Excavations at Dindun, a Pre-Buddhist Village Site in Far Western Tibet

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Until very recently, very little was known of the pre-Buddhist archaeology of far western Tibet. In great part, this is due to the isolation of this region from the greater body of China and its neighbors. Although some knowledge about the early prehistory of the region was obtained by a series of western explorers, most notably Guiseppe Tucci (and more recently John Vincent Bellezza) during the early part of the 20th C., little systematic work was done there until its incorporation with the People's Republic of China in 1950. Since the 1990s, however, interest in the archaeology of far western Tibet has been sparked by the efforts of a number of Chinese archaeological institutions, including Sichuan University of Chengdu, and the Shanxi



Archaeological Institute. Of these, Sichuan University has been the most active in exploring the early prehistory of the region, and under the direction of Professors Huo Wei and Li Yongxian, major new discoveries in both the pre-Buddhist and Buddhist periods have been made.

This paper reports upon the results of archaeological excavations conducted at the Dindun site by the authors and their Chinese colleagues. The site is located on the south side of the Nag chu (Blackwater River) between the modern villages of Piyang and Dungkar, Ngari Prefecture, Tibetan Autonomous Region (Figure 1). In this paper, wewill discuss the following four topics. After a brief description of the site and its environs, we will assess the architectural remains at the site, describe some of the material culture recovered

from their excavation, and discuss one of the major discoveries at the site-the presence of standing stones (*rdo ring*) -found in three different locations on the site. We will conclude my paper with speculations on possible cultural and historical affiliations of the site.



Figure 1 General location of project area in western Tibet (from Pal 2003:12). Dindun is marked by the small "x" near Dungkar.



Site Environs and Setting

Dindun is located on the south side of the Nag chu on a high terrace which lies some 30 m above the river channel (Figure 2).

The elevation of the site is ca. 4100 m above mean sea level. The site is bounded on two sides by deep gorges, a more shallow gorge to the south, and fronts the river to the north. Although the surface of this terrace is generally



Figure 2 Area of excavations at Dindun. The extent of the rocky area is outlined.

even, it does slope sharply upward to the south. Vegetation on the surface is sparse, and consequently, surface visibility is excellent.

The most notable cultural features found on the terrace are Buddhist-era constructions, including chortens, walls, and other structural remains, two large areas of jumbled rock, one at the north end of the terrace and another to the south, and a large cleared area that lies between the rocky areas. The rocky areas have within them depressions of varying sizes that have been partially cleared of rock, and in at least one instance, one of these depressions had been excavated in the distant past. No similar depressions can be seen in



the central cleared area, although alignments of rock, presumably delineating structures, are present. None of these alignments in this area were complete in that they did not obviously close and bound a structure. The rock used to construct the Buddhist-era features was likely taken from these areas, and as we will argue, this rock is likely to have been wall fall from structures that once existed in these areas.

Architectural Remains

That the site contained architectural remains was first determined in 1999. One of the depressions at the north end of the site had been excavated by local people, and in the south wall profile, a clear sequence of preserved floors and household-related features could be observed. Prominent among these features was a stone-box hearth in the southwest corner of the structure (Figure 3). This hearth was filled with burned soil, ash, and some animal bone, most probably



Figure 3 Hearth found in looted structure in 1999.

The hearth is just to the left of the ruler.

caprid . A number of pieces of carbonized wood were recovered from this hearth, and o ne of these was submitted forradiocarbonassay. The resultant date is cal 85 BC (2065±60 rcybp); the range of the date is cal 348 BC -AD 71



(AA34861) . Unfortunately, few other structural details could be determined since these had been destroyed by the informal excavation. However, inspection of other similar, but unexcavated, depressions suggested that the structures were roughly rectangular in form. Some of these also had ashy soils in their southwestern corners, suggesting a consistent cultural pattern of hearth placement in this part of the structure.

In 2001, we began a more systematic search for intact structures that were also easily accessible since our field time was limited. We carefully inspected depressions in both the north and south ends of the site and attempted to define structure outlines in the central cleared area. Following this, we chose three areas for excavation (Figure 4): a

large depression at the south end of the site (Structure 1), a small rectangular pattern of rocks buried in the soil of the central cleared area (Structure 2), and another rectangular outline at the north end (Structure 4).

