

Chapter 7

Raw Material Hoards, Ritual Deposits, or Disturbed Burials? Object Pits in the Mountains of Southwest China

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Abstract

While in European archaeology, hoards are a much-discussed phenomenon equally important to graves and settlements, in China this find category has been receiving considerably less attention. Instead, object finds with no identifiable features surrounding them are usually assumed to be disturbed graves. Only late Western Zhou period ritual bronzes that appear in pits in the Central Plains are interpreted as treasure hidden in war times, but for other periods or other parts of China, such phenomena are not under discussion. In the mountains of Southwest China, however, object deposits are rather common; here, a number of pits containing complete objects arranged in an organized manner have been reported, yet, never discussed in detail. This paper suggests that most of these finds are not trash pits or disturbed graves but intentional deposits that deserve scholarly attention. This paper identifies several separate categories of object deposits connected with different ritual practices that can serve as a case study and point of comparison for research on deposition practices in other parts of the world.

Introduction

Having received my training in archaeology up to the Master's degree in Germany, it may not be surprising that on occasion I view archaeological material from China through a central-European methodological lens. That I do so explicitly and in a – hopefully – self-reflective manner, is the direct outcome of Lothar von Falkenhausen's research and teaching, both of which are international and broad in outlook and are always aware of the strengths, weaknesses, and historical background of the disciplines at hand. In multiple papers, he has reflected on the history of Archaeology, Art History, and Sinology as well as the background of individual scholars and its influence on their work (e.g., Falkenhausen 1993, 1995, 2001a, 2009, 2017, 2018a). The most important example for me, however, is his work on antiquarianism, which takes a comparative perspective, considering these concerns in Europe versus East Asia in general and China in particular (Falkenhausen 2010 and 2015). Here I am trying to follow his example in applying insights gained from material in one region to material in another part of the world. By discussing non-mortuary, non-settlement deposits, which have most commonly been interpreted as ritual offerings, hidden treasure, or scrap metal collections, I furthermore hope to speak to both his long-held interest in ritual (e.g., Falkenhausen 2001b) and his current work on economy (Falkenhausen 2018b).

While graves and settlements are well-established find categories in archaeological research world-wide, objects appearing outside of such contexts are more difficult to interpret.

In the case of single finds made by non-archaeologists, even the exact find location may be unclear, and often no associated archaeological feature can be found. Such items are often interpreted as random finds or lost items; however, there is another group of non-mortuary, non-settlement finds consisting of one or more objects appearing in identifiable features such as pits, in special locations such as streams or natural crevices arranged in ways that strongly suggest deliberate deposition. Such discoveries – usually referred to as hoards, deposits, or caches – are a much-discussed find category in European archaeology, similar in importance to graves or settlements. In other parts of the world, however, such finds receive considerably less attention.

In the Chinese context, there is much discussion about sacrifices in general, especially of humans or animals, mostly in burial contexts or for stately rituals (e.g., Campbell 2018; Flad 2012; Huang Zhangyue 1998; Kim 1994; Puett 2002; Shelach 1996; Sterckx 2011; Yuan and Flad 2005). As far as items placed in non-mortuary pits are concerned, they have mostly been interpreted as ritual and addressed as sacrificial pits (*jisikeng* 祭祀坑). The most famous example are probably the pits found at Sanxingdui in Sichuan, Southwest China (Ehrich, this volume), but a number of pits have also been reported from the middle reaches of the Yangzi river (Flad and Chen 2013: 212-222). Nevertheless, these discoveries have not incited broader discussions of deposition practices, and finds less sensational than those at Sanxingdui have received little attention. Focusing on Southwest China, the present study shows that the relative frequency of non-mortuary deposits here and in other parts of China may have been vastly underestimated. As a first step I introduce the hoard/deposition phenomenon as defined in Europe, highlighting the difficulties of categorizing and interpreting such finds. In a second step, the available evidence from Southwest China will be discussed, paying particular attention to how local research practices may have caused hoards to go unrecognized. It will be shown how the Southwest China case differs from deposition practices in Europe, thus broadening the understanding of non-mortuary deposition practices within general frameworks of human behavior.

Framing and Terminology: Hoards and Deposits as Find Categories in European Archaeology

In Europe, research on prehistoric deposition practices in non-mortuary contexts commenced in the 1860s, first with Worsaae (1866) working on finds from bogs and earth pits in Denmark. He argued that deposits constituted a meaningful find category in their own right (Worsaae 1866:326). In the discussions that followed, Engelhardt (1868:141) suggested that in Scandinavia some of these items or assemblages may have been meant for the use of the dead in the afterlife, as mentioned in the *Sögur*. Müller (1898) proposed distinguishing two main categories: “deposits” and “offerings” or votive finds. The former was meant to be retrievable, the latter for the gods or the dead and not to be retrieved by the living. The term “hoard” was suggested by Seger (1935/6) to cover both categories, arguing that the term “Hort” referred to a collection of treasures to be kept safe for religious or more mundane purposes, thus encompassing both of Müller’s categories. In German, *Depot* and *Hort* are now used interchangeably, and in English the terms hoard or deposit/deposition are similar, sometimes modified by various epithets such as wealth deposit or selective deposition, as well as a range of qualifiers and other terms denoting specific contexts, contents, or assumed underlying motivation.

Issues of Terminology and Category Boundaries

As Geißlinger (1983:334) and many since (e.g., Hansen 2002; Huth 2008; Eggert 2005:78) have pointed out, hoards/deposits are mostly defined by what they are *not*; they are finds not associated with graves or settlements. Huth remarked that by calling them “gift for the gods” – a term actually first used by Linders and Norquist (1987) – Hänsel and Hänsel (1997) had made them a positively-defined category, suggesting that all were offerings; however, such an assumption is problematic as well. There is another positive way of defining this find category, though, seeing it as something deliberately deposited rather than lost or forgotten (e.g., Stjernquist 1963:19). But what term should be used to refer to this type of finds? Cache, let alone treasure (“Schatzfund”) are too narrow as they suggest safekeeping of valuable items and do not include ritual deposits. The same applies to the term hoard. Deposit and deposition are largely synonymous, both describing something that has been laid down, by nature or humans, with “deposition” encompassing both the process and its outcome. One may argue that the word deposit is too neutral as it can also refer to an archaeological or geological feature such as a layer or a post hole. Hence, some scholars prefer the established term hoard.

In German-language research, Hort and Depot/Deponierung (the equivalents to hoard and deposit/deposition) are applied interchangeably to Bronze Age metal finds and other items of material value (e.g., amber beads; Ebbesen 1995). In contrast, ceramics are always referred to as Depot/Deponierung (e.g., Krenn-Leeb 2006), as are most finds from protohistoric periods (Hansen 2002:91). The reasons for this difference are unclear; it may be a convention following the first major publications on the respective phenomena and time periods. In the English-language literature, the preference for the term “hoard” for metal items has historical reasons going back to the 12th century English law of Treasure Trove, which was written to ensure that the Crown received all newly discovered valuables without legal ownership. The law distinguished between collections meant to be recovered and those that were meant to remain in the ground, the latter including graves (Bradley 2013:124). Not surprisingly, the general tendency from the official side was to interpret any find of valuables not associated with graves as hoards or treasure that the Crown could claim, thus shaping both terminology and general understanding of the finds.

Recent years have seen renewed debates on terminology, with scholars trying to find more neutral yet specific terms. Oras (2012:61), for instance, suggested the term “wealth deposit”, defining it as one or more objects of value “hidden deliberately as an intended deposition of specifically chosen artefacts into a specifically chosen place in a specific manner”. She argued that “wealth deposit” did not limit source material, number of objects, environment of concealment, or intent of deposition, and was thus more suitable than the loaded terms hoard (meant for future use or safekeeping), treasure (usually referring to metal), ritual/votive deposit or sacrifice/offering (results of religious activity not meant to be retrievable). It does, however, exclude anything of a value not immediately recognizable to the archaeologist or of no actual value whatsoever. “Wealth deposit”, therefore, does not provide a perfect solution to the terminology problem either.

