BESTING THE BEST

Warriors and Warfare in the Cultural and Religious Traditions of Tibet

A Historical, Ethnographic and Archaeological Survey of Martialism Over the Last Three Millennia



JOHN VINCENT BELLEZZA

LUMBINI INTERNATIONAL RESEARCH INSTITUTE 2020

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Front cover: Copper alloy object discovered in Eastern Tibet embossed with a sword-carrying armored figure, Protohistoric period. Painting (in gold and azurite) by Rwa dpal-ldan (see fig. 7.16)

Back cover: Illumination from a Tibetan funerary manuscript depicting the chief of the mountain gods, 'Od-de gung-rgyal, as an armored warrior, ca. 980–1150 CE (see Bellezza 2013: 51)

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General Introduction

Overview

Employing historical, ethnographic and archaeological sources, this monograph explores the human and material agents of conflict and war on the Tibetan Plateau. The cultural and religious foundations of combat and other bellicose traditions are surveyed through Tibetan textual and anthropological evidence, establishing an interpretative framework for analyzing the significance of the ancient rock art, monuments and artefacts also featured in this work. Set against such archaeological and artistic records, the investigation of martial ideas, practices and technologies permits the postulation of longstanding links in the conception and conduct of warfare in Tibet.

A wide panorama on martialism on the Tibetan Plateau is opened by scrutinizing the development of the military figure and his equipment and emblems. Although the history of specific military operations is not covered in this work,¹ it examines the ideological and sociopolitical apparatus as well as the technological inputs underpinning violent struggle from prehistoric until premodern times. The book expounds upon the cultural conditions contributing to martialism during the Tibetan empire (ca. 600–850 CE), elements of which endured until recent centuries. Though little known to scholarship, historical milestones in the cultural composition of warriors and war were preceded by more formative legacies. Through the allied ethnographic, historical and archaeological perspectives offered in this work, the martial heritage of the Tibetan Plateau is traced to the Late Prehistoric era (1200 BCE to 600 CE). As the study will show, certain abstract and tangible legacies of this remote epoch were palpable in the Tibet of premodern times.

¹ There is a large selection of books and articles covering warfare in Tibet from the Early Historic period (ca. 600–1000 CE) to modern times. I refer here to just a few of the better-known works describing specific wars and campaigns and the organization of military matters. For the Imperial period, see Beckwith 1987; Richardson 1998. For all premodern historic periods, see McKay 2003; Shakabpa 1967; Smith 1996; Tuttle and Schaeffer 2013.

The book begins with treatment of the Historic era (ca. 600–1950 CE) and the role of Buddhism and Yungdrung Bon in propagating martial values and imagery. A wide range of Tibetan historical and ethnographic sources pertaining to martialism in various political, economic, religious, and mythological settings are assessed. Utilizing Tibetan textual accounts in conjunction with archaeological materials and processes, the work then reaches further back in time to the Late Bronze Age (ca. 1200–700 BCE), Iron Age (700–100 BCE) and Protohistoric period (100 BCE to 600 CE). An enhanced picture of Tibetan prehistory is gained by pinpointing areas of agreement between the written and empirical records. Moreover, long-term continuities in martial themes and activities are posited where prehistoric legacies are found to have historical counterparts. Conversely, prehistoric and historical disjuncture elucidate changes in the fabric of martialism over the long haul. The broad chronological view afforded in this work demonstrates how persistent martial beliefs and activities were in Tibetan societies while highlighting the countervailing forces of innovation and adaptation.

In order to more deeply plumb their origins and development, Tibetan martial customs and traditions are systematically compared to the archaeological record of other territories in Eurasia. Incorporating data from foreign cultures greatly aids in understanding the ideological and material foundations of warriors and war in Tibet. Cross-cultural study identifies interregional affinities in the way combatants were conceptualized and equipped. Parallels in cult practices, bronze and iron armaments, riding horses, and in how wars were prosecuted indicate that lines of communication between the Tibetan Plateau and other parts of Eurasia were active and sustained in the Late Prehistoric era.

The Old and Classical Tibetan texts that are relied upon in this monograph come from a reexamination of work I have previously presented as well as newly translated materials. Much of the information contained in Tibetan literature, especially regarding ancient times, is focused on upper and central Tibet. Academic reference to Tibetan literature as well as the works of contemporary Tibetan writers (secondary sources) are also liberally cited. Information about customs and traditions belonging to the contemporary ethnographic scene was obtained in fieldwork and is supplemented by the research of other specialists. The ancient rock art and monuments of Upper Tibet featured in this book were surveyed by the author between 1993 and 2016, while portable objects in the study come from a variety of publications and private collections.²

² For the author's numerous articles and books on the rock art, early copper alloy metallic objects and archaic monuments of the Tibetan Plateau, see the author's bibliography (*infra*) and website (www.tibetarchaeology.com).

For heuristic purposes, Tibetan culture and religion are divided into two broad categories in this monograph: archaic and Lamaist. These terms are exploited to organize the historical, anthropological and archaeological contents of the study into two functional groupings of contrasting origins and orientations. In a work like this that contends with thirteen hundred years of Tibetan history and the preceding two millennia of prehistory, it is essential to distinguish between predominant and defunct cultural and religious systems by collocating their respective ideological, temporal and areal qualities where indicated.³

'Lamaism' is synonymous with Tibetan Buddhism and Yungdrung (G.yungdrung) Bon, the two prevailing major religions of Tibet that appeared in a mature form with the rise of Classical Tibetan literature and a still familiar sectarian mosaic in the 10th and 11th centuries CE. Lamaism denotes the entire corpus of canonical, commentarial and other texts (magico-ritual, biographies, catalogues, technical manuals, collected works, etc.) belonging to any of the sects of Tibetan Buddhism and Yungdrung Bon. This category extends to the practitioners, activities and physical assets of the two religions. The term Lamaism also refers to popular practices and oral traditions derived from or inspired by Buddhist and Yungdrung Bon doctrines, ethics and praxis. Furthermore, the term Lamaism is more loosely applied in this work to cultural phenomena only peripherally or indirectly related to religious matters post-dating 1000 CE. Lamaist religions were a pivotal force among most Tibetan communities and regions, privileging the term's inclusive application in a nomenclature. As used here, 'Lamaism' has absolutely none of the negative cultural or affective undertones that sully some Western academic literature. 'Archaic' denotes religious traditions constituting the entire body of extinct, moribund and relict cult, mythic and ritual activities and conceptions, as preserved in Tibetan texts and in the ethnographic and archaeological records. These diverse materials and processes are not derived from Buddhism in origins,

³ I refrain from relying too heavily on the term 'pre-Buddhist' in this work, because it is often applied uncritically to the extensive cultural legacy of Tibet, which is not indebted to Buddhism for its origins and articulation. Certain Tibetan customs and traditions predating Lamaism survive in Buddhism and Yungdrung Bon, rendering the term less than fully accurate in a chronological sense. The term 'indigenous' is also problematic, because a substantial number of early cultural and technological phenomena on the Tibetan Plateau (bronze metallurgy, western domesticates, certain artistic subjects and styles, etc.) did not ultimately originate there. Another term sometimes employed to delineate the archaic or pre-Buddhist is 'autochthonous', but it has the same limitations as 'indigenous' and further reduces the great complexity of early cultural phenomena in Tibet to a homogenous substrate, obscuring processes of evolution and development over the long arc of time. Nevertheless, the term 'indigenous' is useful when describing native or nativized cultural and religious patterns, archaic or Lamaist. Similarly, 'autochthonous' or 'aboriginal' are germane when denoting patterns of human organization and endeavor that originated on the Tibetan Plateau.

development and expression. The term archaic does not imply the erstwhile existence of a monolithic religion, either ideologically or institutionally, nor does it specify a single period or place on the Tibetan Plateau. Rather it is a heterogenous category that encompasses all cultural and religious phenomena predating the introduction of Buddhism and Yungdrung Bon. Some of these phenomena survived the expansion of Buddhism and Yungdrung Bon in unassimilated or partially assimilated forms.