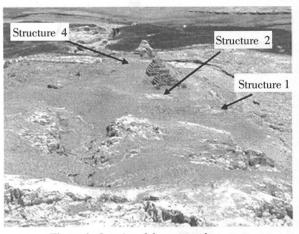


Figure 4 Location of the excavated structures.

Structure 1

This structure consists of two large, connected rooms with associated features that include stone boxes, a large bench, stairs, a





Figure 5 Structure 1

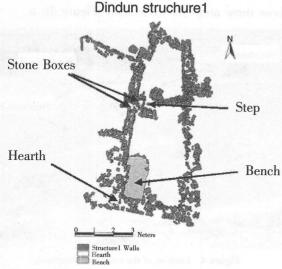


Figure 6 Plan view of Structure 1 showing feature locations.

coursed, and in some cases, modified stones. The entrance to the site is found along the west wall, where a narrow staircase is located. The

hearth, and an external wall. (Figures 5 and 6) . The overall length of the structure is 11.8 m. and it is 5 m at its widest point. The structure tapers toward its northern end. It is semi-subterranean, with the interior floor surface found approximately 65 cm below the modern ground surface on the west side of the structure. The structure was apparently cut into the slope of this portion of the site, in that its eastern wall was most probably placed at or near the former ground surface. The walls of the structure are composed of carefully



interior southwestern corner contains a soil bench or platform that is very similar to those found in modern Tibetan houses in the region. which is This bench lies slightly below the hearth complex, characterized by quantities of burned soil and ash. The hearth itself lies slightly outside the exterior west wall. Its depth and size suggests it was used for cooking. Two small stone boxes, one found at the base of the staircase, and the other in the smaller room to the north, did not contain any artifacts, but were likely to have been storage features. This is also the likely function of this smaller room. A low retaining wall was found to the west of the structure, and this seems to have been placed here to define the northern boundary of a flat, open area to the south and adjacent to the west side of the structure. This is likely to have been used as an external work space. Few artifacts were found in the fill of this structure, but some ceramics and scraps of animal bones were found on the floor surface near the northeastern corner of the bench. Likewise, the hearth had no artifacts in it aside from unidentifiable bone splinters. No obvious midden areas were found near the hearth; this suggests that trash created by the inhabitants was discarded into the deep gorge immediately to the east.

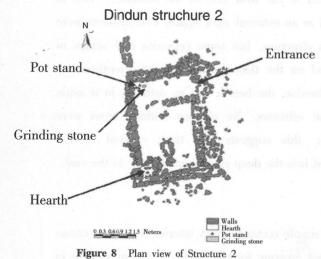
Structure 2

This structure is a simple rectangle with interior walls that create divisions of space without creating formal rooms. It measures 6 m in length by 3.7 in width (Figures 7 and 8). Unlike Structure 1, it is not semi-subterranean, but instead is defined simply by a double course of stones embedded in the ground surface. Here, the entrance is





Figure 7 Structure 2



showing feature locations.

broken grinding stone was found nearby. Four modified stones were found within the hearth, and these will be described below.

at the northeast corner: one enters a small passageway which turns to the south toward a larger interior room. Again, a hearth that is partially exterior to the structure is found in the southwestern corner of the structure. Few features were found in the structure. No storage boxes were present, although a series of piled stones in the central room may have served this purpose. A pot stand. composed of three cylindrical stones, found in the northwestern corner of the structure in the entrance passageway. A



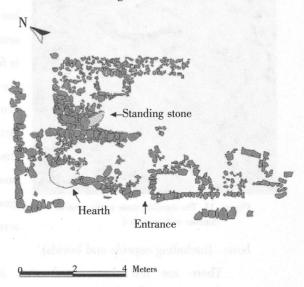
Structure 4

This structure is

much more complex than the others, but unfortunately, it has been heavily damaged by the construction of the large chortens that are found atop and around it. It is a large, rectangular structure with a number of interior rooms as well as external chambers. The structure is built upon a series of low platforms, and appears to have been surrounded on the southern and western sides by a low wall (Figures 9 and 10). The structure (not including the exterior rooms or length and 7 m in width.



Figure 9 Structure 4



walls) is at least 12 m in Figure 10 Plan view of Structure 4 showing feature locations.