Other scholars have been trying to establish more abstract and less interpretive terms, either keeping to the rather vague “deposit” (e.g., Joyce and Pollard 2010), or slightly more narrow terms such as “structured deposit” (Richards and Thomas 1984), “selective deposit” (Fontijn 2008; Needham 1988), or “special deposit” (Cunliffe 1992). The latter term is rather vague, but some scholars working on Iron Age and Medieval Britain are using it for intentionally hidden and/or specially treated objects (e.g., Hamerow 2006). Any intentionally deposited item was necessarily selected from a range of available materials, making the word “selective” unnecessary. The term “structured deposit” has been criticized as unhelpfully broad

(Garrow 2012:85), and also criticized it for excluding unique finds with no structural parallels to other discoveries (Oras 2012:67). The latter kind of finds are naturally difficult to interpret but may nevertheless be clearly identifiable as intentionally deposited. Instead, the term “intentional deposit” seems most suitable.

Single artifact deposits are naturally difficult to distinguish from lost items or disturbed graves. Nevertheless, single items may be intentionally deposited for a variety of reasons. In the European context there are many single finds that have been intentionally broken, burned, and/or deposited in the same way as larger groups of items referred to as hoards or deposits (e.g., Jensen 1972). Horst (1977:168) distinguishes between “classic single finds” of objects that were lost and “single finds of hoard character” (called “single-object hoards” by Bergmann 1970) that were deliberately deposited, and “hoards” that consist of at least two items. Eggert (2005:79) adopted the term single find of hoard character (*Einzelfund mit Hortcharakter*) and furthermore suggested distinguishing between single finds of hoard-character, closed hoard (*geschlossener Hort*), and non-closed hoard (*nichtgeschlossener Hort*). The former consists of items deposited at the same time. The latter is the product of several instances of deposition in the same place. Using slightly different terms, Görmer (2002, 2003, 2008) followed this three-part typology, speaking of closed multi-piece deposits, non-closed multi-piece deposits, and single-object deposits. Hansen (2002) has criticized this plethora of long terms as unnecessarily complicated, arguing that “non-closed multi-piece deposits” was not only a mouthful but also not identifiable and thus unsuitable as a category. For single object finds, he argued, it was impossible to distinguish lost items, objects from disturbed graves, and deliberately deposited objects. Hansen therefore distinguishes only two broad categories, single find and hoard/deposit, keeping the traditional terms for ease of communication and discussing composition and intent of deposition separately for each study.

While it is undeniably true that single finds are particularly difficult to interpret, even more so as they are often poorly documented and rarely scientifically excavated, the same applies to the majority of multi-piece deposits. For middle Bronze Age metal objects from the Netherlands, for instance, Fontijn (2008:88) estimates that only about 4% came from excavations, 69% were reported by private individuals but with some information on find location, and for the others context and location were entirely unknown. Both the Netherlands and Denmark have been so thoroughly surveyed by both archaeologists and private detectorists that at least for metal hoards it is usually assumed that they are representative in terms of distribution, size, and content (Fontijn 2001/2:4; Levy 1982:4). The same may be said to a certain extent for the UK and other parts of Europe but only for metal objects, while for ceramics and items of stone or other material the coverage is much less certain. For regions where such finds – be they single or multi-piece – are not seen as a category in their own right, the coverage is poor and the actual distribution of non-mortuary, selective, structured deposition practices unclear. Additionally, non-archaeologists tend to remove only exceptional objects, leaving associated items such as stones, ceramics, animal bones, or distorted metal scraps in place and not investigating the surrounding area. A recent and rather prominent case in point is the Disk of Nebra, though here the deposition environment and overall composition could later be reconstructed (Meller 2004). This bronze disk of about 30 cm diameter inlaid with a golden sun or full moon, lunar crescent, and stars as well as two golden arcs that are later additions, has been dated to around 1,600 BC. It had been deposited together with two bronze swords, a chisel, two hatchets, and spiral bracelet fragments in a pit at Nebra, Saxony-Anhalt, Germany. There have been heated debates about its origin, date, and meaning, especially its alleged reflection of an early deep knowledge of the cosmos. Had the Disk of Nebra not been so exceptional, the case would probably never have been investigated with such care and the context would have remained unknown.

Even with scientific excavation, less prominent components of metal hoards such as slag, animal bones, or even non-metal containers are generally not depicted in reports and often disregarded in further studies. Likewise, ceramic deposits – although common in both the Neolithic and the Bronze Age of middle Europe – are usually overlooked in studies on Bronze Age deposition practices. Given their very different composition, deposits containing ceramic vessels, stone tools, and/or animal bones are likely to have a somewhat different history or motivation from single-type weapon deposits, for instance, but such differences need to be systematically established and not assumed. The terminology used to refer to thus finds thus needs to be considered carefully.

The Chinese-language literature has not seen similar discussions on suitable terminology for non-grave deposits; nevertheless, a number of different terms being used. One is “sacrificial deposit” (*jisikeng*) mentioned above, a clearly interpretive term. Other terms used are *qiwukeng* 器物坑, object pit, a choice that strives to stay neutral in terms of functional interpretation (Sun 2013), and *jiaocang* 窖藏, implying a secret storage without ritual character. The latter is not generally used in archaeological reports or debates but is the most common translation for the English word “hoard” (Ehrich, this volume). In the Chinese context, the focus thus tends to be on deposits interpreted as sacrificial, in keeping with the broad interest and long-lived discussion on sacrifice in Chinese archaeology mentioned above.

To avoid blanket interpretation in terms of function and underlying motivation, for the present paper I distinguish between two main categories, chance find (single and multi-item) and deposits, the latter standing for intentional, selective, non-mortuary deposition. All chance finds shall be considered together with clearly intentional multi-item deposits, testing in each case if it is indeed a deliberate, selective deposition or rather a random loss or disturbed grave. It will not always be possible to decide this with absolute certainty, so unclear cases may have to be excluded from further analysis. The next step is to determine if these single finds or deposits can be interpreted as sacrificial, hidden treasure, lost items, or what other kinds of human behaviors or natural processes may have shaped them.

Interpreting Intentional Deposits: The European Debated, Its Nature and Insights

The interpretation of non-mortuary intentional deposits varies widely over time and space and the associated terminology, typology, and interpretations are very much the product of their time and place, however, there are some general insights that will be helpful for analyzing the material from Southwest China.

The earliest discussion already made it clear that there was is much diversity for applying one explanation to all such finds, not even within the same region or time period (e.g., Hundt 1955; Torbrügge 1985). Furthermore, the tendency to focus on extraordinary items, especially metal objects, has been shown to be rather unhelpful. It is a world-wide trend, though, that may be related to the historical connection between collectors and archaeological interests and antiquarian traditions common to Europe and East Asia, as discussed by von Falkenhausen (2010 and 2015). Early in the history of research on deposition practices in Europe, it already became clear that there is a broad range of possible motivations for deposition, including trader deposits, workshop deposits, treasure hidden by private individuals or groups, various kinds of votive deposits, and items for the dead, to cite Schumacher’s (1914) categories.