Tibetan texts of a historical or quasi-historical orientation furnish valuable information concerning fighters and fighting in ancient Tibet. These sources were written as early as the 8th century CE, the *terminus post quem* for the strict historical treatment of martialism in Tibet. Nonetheless, historical literature composed in Classical Tibetan, both Buddhist (chos-'byung) and Yungdrung Bon (bstan-'byung), routinely refer to earlier periods of the Tibetan legacy. These sources place great emphasis on the political history of Central Tibet and its various proto-states and rulers beginning deep in prehistory and continuing through a line of thirty-two protohistoric Tibetan kings (btsanpo). In this wide temporal context, the military exploits of sacerdotal bodyguards, wrathful ritualists and warriors and the awards and distinctions conferred upon them are described in some detail. However, most events and personalities of early times are heavily mythologized and have been idealized for Lamaist religious consumption. There are few datable signposts or other points of corroboration in the texts themselves, and their particulars are little acknowledged in the historical traditions of other peoples. A major function of ahistorical elements in tales of prehistory was to exalt the status of rulers and prominent clans of later times, endorsing their political and religious ideologies and activities through the mantle of antiquity and ancestral privilege. However, Lamaist histories also refer to military traditions, organization and equipment that, when examined against the archaeological record, betray discernment of the distant past.

Tibetan mytho-ritual texts postdating the 11th century CE delineate prehistoric martial subjects almost exclusively within a Lamaist ambit, adhering at least nominally to the ethics and sensibilities thereof.⁴ There is also a body of archaic mytho-ritual literature from the Early Historic period that presents prehistoric personalities, places and activities. Most of these Old Tibetan language manuscripts are part of the celebrated Dunhuang and Gathang Bumpa collections but some come from other sources as well. Old Tibetan mytho-ritual texts often showcase formalized proclamations of ritual origins known as *smrang*.⁵ *Smrang* are primarily concerned with authenticating and legitimizing

⁴ On the editorial composition and religious objectives of Yungdrung Bon ritual and historical texts, see Bellezza 2008, pp. 201–208.

⁵ On the function and ritual significance of *smrang* and other types of ritual origin(s) myths (*cho-rabs*,

the practice of various ritual measures for the living and the dead. These are legendary charters for observance, not prosaic accounts of the distant past. However, they appear to be based on well-hewn customs and beliefs, furnishing considerable insight into archaic religious traditions. Where feasible, references in the *smrang* to practices, customs and material objects with martial connotations are correlated in this work to archaeological materials and processes.

The rock art, metallic artefacts and monuments of the Tibetan Plateau are valuable additions in the investigation of textual and ethnographic references purporting to chronicle elements of history and prehistory. Exploited in tandem, these discrete bodies of evidence constitute a powerful tool for assessing the character, scope and significance of warrior-related traditions on the Plateau in the Late Prehistoric era and Early Historic period. Martial phenomena beyond the purview of Tibetan textual and ethnographic sources are evaluated solely through archaeological methodologies and perspectives.

This book comprehensively catalogues armed figures in war, duels, contact sports, horseback riding, and other martial displays in the rock art of Upper Tibet (Byang-thang and Stod) produced from ca. 1200 BCE to 1300 CE. In total, around 10,000 individual compositions (some containing multiple petroglyphs and pictographs) have been documented by the author. These are located at some seventy-six sites throughout the region. Although I have written extensively on the rock art of the region, only a tangential examination of warrior and warrior-related specimens was previously undertaken. In order to more comprehensively understand the martial complexion of the Tibetan Plateau, instances of rock art from Spiti (Spyi-ti), Ladakh (La-dwags), Kham (Khams), and Amdo (A-mdo) are also assessed in this book.

Metallic objects of the Tibetan Plateau inspected in this work include weapons found in archaeologically secure excavations as well as small copper alloy heirlooms and chance finds referred to as *thog-lcags*. Materials obtained from various excavations conducted by Chinese archaeologists include copper alloy and iron arrowheads, spear points, daggers, and swords. However, the majority of such items available in publications and private collections lack a secure provenance, posing well-known problems of attribution and authentication. There were many different types of military as well as talismanic, ritual, and utilitarian objects produced in Tibet from the Late Bronze Age through medieval times subsumed under the generic label '*thog-lcags*', a folkloric rather than a functional ascription. Although these lack the contextual information so vital in

srid-rabs) in Old Tibetan mytho-ritual literature, see Bellezza 2014a; 2013; 2010; 2008; Dotson 2013; Stein 2010, p. 331; Karmay 1998, pp. 160, 246.

archaeological inquiry, weaponry, tools and horse bridle accoutrements among *thog*-*lcags* reflect martial themes and are an important supplemental source of artefacts in the study of ancient Tibet.⁶ *Thog-lcags* were regularly traded by Tibetans in premodern times and have entered the international marketplace in the last forty years, making them widely available for study.⁷

The residential and ceremonial monuments from Upper Tibet referenced in this work were charted by the author, opening a field of study hardly known prior to his work. The presence of archaic citadels and fortified settlements in Upper Tibet and Ladakh bespeak significant military-related activities in the Late Prehistoric era (ca. 1200 BCE to 600 CE). Strongholds are joined by extensive necropolises in Upper Tibet, marking the rise of more complex sociopolitical entities. These funerary complexes are instrumental in documenting a significant expansion of militarism beginning in the Late Bronze Age.

The ancient rock art, copper alloy objects and monuments of the Tibetan Plateau do not exist in isolation from adjoining regions. Of particular relevance in this work is the territory called 'North Inner Asia'.⁸ A wide spectrum of archaeological materials and processes in North Inner Asia and on the Tibetan Plateau (South Inner Asia) are established in this work as having spatio-temporal links, the products of multifarious exchanges, particularly in the Late Bronze Age and Iron Age. The comparative study of North Inner Asian rock art, portable objects and monuments permits a more accurate appraisal of the age, function and significance of Tibetan variants. The far more advanced state of archaeological research in North Inner Asia adds much to the analytical regimen undertaken in this work.

⁶ A presentation of various classes of Tibetan artefacts belonging to the Late Prehistoric era will be the subject of a forthcoming work that examines the distribution of archaeological cultures on the Tibetan Plateau.