Unlike the other structures, the long axis of Structure 4 runs E-W instead of N-S. There is at least one entrance on the south side of the structure



which leads into a passageway which connects to a series of interior rooms. Despite its orientation, the cooking hearth and kitchen area are still found in the southwestern corner of the structure. Given the damage to the structure, it is difficult to get an accurate assessment of the number



Figure 11 The standing stone in the western chamber of Structure 4

and sizes of interior rooms, but there are at least five. One of these is the kitchen area, and another of the most interesting is a room that contains a oncestanding stone (rdo ring) that has been pushed over out of its seat (Figure 11). This room is found on the western side of the structure. Unlike the other two structures excavated. Structure 4 had a very large amount of cultural material present, including ceramics, ground stone tools, metal scrap (bronze), and animal

bone (including caprids and bovids) .

There are few documented sites in western Tibet or the Transhimalaya that can serve as comparisons to these structures. Bellezza (2001, 2002) describes a number of probable residential structures he discovered during his Chang Tang investigations. Although these structures are made of coursed stone, many appear



ovoid or circular in plan, unlike those from Dindun. None of these structures have been dated, although Bellezza suggests that many of them are of pre-Buddhist date, and are likely affiliated with the Zhangzhung polity. This intriguing speculation remains to be confirmed.

Artifacts

Relatively few artifacts were recovered from the excavations at Dindun. The majority of these materials are ceramics (n=193) Although most are body sherds, all of the rims recovered are likely to have been from jars. Surface treatments consist of cord-marking (42%), unslipped plainwares (26%), red slips (26%), black slip (4%), and a brown slip (2%). Other decorative motifs include punctuauions and diagonal grooves or striae of varying widths. None of the sherds have been painted, and only a small percentage are thin

and finely made. These data suggest the assemblage is utilitarian. A number of lugs were recovered, and a number of these had a distinctive surface treatment-striae forming an "X" shape on their exterior surfaces (Figure 12a).

Structure 4 (with 82% of the assemblage) had all



Figure 12a Ceramic lug handle from Structure 4 showing "X" design



five types of surface treatment present, while only three types (cord-marked, plainware, and red slips) were found in Structure 1. Structure 2 had no ceramics.

Huo Wei and his colleagues have excavated a number of mortuary sites in the Piyang-Dungkar region that contain large numbers of whole vessels that have important similarities to some of the materials recovered from Dindun (Chinese Institute of Tibetology, Sichuan

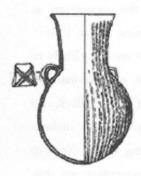




Plate 31:15 2001a

Plate 4:4 2001b

Chinese Insetute of Tibetology. Sichuan University

Figure 12b Grinding stone from Structure 2

University 2001a,
2001b) . Prominent
of these are the
predominance of
cord-marking as a
surface treatment as
well as punctuates
and striae of
various sizes. A
number of the lug
handles they
illustrate have the

"X" shape on their exterior (Figure 12b). Importantly, these sites are roughly contemporaneous with Dindun: site ZDV-M6 dates to cal 403 BC (cal 352-769 BC; 2370 80 rcybp; Beta-134690), and site ZPG-M6 dates to cal 393 BC (cal 197-531 BC; 2310 60 rcybp; Beta-134692). Dindun and ZPG-M6 overlap at two standard deviations, while only four years separate Dindun and ZDV-M6. These dates, when combined using the OxCal 3.8 R_Combine function, result

in an age range of 500-100 B.C. (Bronk Ramsey 2002) Given the substantial similarity of the assemblages, it is probable that we are looking at the same cultural tradition being represented at all three sites.

Of the ground stone tools found at the site, all are grinding

stones. None are whole, One was found on the floor surface of Structure 2 near the pot stand. while the two from Structure 4 were found in the rocky jumble of the The walls grinding stones are rectangular, small, and relatively flat and shallow (Figure 13) . Each of the three was heavily used, but none had been worn through from use.

