederacy (or some other kind of decentralised state) where political power was largely in the hands of the constituent regions and/or clan factions.

Precedents for extensive Iron Age pillar sites are found in Central Asia. Ichianli in Turkmenistan is thought to date to the 5th–2nd Century BC (Abetekov and Yusupov 1994: 31). At this ostensible cult centre for early nomadic tribes, rows of standing stones are found on the east and west sides of a 40 x 35 m stone edifice (*ibid.*: 31). Large groups of pillars were also planted at Tagar burial grounds.¹⁰⁰ Rows of standing stones (deer stones and *balbal*) in close proximity to *kurgans* are also known at Scytho-Siberian (second half of the first millennium BC) and early Turkic (fifth to eighth centuries AD) burial sites such as Barburgazy and Sogonolu, in Mongolia.¹⁰¹ At Judai (7th to 9th centuries AD) in southern Tibet, 15 parallel rows of standing stones are found among graves for horses and other animals.¹⁰² These pillars, however, occupy a much less prominent architectural role than those in Upper Tibet. Of the monolithic

¹⁰⁰ For reference, see Bellezza (2002^a: 117).

¹⁰¹ See Kubarev (1979: 119, Table XX–1, XX–2). At Bugut there is a line of 270 *balbal* stones appended to a *kurgan*, see Kljaštronyj and Livšic (1972: 69, Fig. 1).

¹⁰² See description of this site in Caffarelli (1997).

arrays and tombs of Upper Tibet, the elevation profile and structural features most closely resemble their counterparts in Central Asia. This indicates that pre-Buddhist Upper Tibet was strongly influenced by her northern neighbours, and may even confirm (when the requisite archaeometric evidence is compiled) that, ultimately, Zhang zhung's closest cultural ties were with the steppe regions. If this proves to be the case, the implications for the ethnohistorical formation of the region are very considerable indeed.

As for the periodisation of the monolithic arrays of Upper Tibet, a span of time between the first millennium BC and the collapse of Zhang zhung in the 7th century is probably indicated. Again, what appears to have been the operation of a durable cultural system in Upper Tibet may have insured the long-term establishment of the monument. It seems unlikely, however, that the largest and most elaborate examples of the feature-type, formidable symbols of majesty and authority, could have been established after the annexation of Zhang zhung by Tibet.

The pillars erected inside enclosures and the monolithic arrays appended to tombs are all well distributed in Upper Tibet, west of 88° 30" E. longitude and south of 33° 30" N. latitude (except in Trans-Himalayan Gu ge). Their geographic distribution coincides with the greatest incidence of pre-Buddhist residential feature-types in Upper Tibet. Repeated reconnaissance of the deep valleys of Gu ge and the eastern Byang thang, indicates that the hallmark pillar types were not raised in these regions. Only isolated pillars (II.1a) are found in these peripheral regions. In terms of the coherence of its monumental legacy, the geographic bounds of the two pillar feature-types correspond to what we might call the core area of Zhang zhung. The absence of these emblematic feature-types in the eastern Byang thang, and Gu-ge in the extreme west, indicate that these regions had a somewhat different cultural and/or ethnic composition. The existence of analogous rock art and corbelled all-stone residential buildings, however, shows that Gu ge and the eastern Byang thang were culturally the most closely allied territories to the core area of Upper Tibet. The same observation holds true for Ladakh and probably also for borderland regions like

Dol po, Glo, Sle mi, and Spi ti. The relative geographic placement of these territories certainly emphasises their shared archaeological relationship.

As the two types of pillar monument possess special features of design and construction, setting them apart from the archaeological monuments of adjoining regions, they excellently suit to serve as territorial markers and circumscribe the core Upper Tibetan, pre-Buddhist cultural entity. The rows of pillars accompanying tombs, in addition to the definitive typological and morphological characteristics exhibited by the pillars erected in enclosures, reflect the existence of the unique Zhang zhung paleocultural sphere in Upper Tibet.