⁷ For a preliminary assessment of the international trade in Tibetan antiquities and legal questions surrounding it, see Bellezza 2020a, pp. 9–15.

⁸ North Inner Asia, as defined in this work, encompasses eastern Kazakhstan, eastern Uzbekistan, Tajikistan, Kyrgyzstan, northeastern Afghanistan, Xinjiang (East Turkestan), the Altai, Mongolia, Southern Siberia, and the Northern Zone. The Northern Zone is comprised of regions now incorporated into northern China, including Inner Mongolia, western Gansu, northern Shaanxi, northern Shanxi, northern Ningxia, northern Hebei, as well as the northern and western fringes of the provinces of Liaoning, Jilin and Heilongjiang. For a glossary of geographic terminology also applicable to this work, see Bellezza 2020a, p. 4.

A chapter-by-chapter synopsis of the major themes and theses of the book

Chapter One of this work reviews the functions of hostile intention and language in propagating conflict and bloodshed in Lamaism (Tibetan Buddhism and Yungdrung Bon), setting the course for the study of religious and cultural corollaries of organized violence on the Tibetan Plateau over the long haul. Concepts of warriorhood, metaphors of bravery and strength, fighting styles, and military paraphernalia were all exploited for sectarian and political ends in the second millennium CE. This calls into question the role of Lamaist ethics in both restraining and encouraging violent activities. As is discussed, tales of the past lives of the Buddha are replete with martial imagery and have been harnessed by Tibetan hierarchs and political institutions to rationalize attacks against enemies, raising moral quandaries addressed through different lines of religious belief and philosophical reasoning. Mention is made of well-known documents written by the Fifth Dalai Lama espousing war as an instrument of state control. Much of the call to arms and aggression in Lamaist discourse exists in the realm of ritual and tantra and is symbolic and visionary in nature. However, the real consequences that destructive magic were envisioned to have (e.g., the repulsing of invading armies) indicate that the commission of harm against others through maledictions was a fully weaponized strategy. Also discussed are meditational and mystic practices in Lamaism couched in martial metaphors, the imprint of war being inescapable even in more pacific religious pursuits.

Chapter Two picks up with popular martial traditions and instances of interpersonal violence in Tibetan societies of premodern times as recorded in ethnohistorical sources. Archaic traditions surviving in the secular stream joined the stream of Buddhist intellectual and spiritual enterprises over the course of the second millennium CE, supplying an ongoing rationale for the perpetuation of conflict and combat. The chapter examines the aggression of tribesmen in the Tibetan grasslands, which mirrors that sanctioned by Lamaist personalities and institutions: the actions of state and non-state actors unfolding against a backdrop of endemic violence and strife. Examples of archery and horseracing competitions and the provisioning of shrines with weapons for personal and territorial deities cast light on popular traditions based on warlike behaviors. Many of the disturbances propagated by pastoralist groups were generated in internecine feuds, pitting clans, tribes and other factions against one another in cycles of violence that were difficult to control. The work makes clear that banditry of various causes was rife in Tibetan pasturelands, encouraging the conservation of ancient warrior traditions. Also singled out for comment are Tibetan folk songs from midwestern Tibet that encapsulate

the ethos of fighting for honor and respect. This song cycle glorifies personal prowess, heroism and victory. Animal sacrifice among non-Lamaist or nominally Lamaist priests in the southern borderlands is also cited as an example of bloodshed reinforcing societal values connected to belligerence. Finally, the utilitarian, ritual and ceremonial functions of the arrow are described. The arrow is the Tibetan weapon and symbol of manhood par excellence, an object recurring throughout the rest of the book.

Chapter Three is devoted to the divine paragons of martialism, spirit figures believed to fill the Tibetan landscape with allies and adversaries. A comprehensive picture of the doctrinal structures governing protective deities is given so that the cultural and religious roles of numinous warriors presiding over combat and meting out protection can be fully appreciated. The cultural model for Lamaist and popular practices and ideas pertaining to combat and aggression lie in literature dedicated to the cult of protective deities, which accommodate these traditions under the banner of faith and obedience. In Classical Tibetan literature, a distinction is made between protective deities of worldly and otherworldly rank, each with their own morality and aptitude. It is the worldly spirits who frequently forge the strongest and most useful bonds with combatants and others involved in risky activities. Another distinction delineated in this chapter is that of native versus Indian martial divinities. These are viewed through the syncretism of Lamaist doctrine and iconography. Several famous otherworldly gods in the guise of morally just warriors are considered. Then the spotlight is placed on the lords of mountains, archetypal heroes who bridge the divide between archaic and Lamaist religious traditions. The work treats mountain gods and the classes of elemental spirits to which they belong in Old Tibetan literature, establishing archaic origins and linking earlier practices and beliefs with those fostered in the second millennium CE. In both the older and newer bodies of Tibetan literature the disposition of mountain deities is articulated through martial competition and political endeavor. The iconography of mountain gods as prototypic warriors and the manner in which they are envisioned, placated and exploited in Old Tibetan and Classical Tibetan writings are expounded upon. These divulge much about the persona and aspirations of Tibetan warriors over the last 1200 years. In Upper Tibet, Thang-lha, Rta-rgo and Gangs-ri lha-btsan stand tallest among this group. Some mountain deities are female, clearly indicating that martial identification in Tibet had feminine aspects as well.

Chapter Four continues with an analysis of dedicated warrior spirits in their most quintessential form. Known as *dgra-lha* (enemy god), this class of spirits enjoys close ties to mountain gods but they have also acquired meditational and devotional associations in Lamaism. This most cherished embodiment of the martial archetype in the Tibetan pantheon has assumed many symbolic functions in war, travel, and spirit-mediumship,

becoming an icon of martialism and masculinity. The leader of the *sgra-bla* (*sic*) in Yungdrung Bon is a female figure alluding to a matriarchal component in the ancient cultural mix of Upper Tibet. References to warrior spirits in Old Tibetan literature are tendered in an exploration of their historical origins, revealing their zoomorphism and essential roles in military and political undertakings during the Tibetan imperium. The chapter goes on to inspect the place of warrior spirits in Yungdrung Bon, which has preserved much of the lore and iconography contained in Old Tibetan manuscripts, while at the same time elevating them to an otherworldly status. The overlap in the character and functions of warrior spirits in Old Tibetan and Classical Tibetan sources signals more than a millennium's worth of cultural and religious continuity. Evidence

Chapter Five assays concrete aspects of warriors and war in the Imperial period (mid-7th century to mid-9th century CE), complementing their more lyrical treatment in the previous two chapters. The administrative and military organization of the Tibetan empire is reviewed through Tibetan written records, divulging the existence of a highly militaristic society bent on foreign conquest. The figurehead of this empire was the btsanpo, the supreme personification of martial aptitude and supernatural magnificence. Magical symbols regarding the charisma and bravery of the *btsan-po* and a draconian legal code helped enforce imperial rule and military command over a vast polity stretching across the Tibetan Plateau and beyond. A survey of Tibetan military institutions, battlefield tactics and strategies, and the provision of equipment is relayed through classical and modern texts, much of which is derived from unspecified written and oral sources. Old Tibetan manuscripts, including a recently discovered military legal text, confirm vital aspects of the constitution of the imperial army. These military-related sources augment information on martialism detected in archaic funerary ritual texts. The evidence gathered concerning the state of military science in the Imperial period indicates that the Tibetans were a highly effective fighting force, their historical successes in battle undeniable proof of this. The work proceeds to describe weapons, uniforms, insignia, and technologies favored by imperial troops. Particular attention is paid to the lexicon of military terms and their linguistic roots. The historical and cultural qualities of military gear are also detailed, setting the agenda for their exploration in more ancient contexts in succeeding chapters. Of special interest is the ritualism and mythology surrounding the horse, an animal that exercised an essential role in combat and martial ideology.