Trying to take into account broader societal contexts, since the 1970s, there has been an increasing interest in the social function of deposition practices. Several scholars suggested that the removal of such a large number of bronze items from circulation was meant to create

artificial scarcity and ensure that the material retained its prestigious value (e.g., Kristiansen 1978; Levy 1982; Rowlands 1980), or that the deposition of such items took place in a potlatch-type act of conspicuous consumption that directly enhanced the prestige of the elites involved (Bradley 1984). As Fontijn (2001/2:19) has pointed out, these interpretations all assume “that Bronze Age behaviour was fundamentally structured by an economic rationality.” Indeed, modern concepts of value can easily taint interpretations without the scholars in question noticing. For instance, non-metal deposits receive much less scholarly attention than metal hoards (pointed out e.g. by Krenn-Leeb 2008 and 2014; Stapel 1999). This danger needs to be kept in mind and mitigated by taking into account the entire assemblage and all deposition practices including those involving ceramics, animal bones, and other items of no apparent value.

Already from the 1990s, the pendulum of interpretation started to swing back, with religious and far-reaching sociological interpretations becoming increasingly popular, finally leading to the automatic assumption that all deposits were “gifts to the gods”, as the exhibition “Gaben an die Götter – Schätze der Bronzezeit Europas” (Gifts to the gods – treasures of the European Bronze Age) suggests (Hänsel and Hänsel 1997). Some have been applying frameworks of gift exchange following Mauss (1990; orig. 1925) and Malinowski (1961; orig. 1922) or concepts of collective memory as developed by Halbwachs (1992; orig. 1925) (Hansen 2002, 2005, and 2012), while others have been exceedingly critical of potential over-interpretation of very patchy data (e.g., Huth 2008, esp. 151). Overall, there is just a constant back and forth between often rather narrow narratives of *homo economicus* on one end of the spectrum and *homo ritualis* on the other, and tales of caution emphasizing the complexity and variability of deposition phenomena throughout Europe.

Ethnographic evidence and religious studies have been helpful in interpreting the finds, showing that a clear dichotomy between sacred and profane, or ritual and economic, is clearly not appropriate for premodern cases. For instance, the profane/ ritual dichotomy has come to be criticized as rational and ritual actions as irrational was based on post-Enlightenment concepts of rationality developed in Europe (e.g., Brück 1999). Based on ethnographic evidence and sociological studies she argued that for non-western, let alone prehistoric groups, such antithetical thinking could not be assumed; rather, all spheres of life were permeated by ritual (Brück 1999:325). Dropping the category of ritual altogether as Brück suggests does not seem to be suitable either, though, for as Fontijn argues, some human behaviors were set apart from everyday actions and could thus be termed ritual (2001/2:21-22). This is where concepts of ritualization have been shown to be useful and the idea of special activities meant to structure social reality through acts of performance that can leave material traces such as deposits. Deposition practices, so Fontijn (2008:89) argues, are selective in both object and location choice, showing patterns that indicate a set of shared rules. This phenomenon has been called “framing” (Verhoeven 2002) or “ritualization” (Bell 1992). According to Bell (1992:74) “ritualization is a way of acting that is designed and orchestrated to distinguish and privilege what is being done in comparison to other, usually more quotidian activities”. These special activities, so Bell (1992:91), are meant to structure social reality, especially in connection with community identity and solidarity, always through acts of performance involving sacred symbols (following Rappaport 1979).

Nevertheless, even in cases with ethnographic and historical evidence it remains nearly impossible to infer meanings of individual deposits or depositional practices (for problematic examples consult Hänsel’s (1998) interpretation of metal deposits being either gifts to “chthonic powers” or connected with “the body of the king”, all based on historical accounts with no connection to the finds in question; nevertheless adopted by Krenn-Leeb 2014 and others). In some examples discussed in European contexts, referring to a single textual source

is methodologically problematic and potentially misleading. Such caution has to be applied to the Chinese material as well, where tendencies to rely uncritically on historical analogy are all too common (Falkenhausen 1993). Instead, various ethnographic and textual studies can be used to investigate structures of human behavior in a systematic fashion. Levy (1982) has consulted a broad range of ethnographic cases from all around the world to establish criteria by which offering rites leaving material remains could be identified and interpreted. According to her study, the main characteristics of offering rites that can be identified in the material record are choice of location, choice of objects, often an association with food, and a special arrangement of the deposited objects. She argues that it is “stereotyping of symbols which makes ritual communication clear to both the supernatural and natural world” with ritual offerings or deposits having been “made in a stereotyped way, of symbolically valuable objects (which may also be materially valuable), with the conscious purpose of communicating with the supernatural world” (Levy 1982:20).

I would argue, though, that such references to texts and ethnographic studies have to be accompanied by a systematic analysis of the archaeological material that identifies recurring patterns in deposition location, object types (including details of object production, raw material used, origin of items and materials, object use-life), assemblage composition, treatment, and arrangement. Some of these aspects have been used to analyze and classify deposits in the past, especially location choice and object treatment (e.g., Falkenstein 2011). Only rarely have all of them been viewed together. Additionally, some scholars point out the importance of metal analysis with the aim of establishing source location and distribution (e.g. Bradley 2013; Huth 2008). Fontijn (2008) in particular stresses the importance of object biographies, building on earlier research by Appadurai (1986) and others. Such ideas have been applied to Chinese material as well, both in Art History and Archaeology, albeit not in connection with deposition practices (e.g., Allard 2018; Clunas 1991). Based on European material, Fontijn convincingly argues that the link between the choice of specific objects and specific locations indicates socially agreed rules of deposition and/or taboos connected with certain items and locales (Fontijn 2008). These collective ideas and meanings, so he argues, are then combined with individual agency that may lead to slight variations in depositional patterns.

Indeed, patterns in assemblage composition and location choice are crucial to identify and interpret past behavioral patterns in relation to depositional practices, as are considerations of object production and usage prior to deposition. Furthermore, there is the issue of object treatment first emphasized by Stein (1976) who considered use wear, patina, and object breakage and other forms of treatment as crucial for interpreting hoard finds. There is, however, some disagreement as to how such patterns may be interpreted. While Stein argues that complete, unused objects denote a ritual function, others see unused objects as stock to be traded (Müller 1898). Some argue that breakage or fragmentation indicates a ritual context (Chapman 2000), Nebelsick (1997 and 2000) even speaking of furious, ecstatic acts of violence and Brück (2006) of ritual killing; others argue that fragmentation may have allowed for faster and more fuel-efficient re-melting (Huth 2008:150). Many automatically assume that deposits in wet places such as rivers and peat bogs must have been intended to be non-retrievable and thus ritual in nature (e.g., Stein 1976), but others criticize this as a simplification, arguing that for the initiated items placed in bogs might well be retrievable but safe from people not familiar with the terrain (Geißlinger 1983:322).

I would argue that it is crucial to consider the context of assemblages from other types of sites to understand patterns of selectivity, particular treatment, or potentially special production for non-mortuary deposits. Indeed, in the European case, it has been shown that some deposits are similar in composition to grave assemblages (e.g., Ebbesen 1995; Hundt

1955; von Brunn 1968 and 1980). Therefore Bradley (2013:136) argued that “hoards should not be investigated without paying equal attention to single finds and the artefacts deposited with the dead”. I agree that it is crucial to investigate other contexts in which items similar to the ones observed in non-mortuary deposits have been found, and we also have to consider which types of objects or object treatments may be exclusive to one find context or the other. I am not suggesting that each study on a specific segment of archaeological remains always needs to involve in-depth analysis of the entire range of contemporary remains, but I would argue that any study of non-mortuary, intentional, selective deposition practices has to be conducted with the entire range of contemporary material in mind, conducting comparisons where necessary and useful.

I also suggest that different types of deposits should first be considered together and may then be divided for further analysis based on structural differences. Given that single items may have been deposited following a similar logic as multi-piece assemblages, single finds should also be taken into consideration, though again based on context and treatment of the item in question, part of the single finds will have to be labeled as coming from disturbed graves, lost items, discarded trash, or finds of unclear nature to be excluded from further discussions of non-mortuary deposition practices. The same applies to groups of objects, especially if found in a settlement context where both trash pits and other kinds of deposits such as storage or hidden valuables or lost items may be found (e.g., Stapel 1999).