A swathe of territory encompassing the Trans-Himalaya ranges is, in general, devoid of the hallmark pillars, as it is of other types of pre-Buddhist monuments. This is due to the altitudinous position of the tract of mountains and basins. Generally situated at elevations in excess of 5.300 m, the Trans-Himalaya are above the human biological threshold for permanent sedentary settlement. South of the Trans-Himalaya, Bal tshwa gyang khrog rdo ring (L-404, II.1b)¹⁰³ and Gangs chen rdo ring (L-444, II.1c) form the eastern boundary of the core Upper Tibetan, pre-Buddhist cultural domain. This is some 140 km west of Gtsang kha rag/Rtsang lha phu dar (the southeastern border of Zhang zhung), according to Lopon Tenzin Namdak's account. The discrepancy between the textual and archaeological determined boundary is not especially large and can be explained by a variety of possible factors. Indeed, the formulation of the Zhang zhung paleocultural demarcation in the same general proximity, yet by disparate methodologies, is extremely significant. It mutually reinforces the geographic specificity, which is qualified in both the archaeological record and literary tradition.

As already pointed out, the Byang thang boundary of the core Zhang zhung zone, as heralded by the two hallmark pillar types, is near 88° 30" E.

¹⁰³ Further east in Sa dga' county, several sites of small standing stones with no accompanying structures were surveyed at Sgar shog, Lhag tshang and Grang chung ba bam. East of this, in Ngam ring and central Tibet, no evidence for the erection of this type of pillar monument has been found.

longitude (II.1b = 88° 43", II.1c = 88° 24").¹⁰⁴ East of this meridian, only three sites of pillars have been detected in the Byang thang.¹⁰⁵ The evidence therefore indicates that the erection of pillars was not a prevalent custom in the eastern Byang thang. Discussed in Section One, this consequential difference is probably related to cultural variability, as exemplified by the Sum pa and Zhang zhung proto-states of Tibetan literary tradition. The northern boundary of Zhang zhung delineated by the hallmark pillar types falls south of 33° 30" N. latitude in the western Byang thang, and considerably further south in more easterly regions. No archaeological sites of any type have been inventoried north of the 34° parallel. This appears to be the northern-most extension of pre-Buddhist sedentary settlement in Upper Tibet. Environmental factors most probably account for this northern cultural frontier. North of 34°, Upper Tibet is significantly higher, colder and drier than the more southerly tier and this must have had a retarding effect on settlement throughout the Late Holocene.

Enumeration of sites found in figure 2

- List of the 80 sites of pillars erected within a quadrangle enclosure feature-type (II.1b) documented in Upper Tibet:

¹⁰⁴ A site consisting of rows of pillars and other structures discovered by George Roerich, evidently architecturally modified to create rows of cairns, is found north of Bul dkar mtsho, around 89° 30" E. long. (Bellezza 1995). This site may have constituted the most easterly quadrangle array of pillars appended to a temple-tomb feature-type in the Byang thang.

¹⁰⁵ At Sngo ring (Nag gdong) in Gzhung smad township, Shen rtsa county, 89° 16" E. long., there are three white granite stela erected in close proximity to wall segments. These may be a transitional form of monument between the pillars erected inside quadrangle enclosures and the two sites of pillars erected in isolation and located further east in Dpal mgon county (Sdo ring spun gsum and Rdo mi lang). Study of Sngo ring, however, is hampered by the fragmentary condition of the enclosing walls.