Structure 4 had a large, dumbbell-shaped object pecked from local stone (Figure 14) .Local informants suggested it was used as a weight in a

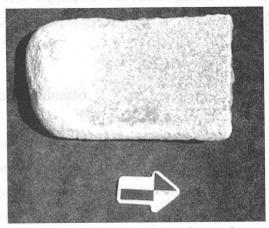


Figure 13 Grinding stone from Structure 2

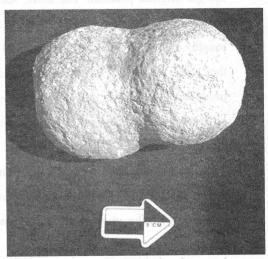


Figure 14 Weight from Structure 4.

balance. Since the stone exhibited no grinding wear on any surface, nor did it show signs of battering, it is likely that it had this function.

Miscellaneous artifacts included four large, smooth rocks found in the hearth of Structure 2; their size and shape suggests they were used as boiling stones, and two chipped stone hoe shafts found in Structure 4. Finally, a very small piece of bronze scrap was found on the floor of Structure 4.

Standing Stones

Standing stones, or *rdo ring*, are found in two different contexts at Dindun: in a chamber in Structure 4, and on the east side of the site. The stela in Structure 4 is seated within a niche on the west side of the structure (Figure 11). It has been pushed over from its likely upright original position. The niche surrounding it has been collapsed by this act. The stone itself is made from locally-available rock, is roughly triangular in cross-section, and is 1.6 m in length. The tip of the stone has been shaped and modified to make more visually prominent the reddish color of the stone at that end (Figure 15). No other obvious modification or carving were found elsewhere upon it. No artifacts were found within the chamber that housed the stela.

The second standing stone was found lying on the ground surface at the foot of one of the chortens near the eastern edge of the site (Figure 16) .The stone is 1.7m in length, and is also triangular in

cross-section. Like the stone found in Structure this one has also been modified by the removal of stone from its tip. The raw material from which this standing stone has been made is not to be found in the vicinity of the site, but is instead found some 30 km to the east at the foot of a mountain known to local people " Mumbu." mountain is recognized as the protective deity of the region. No other modification is found on the stone, which lies within a small stone



Figure 15 The standing stone in the western chamber of Structure 4 looking to the south. Note the modification of the tip.

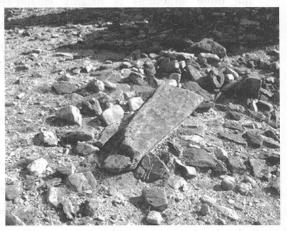


Figure 16 Standing stone at the eastern side of the site.

chamber that has been heavily damaged by the construction of the nearby chortens. This chamber may also be connected to a stone wall that runs E-W to the edge of the site.

Interpretations

Based on the excavations and analyses conducted to date, it is clear that Dindun is a residential site of pre-Buddhist date. Variation in residential architecture appears to be related to probable differences in household composition and size, household life cycle, or wealth, and not to different cultural traditions occupying the site. For instance, while Structure 4 is larger and more complex than the others, and has a more diverse artifact assemblage, the ceramics are similar to those found at Structure 1. Likewise, the architectural canon embodied by the three structures is roughly similar-rectangular structures with interior divisions that generally, but not always, create interior rooms, hearth and kitchen areas always found in the southwestern corner of the structure, and the use of carefully-laid wall foundations of similar construction and treatment.

Clearly, Structure 4 has a number of distinctive features, the most prominent of which is the standing stone in the interior chamber. Structure 4 also has indicators of differential activity performance, indicated by the weighing stone and the exterior rooms appended to its south wall, and simply a larger number of interior rooms. Most of the ceramics from excavated contexts are from this structure, and it has the greatest range of types present. However, the assemblage is strictly utilitarian, and most sherds came from the hearth and cooking area. These findings are consistent with an interpretation of Structure 4 being the dwelling of either wealthier or higher-status people rather



than being a building devoted to religious activity or some other public function. In comparison, Structures 1 and 2 were most likely occupied by humbler people with a more modest range of material possessions.