As explained above, I am only distinguishing between two types, chance finds (single and multi-item) and deposits, the latter standing for intentional, selective, non-mortuary deposition. Based on object type, treatment, and overall context, the single finds then have to be either moved into the deposit category, or be marked as disturbed graves, lost or discarded items, or single finds of unclear nature. Only at the next step of interpretation does it become useful to introduce further categories denoting motivation or intent of deposition, an issue that has been discussed heatedly in European archaeology.

Overall, I would argue that the key to identifying deposition as a practice rather than as one-off individual act is observing repeated patterns and formal item combinations (including animal bones and other items that may not seem of any value to the modern observer), item treatment, and location choice. Here I follow Hundt (1955), von Brunn (1968), and Fontijn (2001/2) in arguing that deposition as a structured phenomenon reflects prehistoric rules of the proper way of doing things. An established practice does not necessarily imply that the underlying motivation was religious, as many scholars assume; otherwise, all repetitive acts (including meal preparations, object production, refuse disposal etc.) would have to have a religious motivation. Still, even everyday actions may have a ritual undertone as the dichotomy between sacred and profane – or ritual and economic – is a modern one.

As far as location choice is concerned, it is not enough to consider only retrievability as many early studies have done (e.g., Worssae 1867), or distinguish simply between water/wet-land and dry-land deposits. Instead, the placement in relation to graves, settlements, and other features, both manmade and natural has to be taken into account. Here, general assumptions have to be avoided. For instance, as Krenn-Leeb (2014) and others have pointed out, not all pits in settlements are trash pits. Ceramic deposits made in connection with drinking/eating or offering rituals may appear in settlements as well. The treatment and composition of items helps to distinguish trash from deliberately chosen assemblages. Complete vessels in standardized sets likely indicate socially and culturally determined activities in connection with feasts and/or offering. In settlement contexts, ceramic deposits may be misidentified as trash pits, while in other locales they may not be found at all. They

will not trigger a metal detector or be reported if encountered when digging a well or building foundation as the vessels will seem of little value to modern eyes.

All in all, it has become clear that focusing on behavioral practices is particularly useful for understanding deposits, including considering process of object production (*chaîne opératoire*), life history of objects, and paying attention to use wear, object treatment, deposition location, and potential connections between all of these aspects. Furthermore, religion may be viewed as a kind of behavior rather than a precise set of ideas, and considering the mechanisms by which foreign objects may be adapted and adopted into local practices for instance via rituals.

In archaeological analysis, ideally all of these different aspects of past behaviors should be considered together. It is key to identify deposition as practice rather than as one-off individual acts is the observation of repeated patterns and formalization of item combination, item treatment, and location choice. In such analyses, the focus needs to be on identifying recurring actions in space and time rather than on trying to re-constructing long-lost motivations or meanings.

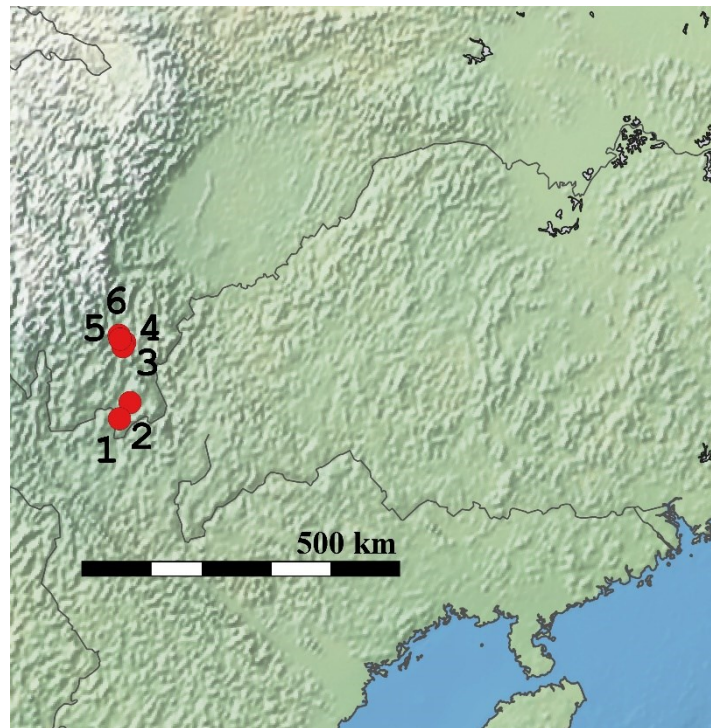


Figure 7.1. Location of object deposits in Southwest China: *Huili*: 1 Zhuanchangba, 2 Luoluochong; *Xichang*: 3 Dayangdui, 4 Beishan, 5 Yingpanshan, 6 Qimugou. Map created by Bryan K. Miller.

A Case Study from the Other Side of the World: Deposits in Southwest China

Based on the insights gained from the European debate on intentional deposits, I discuss here all deposits and chance finds (both single and multi-item) from a region of Southwest China and consider their composition, treatment, and location compared with settlement and grave finds. The terminology to be used is “intentional deposits” for items intentionally deposited in or on the ground or in a water source in a non-mortuary context. Single finds are discussed among “chance finds,” which can consist of one or several items with unknown deposition context. These are evaluated based on a comparison with finds from graves, settlements, and

clearly intentional object deposits to determine if they are indeed deposits or disturbed graves or lost items. Ideally, the full life-history of the objects would be reconstructed based on technological details, use-wear traces, and signs of treatment, but as the reports on all of these finds are sketchy at best, in most cases such detailed information is not available. Where available, such information will be evaluated, but a systematic reconstruction of chaîne opératoire/use life for all items will require a separate study on the original material.

I focus on non-mortuary intentional deposits in Southwest China from the Liangshan Region, in Western Sichuan Province (Figure 7.1.). Additionally, there are a number of chance finds some of which may be object deposits as well (Table 7.1.).

Table 7.1. Deposits and chance finds from the Liangshan Region.

Site	Context	Objects
Huili 1994 (Huili “Gong’anju”)	confiscated by police	9 bronze objects: 1 three-pronged sword, 1 short-sword, 1 halberd, 1 bracelet, 2 knives, 1 spear-head, 1 staff head
Huili Guoyuan	chance find	1 Shizhaishan type bronze drum buried upside down
Huili Hekoucun	chance find	1 bronze sword
Huili Luoluochong	1 pit	1 bronze drum buried upside down
Huili Yimen Xiacunxiang	chance find	1 bronze yue axe
Huili Zhuanchangba	1 pit	6 bronze bells
Jinyang Munagou	chance find	1 bronze sword, 1 bronze halberd
Ninglang Cunyi	chance finds	unclear number of bronze axes a.o. bronze objects, discovered over several years
Puge Wadaluo	1 pit	150+ ceramic vessels, 2 ceramic spindle whorls
Xichang Dayangdui (late Phase)	2 pits	8 and 14 ceramic vessels respectively; stacked neatly
Xichang Dayangdui (middle Phase)	24 pits	1-8 ceramic vessels each; mostly 2 horizontally placed ceramic vessels, larger one placed in smaller one, bottom of former intentionally broken, some with additional objects; filled with fine soil, no ash, charcoal, traces of fire, or bones
Xichang Maliucun	1 pit	20 ceramic vessels
Xichang Qimugou	1 pit	2 ceramic vessels
Xichang Yingpanshan	13 pits	1-5 ceramic vessels each, stone net weight in one
Yanyuan “Gong’anju”	confiscated by police	603 bronze objects (mostly weapons and tools, some ornaments, armor, horse gear, drums, bells, items of unclear function), 2 iron objects, 24 composite weapons, 38 stone arrowheads, 9 stone grinding rods, 2 sea shells, 1 god strip
Yongsheng Laoying	chance find	bundle of 20 much corroded bronze swords 0.6-0.8 m below surface, 1 bronze cauldron on surface, 1 bronze bracelet, 5 ceramic beakers
Yongsheng Longtan	chance finds	300+ bronze objects, mostly weapons
Yongsheng Yangjiaqing	chance find	1 ceramic beaker, 2 bronze drums, 2 bronze cups, several bronze ornaments
Zhaojue Sikaixiang	chance find	17 Han bronze coins 10 cm below surface

All of these finds date between ca. 1,600 BC and AD 200. They occur in the central Anning River Valley and the adjacent river valleys of Puge County where they are largely contemporary with megalithic graves, but also in the mountains of the southwest, southeast,

and northeast where they tend to be later in date and contemporary with stone-construction and earth-pit graves (Hein 2016 and 2017a) (Figure 7.2.).