- L-79: Kya rdzong rdo ring
 L-80: Rdo rang
 L-81: Phe lung rdo ring
 L-82: Mon ra yar rkyed
 L-83: Mon ra'i rdo ring
 L-84: Lam lung rdo ring
 L-85: Ldan chu mon rdo
 L-86: Ma 'byangs rdo ring
 L-87: Zhing chen mon rdo
 L-88: Shang rdo ring
 L-89: Khang dmar rdo ring
 L-90: 'A 'go rdo ring
 L-91: Yid rtse mkhar rdo ring
 L-92: Spyog po rdo ring
 L-93: Shag gang mtho po rdo ring
 L-94: Pe gya rdo ring
 L-95: Sengge rdo ring
 L-96: Chu phug rdo ring
 L-97: Lo ro rdo ring
 L-135: Mer btum pis ma rdo ring
 L-136: Mer btum phyug mo rdo ring
 L-220: Ma g-yo rdo ring
 L-221: Dpal mo rdo phur
 L-222: Tshar skam byang ma rdo ring
 L-223: Dung rtse rdo ring
 L-224: A chen rdo ring
 L-225: Rnya shing rdo ring
 L-226: Ra ser khog rdo ring
 L-227: Rdo ring dmar mo
 L-228: Rdo ring lcags ra
 L-229: Sag the rdo ring
 L-230: Na ma lung rdo ring
 L-231: Rdo ring dkar mo
 L-232: Me 'bar rdo ring
 L-233: Smon lam rdo ring
 L-234: Zhing lung rdo ring
 L-235: Khams chen rdo ring
 L-404: Bal tshwa gyang khrog rdo ring
 L-405: Gur chen rdo ring
 L-406: Khu se rdo ring
 L-407: Byang sde rdo ring
 L-408: Rta ra rdo ring
 L-409: A ser chung rdo ring
 L-410: Gra ma nag gu rdo ring
 L-411: 'Ug pa lung rdo ring
 L-412: Nang chu rdo ring
 L-413: Nag lhas rdo ring
 L-414: Klu mo'i rdo ring
 L-415: Sha phag rdo ring
 L-416: Thang ra rdo ring
 L-417: Nag khung rdo ring
 L-418: Rdo ring dkar nag
 L-419: Mo kyog rdo ring
 L-420: Bul thang rdo ring
 L-421: Nag po rdo ring
 L-422: Sngon mo rdo ring
 L-423: Zha lung rdo ring
 L-424: Sa nyal rdo ring
 L-425: G-yang lung rdo ring
 L-426: Smyon pa lhas rdo ring
 L-427: Gsham zha rdo ring
 L-428: Rdo ring rag gtsug
 L-429: Dmar 'bur rdo ring
 L-430: 'Thag phur rdo ring
 L-431: G-ya' jus rdo ring
 L-432: Rgya steng 'bur rdo ring
 L-433: Khyi'u dur khrod
 L-434: Rdo ring nag kha

L-435: Zhing sa rdo ring	L-499: Gnyan rta rdo ring
L-436: 'Byams ri rdo ring	L-500: Chu nag rdo ring
L-437: Khra tshang rdo ring	L-501: Rin chen chu 'ded rdo ring
L-438: 'O ma tshe rdo ring	L-502: Rta ra rdo ring
L-439: Btsan sgo rdo ring	L-503: Shar ma rdo ring
L-498: Nyung dkar rdo ring	L-512: 'Brug mo'i rdo ring

NB. Among the several dozen sites classified as isolated pillars (II.1a), it seems likely that there are those that originally had perimeter walls that have been totally destroyed or buried. The actual number of pillars erected inside quadrangle enclosure feature-type sites, may therefore be somewhat higher.

• List of 24 sites of quadrangle arrays of pillars with appended edifice feature-type (II.1c) documented in Upper Tibet:

L-98: Rta rgo rta 'dogs sa	L-446: Sna nag po
L-99: Ser leb mon rdo	L-447: Khang dmar rdza shag
L-100: Klu bdud mon rdo	L-504: Skyid gser
L-101: 'Brong pa dpon gyang zhig	
L-102: Dpa' ma 'dre 'khyer	
L-103: Byang sdong gong kha	
L-104: Yul kham bu	
L-105: Khang dmar mon dur	
L-106: Mtho po mar rang	
L-132: Gsum sbug rdo ring	
L-236: Rkyang rtswa mdo gyang ro	
L-237: Chu phur rdo phur	
L-238: Mon dur lhas	
L-239: Sa mig mon dur	
L-240: Gnam gyi ka ba	
L-440: Tshwa ri lung mon dur	
L-441: Rked dkar mon dur	
L-442: Skyung mo'i mon ra	
L-443: Sngon mo mon dur	
L-444: Gangs chen rdo ring	
L-445: Pags mthug	

Conclusion

This article contributes to the study of the localisation of pre-Buddhist Zhang zhung territory, utilising empirical methods. It would seem that the Upper Tibetans, whilst being strongly impacted by the cultures of various neighbours, were still able to produce an assemblage of monuments distinct from adjoining regions. Analysis of material found in oral and literary tradition demonstrates that the Upper Tibetan territory largely corresponds to the Zhang zhung kingdom, as typified by the locations of its major strongholds and royal residences in Bon literature. As previously discussed, archaeological evidence acts as independent verification for oral and literary tradition, establishing a basis for some of the assertions therein made. Traditional accounts that describe Zhang zhung as a large and puissant kingdom are borne out by the diversity and wide dispersal of the repertoire of pre-Buddhist monuments.

Furthermore, the archaeological record allows us to appreciate the degree to which the Tibetans (especially the Bon po) have managed to preserve memory of their pre-Buddhist past, in spite of the mythical overlay that has crept into their chronicles. The historicity exhibited by Tibetan accounts, detailing the geographical characteristics of Zhang zhung, is extremely noteworthy. Further critical study of these sources, in relation to the facts on the ground, is very much warranted. It should come as no surprise that the Tibetan legends of Zhang zhung contain kernels of truth, as is often the case in ancient legacies where myth and fact have become interwoven. The implications for Bon studies are particularly great, and questions, regarding the manner in which lore pertaining to the pre-Buddhist period has been transmitted down to the present day, deserve careful scrutiny.

As the archaeological study of pre-Buddhist Upper Tibet intensifies, the colour and shape of Zhang zhung will become much clearer. Once the requisite data are assembled (and there is no scientific reason why it should not materialise), crucial problems relating to the age, polity, cross-cultural exchange, and religious profundity of Zhang zhung, will begin to be solved. Textual and ethnographic studies will continue to play a pivotal role in the interpretation

and contexture of the growing body of archaeological data. The vast literary corpus of Tibet is a treasure, whose dividends can only grow as pre-Buddhist studies further develop. Even more precious are those living sources of information: the elders of Upper Tibet, who are the termini of the great oral tradition. Their knowledge of the history, culture and landscape has proven invaluable in the exploration of the Zhang zhung kingdom.



Photo 1: Pillars erected within a quadrate enclosure in Byang sde rdo ring, east site, Bla brang township, 'Brong pa county. This square enclosure measures 13 x 13 m and the tallest pillars stand at 1,7–2 m. The enclosing walls are 60 to 70 cm thick and protrude more than 25 cm from the ground.



Photo 2: Quadrate array of pillars appended to a temple-tomb. Khang dmar rdza shag, West Complex, Lo bo township, Sger rtse county. The array of menhirs measures approx. 26 m (east to west) by 12 m (north to south) and the maximum height of a *rdo ring* is 60 cm. Only about 1/3 of the original number of pillars in the array is in situ. The temple-tomb behind the rows of standing stones measures 3 m (east to west) by 5,6 m (north to south) and has been reduced to around 1m in height.