Chapter Six delves into Buddhist and Yungdrung Bon historical and quasihistorical sources for military traditions purportedly belonging to the Late Prehistoric era. Although the treatment of prehistoric battle and other strident matters in Tibetan literature is communicated through myth and legend, many of the arms, armaments and military awards described are also part of the imperial record, hinting at long-term technological and cultural links. Nonetheless, prehistoric martial motifs and tropes in Classical Tibetan texts are shrouded in literary innovations that gathered momentum in the 10th and 11th centuries CE. These pertain to the archaization of Lamaist content and the readjustment of archaic content to reflect Lamaist tenets and ideals. Adjusting for these editorial distortions, the work probes the militaristic roots of Tibetan proto-states and the origins of the popular weapons defining them. The style of combat in prehistory is also considered from several Yungdrung Bon sources. The final part of the chapter deals with the martial deeds, regalia and rewards of priestly and royal personalities, as they were envisioned by later authors. The intimate picture of prehistory thus drawn sets the stage for archaeological perspectives offered in the last three chapters of the book.

Chapter Seven explores actual examples of Tibetan armaments predating the Imperial period and analyzes their material and abstract qualities. Some of the arrowheads, spearheads and swords presented here come from excavations in Far Western Tibet conducted by Chinese archaeologists in the last quarter century. These objects were part of a cultural and technological revolution that took place in the Late Prehistoric era, fundamentally altering the face of conflict on the Tibetan Plateau. Archaeological discoveries corroborate certain claims in Tibetan literature about prehistoric warcraft. These also identify the antecedents of arms deployed in the Imperial period. None of this would be surprising to traditionally minded Tibetans, who have regarded the bow and arrow and the sword as defining features of their civilization since deep antiquity. Copper alloy weapons in Tibet are tracked to the Late Bronze Age, although even earlier origins for them cannot be discounted. Weapons as political and economic instruments of dominance are elucidated by probing cultural and technological advances in Far Western Tibet, exposing the existence of a fully mature Iron Age culture beginning ca. 500–300 BCE. A study of copper alloy anthropomorphic figures of the *thog-lcags* class depicting swords, armor and horses makes up the second part of the chapter. These rare objects tell us much about how Tibetans envisioned warriors and the arms they bore in the Late Prehistoric era. The last section of the chapter traces the origins and development of Tibetan armaments through analogous examples from other territories in Eurasia. These demonstrate that Tibetans were heavily impacted by technological and cultural upheavals erupting outside the Plateau. Through comparison with those in North Inner Asia, arrowheads, the recurve bow and other weapons help illuminate the technological evolution of warfare on the Tibetan Plateau prior to the Imperial period.

Chapter Eight is focused mostly on Upper Tibetan monuments in the Late Prehistoric era, further identifying cultural and technological factors that spurred on the development of martialism starting in the Late Bronze Age. Archaeological findings from North Inner

Asia contribute much to an understanding of changes to the social, political and economic landscape of Upper Tibet prior to annexation by the Tibetan empire. A highly important factor in the tenor of warfare emerging in the Late Prehistoric era was the perfection of horseback riding. Adduced from evidence obtained in North Inner Asia, it is hypothesized that equestrian skills reached Upper Tibet from the north in the Late Bronze Age. Particular attention is paid to the contribution of horseback riding and mobile pastoralism in growing social inequality and political entanglement, motive forces in the heightened conflict recognizable in the archaeological record of Upper Tibet in the Late Bronze Age and Iron Age. After setting out North Inner Asia's formative role in shaping militarism in Upper Tibet, the focus shifts to two major groups of ancient monuments in the region: arrays of pillars appended to temple-tombs and strongholds emplaced on summits. The archaeological evidence vetted indicates that these classes of ceremonial and residential structures were founded as early as the Late Bronze Age. The architectonic status of these structures, including the use of stone corbelling, underscore the advanced technical nature of the necropolises styled 'long stone grid' and the hilltop citadels. This architecture verifies that Upper Tibet conformed to basic cultural trends in other regions of Inner Asia, characterized by increased sociopolitical complexity and the rise of more organized forms of warfare. As portrayed, these monuments also mark an economic watershed, the consolidation of physical and human resources for the task of large-scale construction, as well as the increased centralization of the ruling classes. Although textual accounts furnish largely fanciful narratives about strongholds and war in early Upper Tibet, the archaeological evidence appraised in this chapter indicates that they also enshrine valid memories of the remote past.

Chapter Nine reconnoiters the martial rock art of the Tibetan Plateau, drawing from the embedded illustrations and the catalogue of images that follows. Tibetan rock art is subject to cross-cultural comparison and analysis with North Inner Asia serving as a baseline reference. Produced in the same time frame and locations, rock art is the graphic counterpart to fortifications and necropolises on the Western Tibetan Plateau.⁹ A perusal of the more personalized tableau of ancient activities and beliefs in combat-related rock art helps clarify Tibetan textual accounts of weaponry and dress. Rock art also rounds out data regarding the beliefs and symbolism of war gained through a study of objects and monuments. As the bulk of rock art on the Tibetan Plateau spans the Late Bronze Age to the early second millennium CE, it is an excellent tool for reexamining martial themes that run through the book, the artistic recapitulating the textual, oral and

⁹ Comprised of Upper Tibet, Ladakh, eastern Baltistan, Spiti, and Transhimalayan extensions of western Nepal.

archaeological. The martial rock art of Upper Tibet, Ladakh, Spiti, Kham, and Amdo are compared in order to isolate their common and contrastive features. These comparisons provide much insight into the variable complexion of the Plateau in the Late Prehistoric era and Early Historic period. Although there were vigorous human interactions across the Plateau in those times, regional differences in rock art delineate key cultural and economic disparities. These variations suggest that the Plateau was comprised of distinctive orders of peoples, just as is averred in Tibetan historical materials. Much attention is given to parsing the function of rock art that conveys competition, struggle and violence. Rock art in Inner Asia is shown to be primarily a conventionalized picture of combat-related activities, not a literal record of pedestrian events such as the operational details of battles. Like Tibetan monuments and objects, the rock art of the Plateau helps define a transcultural sphere of cultural and technological interaction encompassing all of Inner Asia in the Late Prehistoric era.