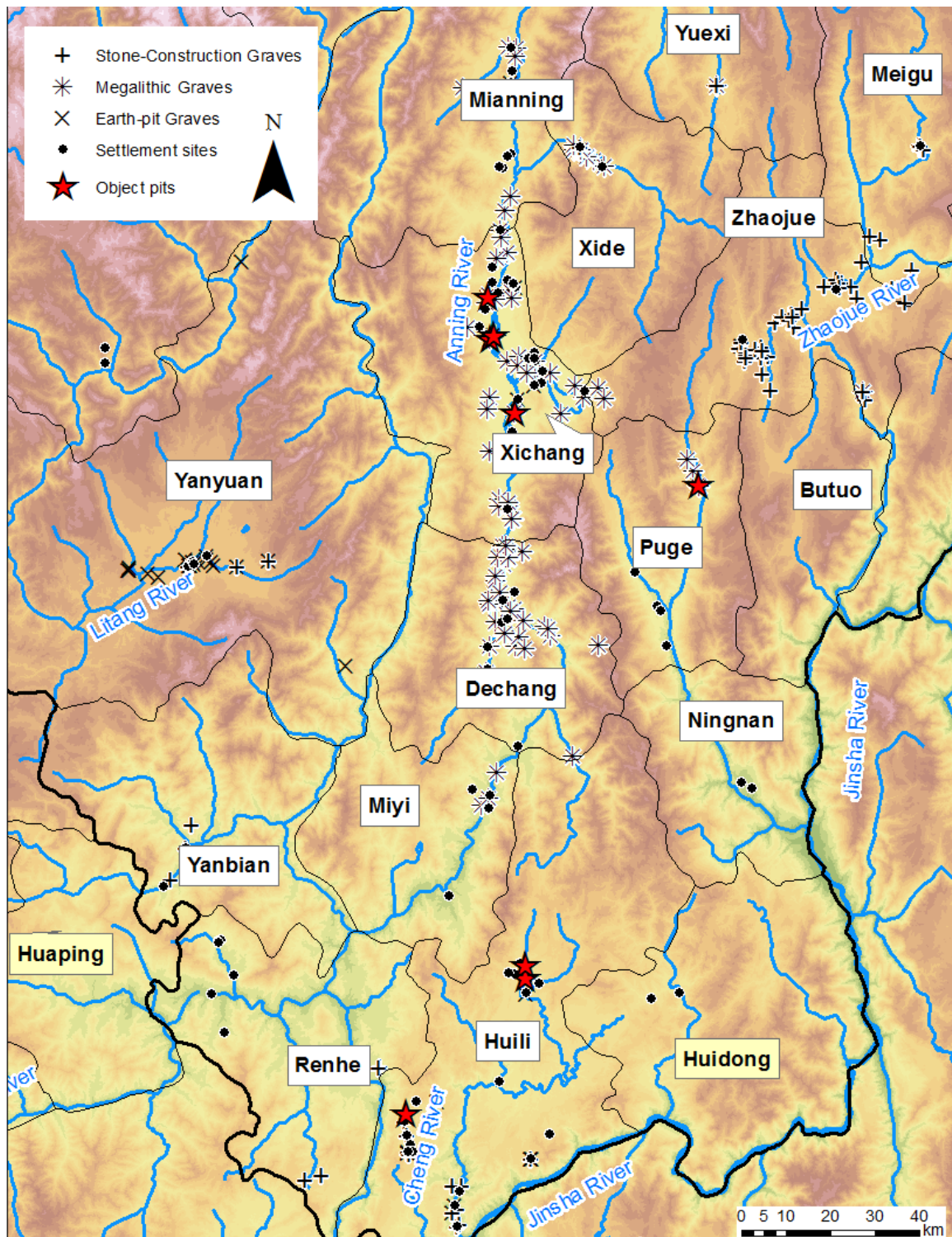


Figure 7.2. Site locations in the Anning River Valley by site type. *Map created by the author.*

Intentional Object Deposits

Two broad type of intentional deposits have been observed in two areas. Deposition pits in the Anning River Valley and adjacent mountains contain ceramic vessels, sometimes associated

with stone tools. Deposition practices in the southeast also involve bronze drums and bells. In all cases, the objects are complete – though sometimes broken – and carefully arranged in recurring patterns indicating socially and culturally agreed practices. Given these differences, below these two phenomena are discussed separately.

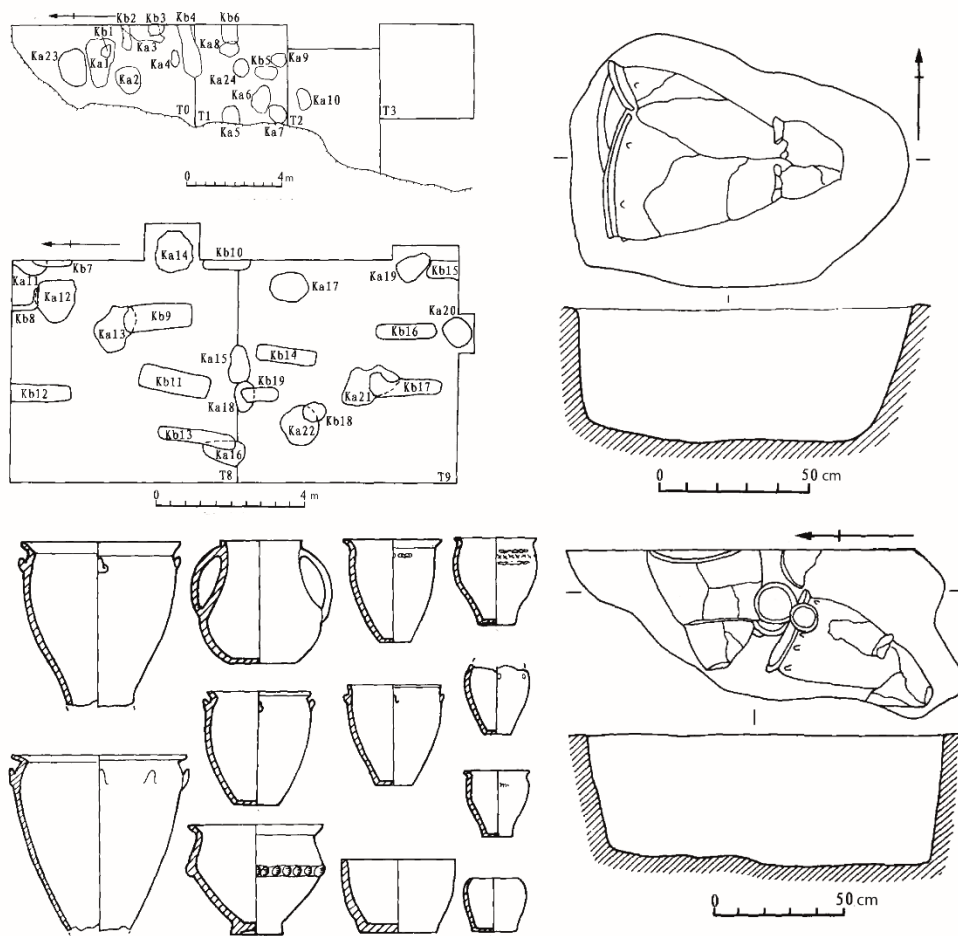


Figure 7.3. Plan of object pits in the northern (top) and southern (bottom) part of Xichang Dayangdui; plan of Ka21; objects from pits ((1. Ka19:1, 2. Ka23:1, 3. Ka13:5, 4. Ka12:2, 5. Ka13:1, 6. Ka3:2, 7. Ka19:2, 8. Ka3:4, 9. Ka21:2, 10. Ka17:2, 11. Ka15:1, 12. Ka13:4); plan of Ka3. *Drawn by the author after Xichangshi et al. 2004: Figure 9-17.*