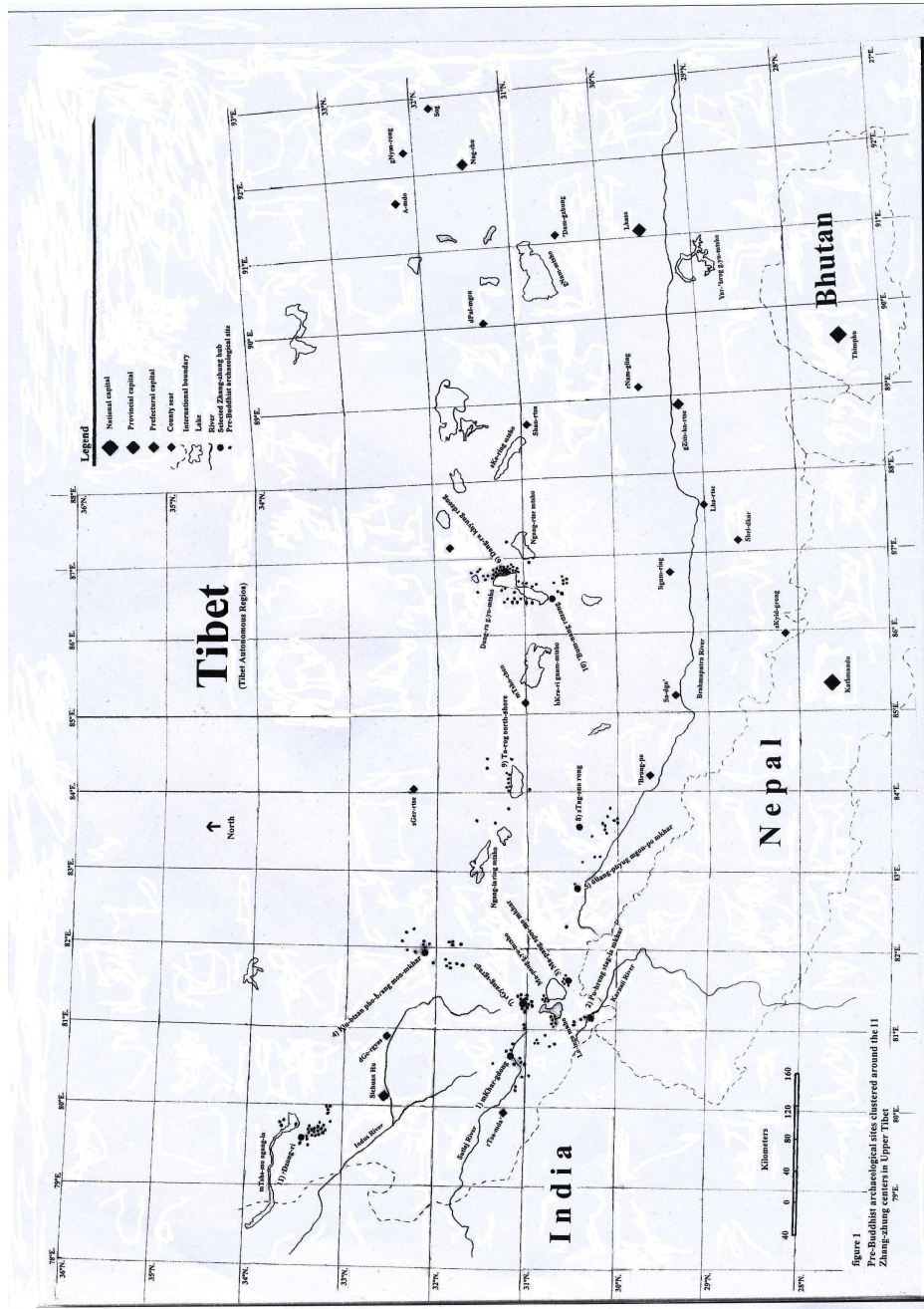


Figure 1: Pre-Buddhist archaeological sites clustered within a 50 km radius of the eleven Zhang zhung centres in Upper Tibet.