Tibet and war in the global setting

The causal factors involved in the origins and functions of war are highly complex and are still disputed by scholars. Great variations in the archaeological, ethnographic and historical records of warfare worldwide complicate any attempt at producing an overarching theory about its causation. Two main lines of Western argument on the beginnings and utility of war are traced through the discrepant theories of Thomas Hobbes (1588–1679 CE) and Jean-Jacques Rousseau (1712–1778 CE).¹⁰ Hobbes believed that individuals are fundamentally pitted against one another in the pursuance of resources and power, a tendency that can only be tempered by stringent laws and absolute rule. Rousseau argued that humans living in the primeval natural state were fundamentally pacific. He saw war as an outcome of the gross injustices and loss of liberty ushered in by the development of civilization and perpetuated by the modern state. These contending arguments have been rearticulated over the last two centuries in a number of philosophical contexts from the social Darwinism of the 19th century to the anthropological, sociobiological and cultural ecology theories of the 20th century.¹¹

¹⁰ For a critical analysis of the influences of Hobbes and Rousseau on Western thinking about war, see Dawson 1996. Dawson attempts to synthesize more than two hundred years of conflicting ideas on the nature of war, putting forward that it is largely a product of cultural and environmental forces reinforced by human evolutionary imperatives, both of which are shaped by ever-changing historical circumstances.

¹¹ One the most influential anthropological thinkers of the 20th century considering the causes of war was Margaret Mead. In a well-known essay first published in 1940, Mead maintains that war and its ideological and social expressions are fundamentally cultural inventions (composed of learned behaviors), rather than a biological imperative or product of inevitable social pressures (Mead 1990). Consequently, the abolition

Martin and Harrod (2015) review several studies that examine evidence of violent encounters in human skeletal remains. Using bioarchaeological methods informed by social anthropological theories, these authors (*ibid*.) conclude that violence is a culturally mediated constellation of assorted behaviors, which is historically contingent and contextualized within political, social and economic systems.¹² Wilson and VanDerwarker (2016: 3, 4) summarize theoretical approaches to the investigation of warfare and other forms of violence, observing that these fall into three categories: 1) biological (often built around the assumption that reproductive success is a prime motivator for engaging in hostilities),¹³ 2) material (structured around the premise that safeguarding the obtainment of critical resources such as food is a main driver of conflict), and 3) sociopolitical (dependent on various social factors such as administrative structures, hierarchal relations and social identity dynamics).

Whatever the ultimate causes, violence in pursuit of strategic political and economic goals is very widely (but not universally) represented in human societies.¹⁴ LeBlanc (2005) and Arkush and Stanish (2005) observe that researchers have often imprudently discarded evidence for warfare. In the last two decades, combat-related activities have been exposed as more far-reaching in the archaeological records than was previously thought. Warfare – the use of organized lethal violence by social groups pursuing conflicting goals – began in various places and can be traced back in the archaeological record at least 10,000 years (Cioffi-Revilla 1996: 8–15). However, osteological evidence

of war is a matter of the right cultural choices being made (*ibid*.). While her idealism is of great moral weight, Mead's unifocal cultural approach is not widely shared by modern archaeologists investigating the origins and functions of warfare.

¹² Hanson (1999: 384) questions trends in anthropology and sociology of the second half of the 20th century to view warfare as a social and moral aberration, reminding us that both the Greeks and Romans, while seeing the loss and destruction caused by war as tragic, acknowledged it as a natural part of the human condition and a necessary measure to vanquish recurring evil. In his work, Hanson (1999) calls for a more balanced view of how war was envisioned in ancient times, which he goes on to review through classical sources that set the ideological stage for the 'total war' philosophy of Western societies.

¹³ Thorpe (2003: 146–148) criticizes evolutionary theories of the origins of warfare as stemming from the biologically ordained urge to kill, citing prominent culturally prescribed exceptions to them. Thorpe (*ibid.*, 149) notes that using chimpanzees to determine the sociobiological basis of warfare is biased by species selection, observing that bonobos for instance show few signs of violence, hunt little, and are not dominated by males.

¹⁴ For a dissection of the interpersonal dynamics of violent confrontation and the different forms it manifests (including in the way wars are organized and prosecuted), see Collins 2008, Ch. 1. While Collins acknowledges that social factors loom large in the etiology of violence, he stresses the psychological context: one marked by fear and confrontational tension. While not devaluing individual agency in explaining violence, Martin and Harrod (2015) prefer a more systemic approach to understanding violence, seeing it fundamentally as a historical and social process. They write (*ibid.*, 119), "...when violence is

for violent death in Europe and North Africa in the Paleolithic is limited and often inconclusive (Thorpe 2003: 150–153).¹⁵ Thorpe (*ibid.*, 153–160) reviews skeletal evidence for violent death, warfare and cannibalism in Mesolithic Europe, concluding that it occurs more regularly than in the Paleolithic, but the record is culturally highly variable, pointing to sundry immediate causes to which no single sociobiological or evolutionary anthropological theory can be adequately applied. Neolithic peoples, it appears, engaged in primitive warfare that was transient, poorly organized and ritualized in nature, and rarely employed fortifications (Hacker 1997: 462, 463). In the ethnographic context, primitive warfare is waged voluntarily on a small scale by acephalous non-state societies and consists of surprise raids, ambushes, feuding, chance encounters, and duels (Glowacki and Wrangham 2013).¹⁶

The earliest reliable historical documentation for large-scale warfare comes from Mesopotamia (ca. 3000 BCE) and China (2500 BCE; Cioffi-Revilla 1996: 4–7). Military institutions in Eurasia are associated with the advent of civilization, hierarchical societies, state or near-state polities, specialized weapons made of metals, and the soldierly vocation. Early soldiers on the continent fought in formation, armed with the mace, axe, sword, spear, shield, and bow and arrow. The creation of standing armies began in the

viewed as part of the social fabric of human cultures, the suffering of humans at the hands of others is in fact patterned, purposeful and operationalized just as any other social system..."

¹⁵ The bioarchaeological record has been shown to be very complex and difficult to read, not only for the Stone Age but for later periods as well. Martin and Harrod (2015: 123, 124) discuss the challenges of discerning intentional violence from other kinds of trauma, mortuary practices, and postmortem changes in the osteological record, especially when human remains are disarticulated and fragmentary, as they often are. For a survey of bioarchaeological indicators for violence-induced trauma and their antemortem and perimortem consequences in a variety of geographic and chronological settings, see Knüsel and Smith 2014.

¹⁶ Ethnographic findings may provide some insight into the motivations behind primitive forms of warfare in ancient times. However, drawing parallels between contemporary and ancient peoples is very difficult to sustain, as anthropological variability may be so great as to render any comparisons drawn as irrelevant. Nevertheless, wider themes present in the contemporary ethnographic record have general correspondences to the conduct of war in ancient societies. For instance, there is documentation for primitive warfare augmenting the reproductive success (more wives and offspring) of warriors. A case in point is the Nyangatom of the South Sudan and Ethiopian borderlands, agro-pastoralists customarily involved in intertribal conflicts. It has been shown that Nyangtom warriors who were more active in raiding in their youth eventually generated added bridewealth in livestock, permitting them to have more wives and children than other men. On the Nyangatom, see Glowacki and Wrangham 2015. Similarly, Yanamamö warriors who have killed in blood revenge attacks enjoy more wives and offspring (Chagnon 1988). These homicides enhance the status of warriors and contribute to the success of their kinsmen as a whole, adding to the perpetrators' attraction as marriage partners (*ibid*.). Borrowing from ethnographic studies carried out across the globe, Glowacki and Wrangham (2013) hold that rewards comprised of intrinsic cultural factors (increased prestige, access to females, etc.) are a greater motivating force in primitive warfare than material rewards or slaves obtained through plunder.

first millennium BCE in the neo-Assyrian empire, spreading subsequently to Persia, India, China, and other countries, which gave rise to military traditions prevalent in the classical world (Hacker 1997: 465).