The presence of the standing stones at Dindun is intriguing. These are referred to as rdo-ring in Tibetan, meaning standing (or long) stone, and the term has been used by authors to describe a varied set of objects. Some rdo-ring are found in elite contexts, including pillars commemorating political events and treaties (such as the AD 821-822 treaty pillar that stands before the Jokhang), elite mortuary contexts, such as those found at the burial grounds of the Yarlung dynasty, or in sacred contexts such as at Samye monastery and other temples of central Tibet (Snellgrove and Richardson 1995: 91-92). However, standing stones are also known from humbler contexts. Bellezza (2001, 2002) describes stelae from a series of sites in the Chang Tang, and identifies three types of sites in which they are found: "isolated pillars, stelae built within a quadrangular perimeter," and "mononlithic arrays with accompanying structures." Although he has limited data that can be used to ascribe their function, at least some of these stelae in the first two categories are likely to have served in mortuary contexts. However, it is probably that most of these stelae served a ritual function, although what that function awaits further research. None of the stelae he illustrates, however, are standing stones erected in cultivated fields as described by Richardson (1972: 27), and thus, they are similar to those discovered at Dindun. Other authors, such as Francke (1914: 22) observed standing stones in what he described as a "dancing



ground" in Ladakh, and suggests these may be lingam associated with Saivite Hinduism. However, we think it more reasonable to consider the stones scattered across western Tibet and the Transhimalaya as an expression of pre-Buddhist ritual and religious practice (Aldenderfer in press).

How might the standing stone on the eastern side of the site functioned? We noted above that the standing stone was made from

stone found on the slopes of the nearby sacred mountain of Mumbu. Our team visited the site following reports of the presence of an erect stone at the base of this mountain. There is in fact a standing stone present, and while it is similar to the stones at Dindun (tip broken and modified in an identical manner), it is also larger and situated within a large, open area that has associated with it a variety of Buddhist-era constructions (Figure 17).



Figure 17 Standing stone found at the base of Mumbu. Note it has been wrapped in numerous khata.

One side is also inscribed in a Tibetan script with part of a now-highly eroded *Om mani padme hum* mantra. Local informants reported the stone is an integral part of the protective power of Mumbu, and the



stone is visited twice a year, first by local lamas, and later by local people intent on assuring agricultural fertility and general benefits for the coming year. No one could say when the stone was erected.

Based on our secure knowledge that mountains and mountain spirits were an essential element of the folk religion of Tibet (Tucci 1988: 166–167; Karmay 1998), and that they served as the most powerful element of the sacred landscape, the relationship of *rdo ring* with sacred protective power is interesting, suggesting an integral function of at least some *rdo ring* in the pre-Buddhist period was to connect dwellings to these sacred places. In effect, these *rdo ring* may have been symbolic representations of these mountains, and their placement in villages may have been an attempt to invoke locally the distant power of the protective deity of that place (Aldenderfer in press).

A final question that must be addressed, but cannot be answered at this stage of our research, is the likely cultural affiliation of the remains found at Dindun. There is no question that in terms of date, these materials are found within a Chinese time frame that is contemporary with the late Warring States period through the Qin and Han dynasties. It is well known that the Han dynasty expanded westward and took control of the Silk Route, which lies to the north of western Tibet. Although the ceramics found at Dindun and the nearby mortuary sites are most likely of local origin, some of the metals could have made their way into the Dindun region in Qin or Han times, with the latter being most probable.

However, this still begs the question of "who" inhabited



Dindun. It is tempting to assign the site to the Zhang-zhung polity. Bellezza does this with for his Chang Tang materials, although he has no strong empirical warrant to do so. He is also intent on ascribing the religious and ritual practice he sees at many of his sites to the Bon tradition. He bases this primarily upon recorded oral tradition. While both of these claims are reasonable, they are also premature given the almost complete lack of chronometric data from western Tibet and the Transhimalaya.

If we look simply at the radiocarbon assays taken from Dindun and the mortuary sites, we could be looking at a Zhang-zhung cultural affiliation. However, until more systematic research is done on the material culture of Zhang-zhung, it is still premature to call Dindun with certainty a Zhang-zhung site. At this point, then, I am content to offer a hypothesis subject to further investigation, that Dindun may have a Zhang-zhung affiliation. Research at the putative capitol of the Zhang-zhung polity, Khyunglung, which is located in the Puhrang area of western Tibet, may help to resolve this question.

References Cited

Aldenderfer, M.

In press Domestic *rdo ring*? A new class of standing stone from the Tibetan Plateau. *Tibet Journal*.

Bellezza, J.