Ceramic Deposits

Object pits containing carefully arranged complete ceramic objects have been reported from Xichang Dayangdui (Xichangshi et al. 2004), Maliucun (Sichuansheng et al. 2006a), Qimugou (Sichuansheng et al. 2006b), and Yingpanshan (Sichuansheng et al. 2006c), as well as from Puge Wadaluo (Liangshan 1983). Among them, we can distinguish between two different types of features:

- I. small round-oval or irregular pits containing one horizontally placed large jar or urn, sometimes combined with a few smaller ceramic vessels (Dayangdui Ka1-24, Qimugou W1, Yingpanshan W1-13), and
- II. large, usually rectangular pits with a larger number of different kinds of medium-sized and small vessels (Dayangdui H1-2, Maliucun H1, Puge Wadaluo H1).

Type I Ceramic Deposits

The 24 pits at Dayangdui were found in layer 5, which was devoid of other traces of cultural activity. The other layers at Dayangdui held earth-pit graves (layer 6), megalithic graves and two further pits (layer 4). The pits in layer 5 were arranged in two groups; those in the northern part of the site were East-West aligned, and those in the south were North-South aligned (Figure 7.3.).

The ceramic vessels are of brown or red medium coarse ware, hand-thrown, rarely with a black slip, and overall of a similar quality as contemporary settlement and grave ceramics, all of them roughly made undecorated yellow-brown coarse ware. Most pits contained one urn or large jar, often with a row of upward-pointing lug-handles around the shoulder. The bottom of this vessel was nearly always intentionally broken and placed into a smaller jar. Only in a few cases was the placement different: Ka3 contained two such vessel groups accompanied by three basins and one bowl; in Ka11 the vessels were placed mouth to mouth; in Ka2 they were positioned next to each other; Ka4-7 and Ka9 each held only one large jar with an intact bottom; Ka 13 had an assemblage composed of one jar, one double-handled jar, one cup, and one stemmed bowl; and in Ka14 two large jars of equal size and form were stacked on top of each other (Figure 7.3.). In all cases, the vessels were horizontally placed in irregular pits just large enough to hold them. Furthermore, every object pit was paired with a larger long-rectangular pit with rounded corners containing fine yellow silt (Kb1-19). Such silt pits do not occur at Qimugou or Yingpanshan, but the vessel forms observed there are similar to those seen at Dayangdui.

The single object pit W1 at Qimugou was small and contained one urn and one jar, both made of grey-brown medium coarse ware without slip or decoration. The vessels were accompanied by some charcoal indicating burning inside the pit. In this instance, the smaller vessel was placed inside the larger one, and the larger vessel seems to have been standing upright instead of lying on its side. The pits at Xichang Yingpanshan were mostly small and round (0.5-0.9 m rim diameter, 0.1-0.3 m depth), with the exception of W2, which was considerably larger (1.3-1.62 m rim diameter, 0.1-0.24 m deep). In spite of its size, W2 contained only two large urns. The vessels from the pits at Yingpanshan are generally larger than those at Dayangdui (mostly 40-50 cm height compared to 23-35 cm). Furthermore, they are slightly different in form, and none had lug-handles, but some did feature incised decoration, which is rare at Dayangdui. The ware quality and color, however, were similar between the two sites.

The vessel forms from Qimugou W1 are similar to those from the pits in Yingpanshan (very large urns with pointed-bottom ovoid bodies, constricted neck, angular outward-flaring rim, wide opening, flat bottom, and downward-sloping shoulders or high rounded shoulders, all without handles), and the sizes correspond closely as well. The vessels at Yingpanshan were horizontally placed but the bottoms had not been intentionally broken, and some contained red-burned earth pellets and ash (W2, W5, W8, W11), which does not occur at Dayangdui. Some pits at Yingpanshan held only one large urn (W1, W3, W4, W9, W10, W12), others contained two vessels (W2, W5-8), most of them urns as well, while W6 held one urn and one double-handled jar. W11 and W13 are exceptional as their assemblages consist of five objects each; W11 held three urns or jars (they were too fragmented to allow reconstructing the exact form) and one vessel with a high ring-foot, possibly a beaker, all of them placed horizontally next to each other, and W13 contained two urns layered on top of each other, with one bowl and one lid placed next to them. W12 is noteworthy as well, having yielded a large urn with a stone net-weight placed inside.

The vessels from all three sites are of red to brown coarse sand-tempered material, and were hand-thrown or more rarely coil-built and fired at very low temperatures. The

completeness of the vessels and the regularity of their placement and treatment makes it clear that the deposits were not meant for mundane storage but were the outcome of ritualized actions. Because some of these vessels contained charcoal, they have often been referred to as "urn graves" (*wenguanzang* 瓮棺葬); however, as none of them contained any bone remains or personal ornaments and many were even devoid of ash, this interpretation seems untenable. The pits could have been cenotaphs or ritual offerings, or they might contain objects used in ritual activities and then disposed of in a prescribed fashion. As no residue analyses were conducted at the time of excavation, it is difficult to tell whether they ever contained food or drink, but as the objects were placed horizontally, they were likely empty at the time of deposition.

The ceramics in the Dayangdui deposits on the one hand (we may call them ceramic deposits type Ia) and Qimugou and Yingpanshan (ceramic deposits type Ib) on the other seem to have been used differently. Most of the large urns and jars at Dayangdui had a broken bottom and were placed in a smaller vessel. They might thus have been used for libation or some other kind of symbolic transition from one state or place to another. The fine yellow silt in the adjacent pits might have come from a special or sacred location, perhaps a place of origin of the group of people who dug them. At the other two sites, fire was involved in some way, but the vessels were intact, reflecting a different kind of ritual.

Both kinds of deposits are unique within the Liangshan region and do not seem to have any parallels in adjoining regions either. They have been compared to the urn graves at Yuanmou Dadunzi in Yunnan, but these contained charred bones of children placed in large urns covered either by another urn or jar or by a stone (Yunnansheng 1977). The urns had been horizontally placed as well, but were of different form, roughly pill-shaped with a very small bottoms and narrow opening with medium-high neck. Many urns contained additional objects, either ceramics (ewers or jars), or animal bones probably belonging to food offerings, or in one case 12 bone beads that might have belonged to a necklace. A similar kind of urns containing the calcinated bones of infants accompanied by a few ornaments or small tools have furthermore been observed at the unpublished site of Yongsheng Duizi (Yunnansheng et al. 2010). The site of Mianning Xiaogoudi is likewise reported to have held 21 urn burials, but as the material remains unpublished it is unclear if they were burials of infants or adults, what the urns looked like, and how they were positioned (Zhongguo Wenwuju 2009).