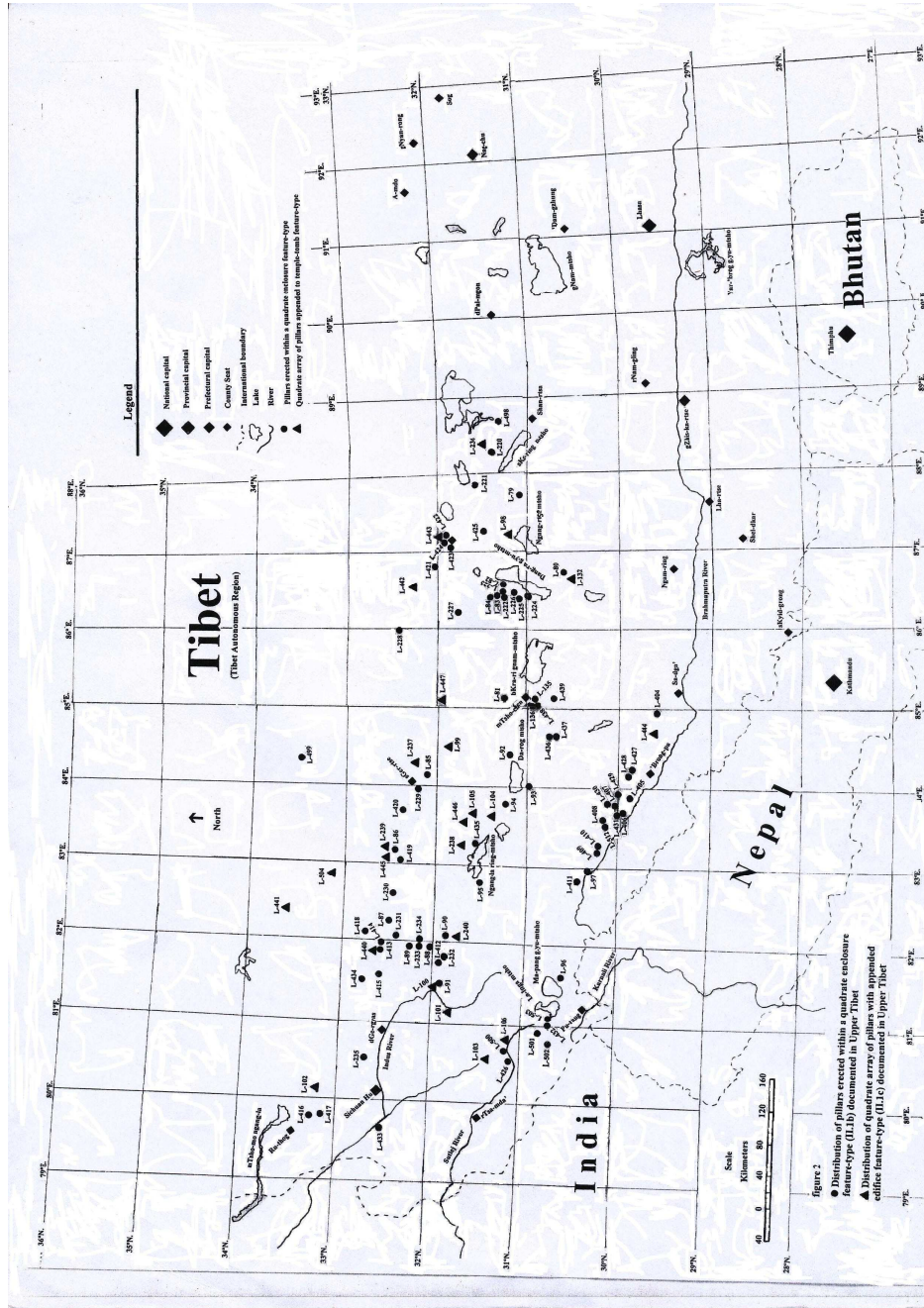


Figure 2: Geographic distribution of pillars erected within a quadrangle enclosure (II.1b) and quadrangle arrays of stela appended to temple-tombs (II.1c).