Many ancient societies accepted that their gods sanctioned war, and attempting to act in concert with them in warfare was a basic military tactic (Goodman and Holladay 1986: 151). Generally speaking, victory was insured through customary connections with favored deities, sacrifices, prayers, rituals, and celebrations, and by avoiding activities seen as negative (cf. *ibid.*, 152). Thus, ideology and cult practice were closely tied to martial culture and the waging of war. As I shall show in the course of this study, historical and archaeological sources of evidence demonstrate that ancient Tibet adhered to these worldwide cultural and social patterns. This should come as no surprise, for martialism is born not only from aggression and the will to dominate but also from the need to strive for and achieve difficult goals in uncertain and dangerous conditions. Nonetheless, the forms of primitive warfare practiced by tribal and other non-state groups in the historical and ethnographic records were and are extremely diverse, with the overarching themes of martial cult practices and violence articulated in myriad ways.¹⁷

The rise of nomadic pastoralism, production of new types of weapons and the widespread adoption of riding horses in North Inner Asia greatly increased the scope for armed conflict in the Late Bronze Age and Early Iron Age.¹⁸ The effectiveness of nomadic combat in the steppes was based on increased mobility, tactical nimbleness, and a high level of social cooperation. It arose from a way of life characterized by regular movement on horseback over broad areas as well as collective hunting expeditions, and reliance on livestock was essential. The presence of cognate weaponry and rock art consisting of the horse and rider, dueling figures and hunting scenes on the Tibetan Plateau indicate that similar technological, economic and social developments were underway there beginning as early as the Late Bronze Age. These paved the way for new forms of martialism and military organization with a pan-Inner Asian purview.

Novel types of combat and militarism on the Tibetan Plateau went hand in hand with agro-pastoralism, technological advances and greater sociopolitical enmeshment, paralleling analogous developments in North Inner Asia beginning in the Late Bronze Age.¹⁹ Evidence (artistic, monumental and artefactual) demonstrates that these processes had their own adaptive, material and ideological configurations in Tibet as part of the

¹⁷ For case studies of the variable causes, conduct and cessation of small-scale warfare in world cultures, see Dennen 2014.

¹⁸ The 'Early Iron Age' in North Inner Asia is generally dated ca. 800–300 BCE.

¹⁹ On these dynamic changes and their effect on sociopolitical organization in Mongolia in the Late Bronze Age and Iron Age, see Honeychurch 2015.

unique patterns of cultural, economic and political expression manifest on the Plateau. Although vigorous interactions crisscrossing the Tibetan Plateau can be postulated from the archaeological record, there are also indications that this vast territory of more than 2,000,000 km² did not host a monolithic cultural entity in antiquity, nor does it today. Stark differences in funerary and residential structures and rock art on different parts of the Plateau reflect considerable cultural, social and economic diversity there. This diversity is reinforced by the variable environmental and climatic conditions existing in Tibet. Tibetan historical literature also attests to significant linguistic and ethnic divisions existing in the Late Prehistoric era. Buddhist and Yungdrung Bon texts relate that the Tibetan Plateau was divided into a number of kingdoms until the time of the empire in the 7th century CE, each with its own language, clans and religious traditions. Consequently, martial traditions were not uniform across the Plateau before the dawn of the empire in the 7th century CE. Furthermore, military factors contributing to territorial expansion and state formation took a number of different trajectories on the Plateau during the Late Prehistoric era.²⁰

The greatest quantity of identifiable archaic fortified installations on the Plateau is located in Upper Tibet. However, archaic strongholds were also built in Ladakh and Central Tibet and in much smaller numbers on other parts of the Plateau. The highly evolved monumental infrastructure of Upper Tibet in the Late Prehistoric era accords it a central role in gauging the development of martialism and militarism on the Plateau. As in North Inner Asia, the establishment of complex funerary monuments in Upper Tibet beginning in the Late Bronze Age heralds the emergence of more complex social, political and economic systems.²¹ However, unlike most of North Inner Asia, Upper Tibet also boasted extensive permanent settlements comprised of strongholds and other elite residences. These structures founded on summits appear to have variously functioned as citadels, garrisons, palaces, temples, hermitages, and so on. Archaeological findings indicate that these sites began to appear sometime in the first millennium BCE.²² The highly developed monumental underpinnings of Upper Tibet are reflective of one or more well-organized polities characterized by centralized authority, a well-defined

²⁰ For the unique mix of cultural factors in operation in Upper Tibet and other parts of the Western Tibetan Plateau, see Bellezza 2008, pp. 92–108, 122–126, 189–199, 543–557; 2014d, Chs. 7, 8; March 2016 and January 2017 *Flight of the Khyung*; Bruneau and Bellezza 2013; Bellezza 2018; Bellezza 2020a; 2020b; *infra*, Chs. 7, 8.

²¹ On the foundation of Long Stone Grid (LSG) necropolises, a defining funerary monument type of the region, see Bellezza 2008, pp. 83–108; December 2016 and January 2017 *Flight of the Khyung*; *infra*, Ch. 8.

²² On data indicating the earliest phase of large edifice construction, see Bellezza 2008, pp. 35–37; 2014b; 2014d, Ch. 5.

sociopolitical hierarchy, and yawning economic disparities. To what degree state structures evolved in the region in the Late Prehistoric era remains unclear. It is still to be determined whether political development on the Byang-thang and Stod in the Late Prehistoric era advanced beyond a confederacy: a polity organized upon chieftains, kinship ties and ritual centers. Nevertheless, like the Xiongnu (Hsiung-nu) of North Inner Asia, Upper Tibetans seem to have possessed the requisite elements for state formation in the late first millennium BCE. Moreover, Tibetan historical documents hold that Upper Tibet supported two kingdoms: Zhang-zhung and Sum-pa, but the precise territorial extent, political organization and duration of these polities remains unknown.²³

It appears that many martial elements of the first millennium BCE in Upper Tibet persisted during the Protohistoric period, which can be viewed as an anachronistic extension of the Iron Age in terms of cultural and technological progress. Therefore, these two periods could also be referred to as an 'Early Iron Age' and 'Late Iron Age'. Some of the temporal linkages traced through rock art, copper alloy figurines, weaponry, and funerary and fortified structures in the era of iron extended into the Tibetan imperium. In that time, art, technology and architecture related to martialism underwent further development. For instance, the light javelin of horsemen, archery, and big game hunting techniques invented in the Late Prehistoric era continue to appear in rock art of the Early Historic period. However, there were also seminal technological innovations in military provision and organization during the Imperial period. At that time, Tibetans awakened to religious, aesthetic, manufacturing, and architectural undertakings circulating in India, Iran, North Inner Asia, and China, enriching their civilizational profile. Yet, this new chapter in cultural and technological development of Tibet did not efface many of the more deeply seated martial customs and technologies.