While the pits at Dayangdui clearly did not contain cremation burials, it is conceivable that the large vessels in the pits at Qimugou and Yingpanshan originally contained small bones which had deteriorated in the unfavorable soil climate. As both sites as well as Mianning Xiaogoudi are very close to megalithic graves, which only contained bones of older men and women, it is possible that these three sites are cremation burials for children of the same group who buried their elderly in megalithic graves. If this was the case, then the object pits at Dayangdui would be either a completely unrelated phenomenon or a symbolic burial for infants whose bodies were deposited elsewhere. As the pits at Dayangdui precede the megalithic graves at the same site, the latter explanation seems more plausible; the pits of Qimugou and Yingpanshan likely had a different behavioral context.

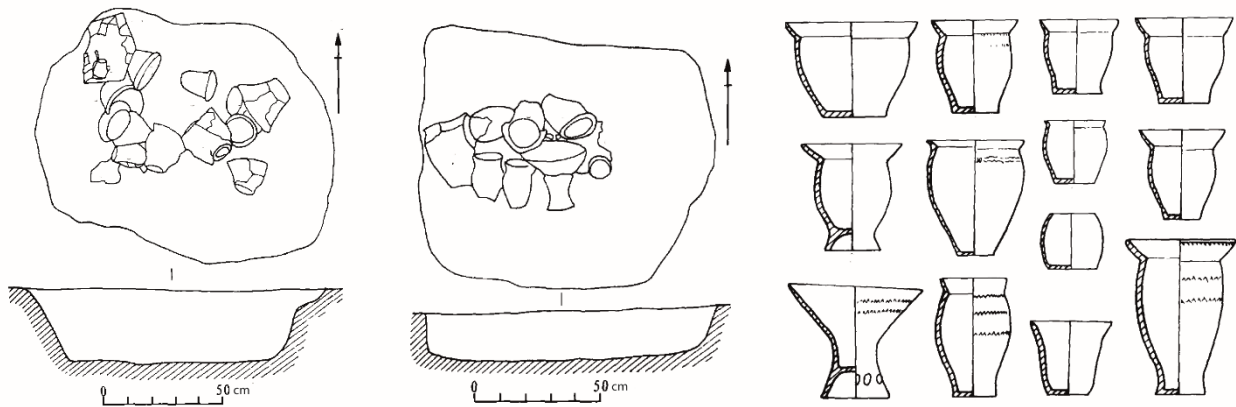


Figure 7.4. Plan of Dayangdui H1 (left) and H2 (middle); objects from pits H1 and H2 and grave DM2 (1. H1:1, 2. H2:6, 3. H2:1, 4. H2:3, 5. DM2:1, 6. H2:5, 7. H1:10, 8. DM2:4, 9. H1:13, 10. H1:6, 11. H2:2, 12. H1:5, 13. H2:4). Drawn by the author after Xichangshi et al. 2004: Figure 13-15.

Type II Ceramic Deposits

Type II pits are large, roughly rectangular in form, and contain a larger number of smaller vessels neatly stacked in the center of the pit (Figure 7.4.). The excavators interpret the feature at Wadaluo as a storage pit (*yaoxue* 窖穴), and the ones at Maliucun and Dayangdui as ash pits (*huikeng* 灰坑), i.e., places for trash disposal. Given that the objects were complete and carefully stacked, these features are unlikely to have been trash pits; however, their actual meaning is difficult to determine and they may differ from site to site.

The three pits differ significantly in size and assemblage. Even though the Maliucun pit is much larger than the others (3.68 x 2.06 x 0.6 m as compared to 1-1.2 x 0.5 x 0.8 m), it held only 20 identifiable objects, while over 150 vessels have been reported from Wadaluo; Dayangdui H1 contained 14 and H2 a mere 8 vessels of slightly differing types (Figure 7.4.). The ceramics from Dayangdui were all hand-thrown and made of red or brown sand-tempered clay enhanced in some cases with incised water-ripple pattern, impressed leaf-vein pattern, or a black slip. Nearly all forms have wide outward-flaring rims, making them useful for drinking or pouring liquids.

The assemblages from Puge Wadaluo H1 and Xichang Maliucun H1 consist of fine grey-brown or black-brown high-fired clay-ceramics, many of them highly polished or with black slip. In both pits, vessel forms associated with drinking, such as cups, beakers, ewers, and flasks are most common, but there are stylistic differences between the two sites. The objects from Wadaluo are simple in form, undecorated, and with flat bottoms; at Maliucun complex vase and goblet forms with handles, spouts, ring-footed or pedestal-based bottoms, and line-decorated bodies are most common (Figure 7.5.).

Megalithic graves have been observed at all three sites with this type of deposits, but so far only two of the graves at Dayangdui have been excavated. DM1 was devoid of objects, but DM2 contained five ceramic vessels of similar form and quality as those from the two object pits. The assemblage from Maliucun H1 closely resembles the ceramics from the megalithic graves of Xichang Bahe Baozi, which were located at about 15 km from Maliucun (Xichang et al. 1978: Figure 7.4.). Both sites are situated on the western bank of the Anning River. Liu Hong's (2009:91-92) interpretation of Maliucun as an offering pit used in connection

with the multiple secondary burials of the megalithic graves is plausible and can be applied to Xichang Dayangdui H1 and H2 as well.

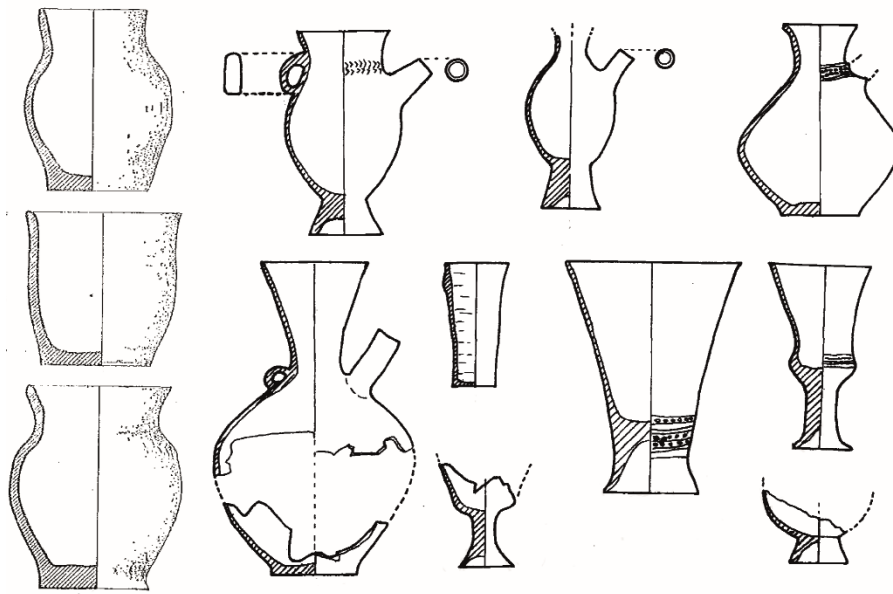


Figure 7.5. Objects from Puge Wadaluo H1 (after Liangshan 1983: Figure 9, 10 and 4), ceramics from Xichang Maliucun H1. *Drawn by the author after Sichuansheng et al. 2006a: Figure 1-2*

For the object pit at Wadaluo, the situation is a little more difficult to assess. The megalithic graves excavated so far in Puge are very different in assemblage from what was found at Wadaluo (Liangshan et al. 1982). The graves contained mainly bronze, stone, bone, and tooth ornaments, bronze weapons and tools, and a very small number of pottery objects, the only overlap being a single centrally perforated spindle whorl in one of the graves resembling one object from the Wadaluo pit. The relationship between these two kinds of features therefore remains unclear. The ceramics at Wadaluo are reminiscent of objects from the stone grave M10 at Xichang Tianwangshan (Liangshan 1984: Figure 4), as well as of vessels from earth-pit graves with or without stone installations in Puge, Zhaojue, and Huili (Liangshan et al. 1982: Figure 4; Liangshan and Puge 1987: Figure 8.1; Liangshan 1981: Figure 7; Tang 1999: Figure 2). Given this resemblance to artifacts from grave contexts, the object pit at Wadaluo might have been an offering connected with burial practices as well, be it in earth-pit, megalithic, or stone-construction graves.