2001 Antiquities of Northern Tibet: Pre-Buddhist Archaeological Discoveries on the High Plateau. Adriot Publishers, Delhi.



2002 Antiquities of Upper Tibet: An Inventory of Pre-Buddhist

Archaeological Sites on the High Plateau. Adriot Publishers,

Delhi.

Bronk Ramsey, C.

2002 OxCal Program v3.8. Radiocarbon Accelerator Unit, University of Oxford.

Chinese Institute of Tibetology, Sichuan University

2001a Trial excavation of ancient tombs on the Piyang-Donggar site in Zanda1 County, Tibet. *Archaeology* 6: 14–31.

2001b Survey of the Gebusailu cemetery in Zanda County, Tibet. *Archaeology* 6: 39–44.

Francke, A.

1914 Antiquities of Indian Tibet. Archaeological Survey of Indian38, Part 1: Personal Narrative. Calcutta.

Karmay, S.

1998b Mountain cult and identity in Tibet. In *The Arrow and the Spindle: Studies in History, Myths, Rituals, and Beliefs in Tibet*, edited by S. Karmay, pp.423–431. Mandala Book Point, Kathmandu. (Originally published in 1994 in *Resistance and Reform in Tibet*, edited by R. Barnett and S. Akiner, pp.112–120. London, Hurst and Company. Verlag dersterreichschen Akademie der Wissenschaften, Vienna.)

Pal, P.

2003 Himalayas: An Aesthetic Adventure. The Art Institute of Chicago, Chicago.

Snellgrove, D. and H. Richardson



1995 A Cultural History of Tibet. Shambhala, Boston and London. Richardson, Hugh

1972 Phallic symbols in Tibet. Bulletin of Tibetology 9 (2): 27-29. Tucci, Giuseppe

1988 The Religions of Tibet. University of California Press: Berkeley



丁冬:西藏西部一处前佛教时期居住遗址的发掘

马克·奥登德菲尔 赫雷·莫耶斯

本文对在西藏阿里札达县皮央·东嘎遗址发现的前佛教时期的居住遗址的有关情况作了初步介绍。此遗址在1999年试掘后,2001年作了正式发掘,出土的碳十四材料表明,其年代在距今2065±65年左右。尽管遗址为后代的佛教建筑破坏,但可以看出可能是一个至少有十座明显的建筑遗迹构成的小村落。不少遗迹埋藏在深浅不一的断壁残垣之下,但从表面上仍可探察出这些墙基的走向。房屋的形制一般为长方形,而房间的数量变化却很大,有的结构很简单,仅有一个单间和附属设施,而最大的房屋却有若干单间。虽然目前对于导致这种多样化的原因还不甚明了,但可能与家庭规模或构成大小、家庭成员年龄差别以及财富的多寡有



联系。尽管如此, 在结构特征和布置上, 仍表现出一定的共同性, 比如每一座建筑的角落总有一处用石头围成的可能为火塘的设施; 另外, 在建筑的某一角落, 有一处用石头或石板垒砌起来的可能 为储藏仓的部分。诸如此类的特征,再加上我们所发现的陶片特 征都相同,可以推断丁冬遗址所代表的是一种单一的文化传统, 而没有发生过不同族群的更替。不同规模的建筑所出土的遗物在 数量上有较大的差别,结构复杂的房子里出土较多的陶片甚至包 括一定数量的砾石石器。遗址中最大的一间建筑包括很多小隔间, 在它西边的隔间里有一块倒伏在地的石柱,可以看出它最初是置 于一个岩石围成的基座中的。这块石柱高大约两米,取材于当地。 尽管在它上面没有任何图像和文字材料,但它的形状无疑表达了 生殖崇拜的意义。与此相仿的一块石柱发现于遗址的东缘,也是 倒伏在一个岩石垒成的圈中,在周围我们发现了炭化的大麦和蔬 菜种子。这块石柱无疑是遗址中曾经具有宗教礼仪用途的,不过 具体的功能我们无从得知。与之相似的具有生殖崇拜意义的石柱 在西藏西部和整个喜马拉雅周边地区都很常见,但在一个真正的 早期居住遗址中发现这还是第一次。本文从考古学的角度对这一 文化类型作出可能的探讨。