The scale of warfare appears to have expanded considerably in the Imperial period. A Sui dynasty record of the late 6th century CE states that the Tibetan King Gnam-ri slon-mtshan had an army of 100,000 men and his kingdom extended to the frontier with India (Richardson: 1998: 133). This estimation of the strength of the Tibetan army under the *btsan-po* rulers is probably not too far off the mark, as this force went on in the ensuing decades to consolidate control over the entire Plateau. The subsequent conquest of outlying territories required even a larger Tibetan military force. War and strife continued in Tibet throughout the medieval period. Bow and arrows, swords, daggers, spears, and shields remained the mainstay of Tibetan fighting contingents until the

²³ On the potential historical depth of Zhang-zhung and Sum-pa, see Bellezza 2018; June 2013 *Flight of the Khyung*.

18th and 19th centuries.²⁴ What's more, some ancient ceremonial and ritual aspects of war and warriors were just as persistent as the weapons themselves. With the Chinese Communist occupation of the bulk of the Tibetan Plateau in the mid-20th century and the institution of the modern era, traditional warfare and its cultural, sociopolitical and economic undergirding disappeared. In contemporary Tibet, martialism is confined to mere symbolic, ritual and sportive functions.

A chronology of the archaeological resources utilized

Here I set forth methods for gauging the age of the rock art, metallic objects and monuments upon which this study relies. With few exceptions, these archaeological materials have not been subject to absolute dating techniques.²⁵ To compensate for this lack of chronometric data, I have devised a system of non-direct methods to assess their age. Founded upon visual and tactile inspection of the physical characteristics of archaeological materials to build a relative chronology, these methods permit an understanding of what materials are older in relation to others. The regimen employed yields provisional chronological values of limited resolution and unverified accuracy. As most of the chronological attributions provided in this work have not been checked through more objective testing methods, they must be viewed as suggestive rather than prescriptive of the age of the materials discussed. Also, the relative dating furnished in this work is open to adjustment should new findings warrant it.

In relative dating methods, the age of rock art, metallic objects and monuments is inferred through an appraisal of their intrinsic and acquired qualities. Intrinsic qualities of archaeological materials are those they were produced with, including their original style and form, structural elements, and the techniques of manufacture. Acquired qualities include signs of prolonged use, degradation and other alterations that have

²⁴ Although firearms were introduced in Tibet from China, India and West Asia at an earlier date, evidence for their use in Central Tibet in battle before the end of the 17th century is lacking (Dotson 2009a: 198).

²⁵ A wide array of methods in the physical sciences has been developed to test organic and inorganic archaeological materials, providing objective indications of their age. Methods for quantifying absolute age such as radiometric analysis, thermoluminescence, dendrochronology, and lichenometry measure physicochemical alterations in the properties of substances and associated natural phenomena that exhibit determinable rates of chronological change. Scientific tools are also applied to ascertain the geographic sources of human remains, metals, ceramics, and other physical objects. For a host of reasons, the objective means of testing archaeological materials on the Tibetan Plateau has been slow to gain ground. Although many strides in the application of scientific methods and tools in archaeology have been made in recent years, a more rigorous approach across the board is sorely needed. On methods of direct dating attempted in the PRC (Tibetan Plateau included), see Bednarik 2015; Bednarik and Li 1991.

transpired since the production of rock art and metallic objects (e.g., build-up of mineral encrustations, patinas and corrosion products, wear, fracturing, fading, etc.) and the construction of monuments (e.g., structural disintegration, erosion, loss of density, lichen buildup, etc.).

The inductive methods used to estimate the age of archaeological resources belong to two interrelated systems of analysis: typology and seriation. Dating through typological analysis relies on an assessment of the physical attributes of rock art, objects and monuments. Composed of their intrinsic and acquired qualities, the properties of these materials are assumed to have changed in fairly consistent ways over time. A morphological component of typology dating pertains to analyses of variations within the structural arrangements and methods of fabrication of objects and monuments. These are also inferred to be related to the passage of time. Dating through seriation dating incorporates both typological and morphological data to organize assemblages of rock art, metallic objects and monuments into sequences according to their physical properties and the manner and frequency in which these occur.²⁶ Provided that serial changes are distinguished from functional factors,²⁷ categories of archaeological materials ordered in this manner reflect a chronological progression. When sample sizes are large enough, the seriation of rock art, objects and monuments facilitates a grasp of their chronological development. Periodization through seriation contributes to a better understanding of the changing social, economic and political relationships shared by archaeological materials.

Although progress has been made in the absolute dating of rock art, a widely accepted protocol has not yet been established. A variety of methods are being developed to objectively determine the age of rock art but corroboration of their efficacy and reliability is still pending.²⁸ The relative chronology I have devised for Upper Tibetan

²⁶ Seriation works best across the full gamut of classes of objects, rather than among subgroups of them. Unlike large assemblages of ceramics and stone tools that exist in many archaeological contexts, the seriation of the relatively small classes of Tibetan rock art, metallic objects and monuments currently available for study does not lend itself to the application of formal statistical tools. Atemporal changes in Tibetan archaeological materials further complicate the use of statistical methods for postulating chronological values.

²⁷ Chronological seriation is complicated by functional factors unrelated to the periodization of archaeological assets. The personal proclivities of artists and builders, variable economic allocations of time and resources, and disparate social forces all may contribute to the more rapid adoption or abandonment of specific physical attributes of rock art, metallic objects and monuments. Anomalies that defy seriation operate within specific geographic areas and/or among specific groups of people. Uneven influences exerted on the constellation of traits making up an artform, object or monument can skew or obscure changes ordained by time.

²⁸ On recent advances in the absolute dating of rock art worldwide, see Ruiz and Rowe 2014; David and McNiven 2019.

rock art – inferring age through typological analysis and seriation – is based on the following criteria:²⁹

- Stylistic and thematic categorization of motifs, subjects and scenes
- Appraisal of the general characteristics of the contents of sites
- Gauging ecological conditions depicted in rock art
- Assessment of the techniques used in carving and painting
- Examination of the degree of erosion and re-patination (chemical alterations to rocks surfaces) of carvings and the degree of browning and ablation of pigments
- Determination of the placement of palimpsests
- Rock art associated with particular historical contexts in textual sources
- Paleographic assessment of Tibetan inscriptions accompanying rock art

The typological criteria employed in the relative dating of metallic objects is as follows:³⁰

- Analysis of the style and form of objects
- Assessment of the identity and functions of objects
- Appraisal of techniques used in the manufacture of objects
- Inspection of the color, texture, luster, and density of metals
- Objects with ornamentation comparable to Tibetan rock art
- Objects associated with particular historical contexts in textual sources
- Paleographic assessment of objects with Tibetan inscriptions

The identification of archaic edifices (structures exhibiting physical and cultural qualities that originated before the introduction and spread of Lamaism) in Upper Tibet is based on the following criteria:³¹

- Residential monuments exhibiting archaic construction features (e.g., corbelled roofs, all-stone composition, extremely thick and buttressed walls, well-fitted seams, drystone masonry, herringbone and slab fabrics)
- Residential monuments exhibiting archaic design features (e.g., low ceilings, small windowless cells, tiny entranceways, rounded corners, irregular ground plans, subterranean and semi-subterranean aspects)

²⁹ On relative dating, see also Bellezza 2008, pp. 162, 163; 2017; December 2013, July 2015, July 2016 and April 2017 *Flight of the Khyung*; Bruneau and Bellezza 2013; Bellezza 2020a.

³⁰ For a synopsis of more direct scientific methods used to date and source metallic objects, see Bellezza 2020a, pp. 8, 9.

³¹ For more information on these criteria see, Bellezza 2014b, pp. xv–xix.

- Non-residential monuments exhibiting archaic morphological traits (e.g., 'megalithic' funerary structures, large burial mounds and enclosures; stone slabs embedded in the ground)
- The placement of monuments in disused environmental niches (e.g., defunct agricultural enclaves, now waterless areas, locations above 4900 m, extensive parietal structures, situation on headlands and islands)
- Monuments at sites attributed to personages, events, facilities, and locations associated with the Zhang-zhung and Sum-pa kingdoms in Yungdrung Bon literature
- Monuments attributed in local oral traditions to non-Buddhist or nominally Buddhist personalities (e.g., *bon-po*, Mon, Sing-pa, figures in the Gling Ge-sar epic, etc., and the pantheon of local spirits)

The dating of each class of archaic monuments based on typological analysis in Upper Tibet is still in its infancy. It remains difficult to assign chronological values to morphological variations in residential structures, except in a few cases where calibrated dates have been obtained for associated organic remains. An exception to this is allstone corbelled buildings where some chronological progression has been discerned in their design and construction. Those edifices exhibiting architectural features associated with Buddhist monasteries (e.g., larger doors and windows, internal courtyards and galleries, Lamaist ornamental features, etc.) are generally attributable to the Early Historic period.³² There is much morphological variability in funerary structures (both non-burial and burial) in Upper Tibet, but these have not been adequately classified chronologically. Although radiocarbon dating of organic remains discovered inside residential, ceremonial and burial structures in Upper Tibet have yielded data crucial in the chronometric assessment of individual examples,³³ the assaying of many more samples from a wider range of sites is required to devise a reliable seriation of the sundry classes of archaic monuments in Upper Tibet.

The relative dating of Tibetan archaeological materials based on typology and seriation employs comparative analyses to check and refine chronological values obtained through an examination of their intrinsic and acquired qualities. The comparison of Tibetan rock art, metallic objects and monuments featured in this study with analogous classes of materials fixed in time through both relative and absolute methods adds considerable weight to typological dating. Determining how and to what degree

³² On these later all-stone edifices, see Bellezza 2015; 2014b, pp. 314–322, 341–344, 351–354.

³³ See Bellezza 2008, pp. 37, 38, 91, 127, 128, 141, 146; 2014b, pp. 141, 150, 217, 274, 457; 2014c, pp. 133, 481, 515, 525.

archaeological assets are aesthetically and technically alike is procured through analogical reasoning. As to the major principles of analogical reasoning adhered to in this work, they can be summarized as follows:

- The more similarities there are between the art, objects and monuments being compared, the stronger the analogy
- The more that is known about the age, source, transfer, and function of cognate archaeological materials, the stronger the analogy
- In determining the validity of an analogy, the nature and extent of the similarities present must be weighed against differences observed therein
- In drawing conclusions, multiple analogies are stronger than a single analogy

Analogies predicated on objective criteria (e.g., structural metrics, manufacturing techniques, etc.) tend to be more reliable than those based on more subjective criteria (e.g., form, style, imputed function, etc.). Moreover, analogies made between archaeological materials with demonstrable spatio-temporal links are more robust than those where causal relations have not been identified. Adhering to a basic set of analogical principles aids in systematizing and validating cross-cultural comparative approaches. Furthermore, the identification of analogies in the rock art, metallic objects and monuments of different regions helps to diagnose the cultural, demographic, economic, and political interactions that may be reflected in them.

The comparative approach promoted in this work musters archaeological materials from the Tibetan Plateau and from outside the territory. Another approach exploited in this study is the cultural and historical comparison of rock art, metallic objects and monuments with complementary textual and ethnographic accounts. Historical and anthropological instruments are applied to archaeological materials discovered on the Tibetan Plateau and from other territories to facilitate an understanding of their chronological framework, as well as the ideological, practical and symbolic functions they may have fulfilled.

Relying on the above methods and criteria, rock art, metallic objects and monuments of the Tibetan Plateau are assigned to specific chronological categories in this work. Due to the methodological shortcomings spotlighted, time frames are defined in broad terms only. Although this chronological scheme is designed specifically for archaeological research conducted on the Tibetan Plateau, it utilizes nomenclature in accordance with the designation of analogous periods in other parts of Eurasia, particularly that of North Inner Asia. Chronological categories pertaining to the Historic era are applied both to archaeological and historical phenomena in this work. When germane to historical matters, text-related evidence (e.g., paleography, grammar, orthography, syntax, semantics, rhetorical content, etc.) underpins the formulation of chronological categories.

To enhance the rigor of the relative dating of the rock art, metallic objects and monuments in this study, a wide array of archaeological, cultural, artistic, and historical data is examined in order to better ascertain their spatio-temporal characteristics. While no amount of informed inquiry into the objects, rock art and monuments featured can address many questions regarding age and provenance, it does allow for contextualization in accordance with the physical characteristics, cross-cultural affinities and propagative forces characterizing the origins and evolution of these materials. The analyses propounded in this work help set the agenda for subsequent inquiry by embedding Tibetan archaeological resources in a comprehensive methodological template. This should continue to prove useful even when absolute dates are secured for a wider range of these physical entities.

The chronological scheme employed in this work is as follows:

I. Late Prehistoric era Late Bronze Age (ca. 1300–700 BCE) Iron Age (ca. 700–100 BCE) Protohistoric period (ca. 100 BCE to 600 CE)³⁴
H. Historic

II. Historic era

Early Historic period (ca. 600-1000 CE)

- i. Imperial period (ca. 600-850 CE)
- ii. Post-Imperial period (ca. 850-1000 CE)

III. Vestigial period (ca. 1000–1350 CE)

IV. Late Historic period (ca. 1350-1950 CE)

³⁴ It is also appropriate to refer to the Protohistoric period in Ladakh and Baltistan as an 'early historic period', because of the occurrence of non-Tibetan inscriptions throughout that time span. However, in the interests of uniformity and simplicity, one chronological scheme for the entire Tibetan Plateau is maintained in this work. Moreover, inscriptions predating the 7th century CE in Ladakh are isolated in various geographic pockets and do not appear to exemplify widespread literacy.