Bronze Deposits

The only three known bronze deposits in the Liangshan region were discovered in Huili. They all contained large musical instruments. At Huili Luoluochong (Huixian 1999) and Guoyuan (Bao 1989), peasants found single bronze drums buried upside-down. At Zhuanchangba (Tao 1982), locals encountered six bronze bells when digging a well. The bells were subsequently excavated by archaeologists, who noticed that they had been carefully stacked in three layers. The drum at Luoluochong was filled with grey-black earth, indicating that it had either contained organic material, or been filled with a special kind of soil denoting ritual significance.

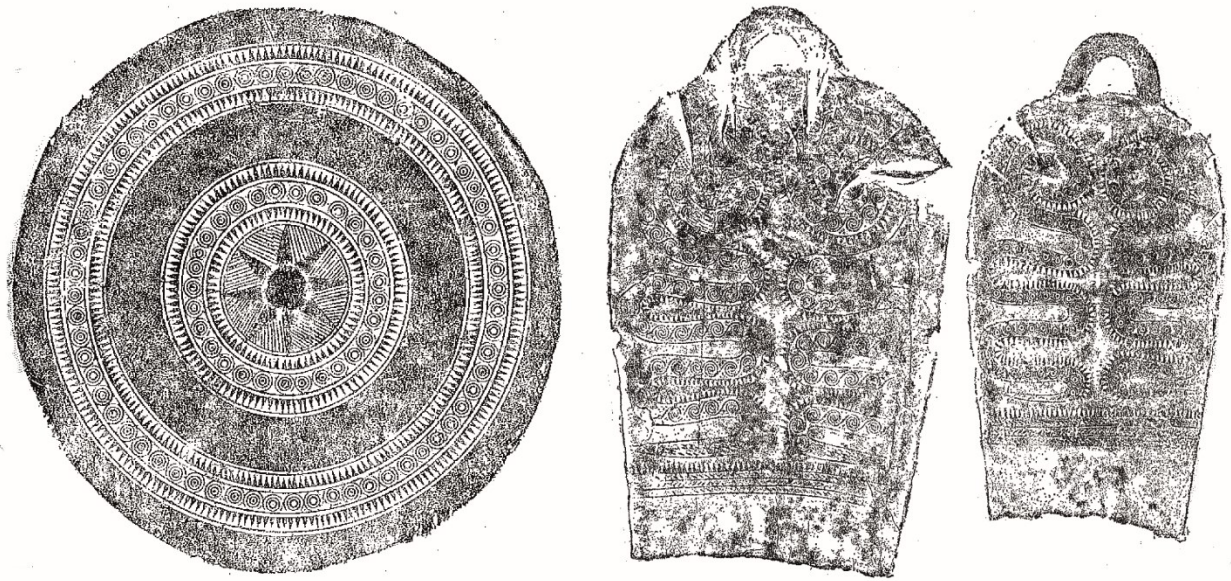


Figure 7.6. Rubbings of the drum from Huili Luoluochong and of bells from Huili Zhuanchangba (for photographs of the drum from Huili Luoluochong consult Huilixian 1977: Figure 1; for photographs of the drum from Huili Guoyuan consult Bao 1989: Figure 1). *After Huilixian 1977: Figure 2 and Tao 1982: Figure 1.*

The drums from the two sites of Luoluochong and Guoyuan are very similar; they are both Shizhaishan type drums, consisting of a flattened oval top and a trapezoidal outward-flaring lower part with a slightly stepped foot section (Figure 7.6.). Four pairs of small braided double-handles are distributed around the vessels, connecting the lower part of the top portion of the vessel to its middle. Both drums are of medium size, measuring 24.1 cm (Guoyuan) and 30.4 cm (Luoluochong) in height, with top diameters of 28.5 and 41 cm and bottom diameters of 34.5 and 50 cm. These drums are decorated in a similar fashion, carrying a star or sun motif inside several concentric circles on the top and several bands and panels of geometric and figural ornamentation around their body. The sides of the Luoluochong drum show the outlines of six boats with two or three rowers each, as well as four oxen with birds sitting on their back and at their feet and additional birds shown in separate panels. The published picture of the Guoyuan drum is too small and unclear to see such details, but the excavation report describes the drum as carrying similar decorations of boats with two rowers each and standing oxen. Tang Xiang (1999), who had access to the original drums, furthermore remarks that the Guoyuan drum was most similar to Shizhaishan-type drums of the middle phase found both at Shizhaishan (e.g., M3:3, M15:7, M16:1) and Lijiashan (e.g., M24:36, M24:42) (Yunnansheng 1975: Figure 39; Zhongguo 1988:37-42). The Luoluochong drum strongly resembles a number of other drums from Shizhaishan (e.g. M1:58, M6:2) (Li 1978: Figure 1.2), as well as drums from Yunnan, Guizhou, and Guangxi generally attributed to late phase Shizhaishan drums (Zhongguo 1988: 43-47).

Shizhaishan-type drums, which are also referred to as Heger Style I drums, are very common throughout Southwest China, and are either of similar size or larger than those from Huili. The alloys used in their production vary considerably, but it is unclear whether these differences were meant to influence the resulting sound or color or whether they had metallurgical reasons. It is generally assumed that the drums from southwest China and Southeast Asia were cast in the lost-wax technique (Jiang 2008), although the occurrence of casting seams suggests that the piece-mold technique might have been used. The quality of

these drums as well as of the Huili drums is very high, contrasting with the lower quality of most other bronze objects from Huili. Tang Xiang (1999) therefore suggests that the drums were imported. The stylistic similarity with objects from Yunnan further supports this hypothesis.

What is most remarkable about the Huili drums is their mode of deposition. Most known bronze drums from China and Southeast Asia were retrieved from graves. Only the bronze drum from Cồ Loa Citadel near Hanoi was found in a pit (Higham 2002:122-123). This drum was exceptionally large (width: 73.6 cm; height: 57 cm), and it was filled with about 200 bronzes, including 20 kg of scrap pieces of various kinds of tools. It is unclear whether this was a storage hoard or a ritual offering. At the Phu Chanh site, about 40 km north of Ho-Chi-Minh City, a Shizhaishan/Heger I type bronze drum was found positioned over a larger wooden jar of 50 cm diameter and 43.5 cm height (Bui 2008). Although the drum was interred in a large pit and contained no bones, the site has been interpreted as a burial. At Prohear, Cambodia, some of the dead were buried with a bronze drum over their head (Reinecke et al. 2009), a phenomenon that resembles the common burial practices at Kele culture sites in Guizhou, where bronze kettles were employed for the same purpose (Guizhousheng 2008).

Combined with textual sources and ethnographic records, the archaeological material suggests a wide range of uses for bronze drums. Aside from the obvious function as musical instruments and signaling devices in rituals, celebrations, and war, they were employed in a burial context, most often as burial goods, presumably for the dead to use in the afterlife, or as objects that had been made ritually unusable as a consequence of their use in the burial ritual. Furthermore, drums could be used to cover the head of the dead, and they could serve as containers for various kinds of offerings, e.g., cowrie shells at Shizhaishan and other sites. Additionally, the drums probably served a wide range of purposes outside the grave, as suggested by some of the scenes depicted on cowrie containers (Wang 1979, Tong 1983).

What kind of inferences can be drawn from this material that might help us to understand the nature of the bronze drum deposits in Huili? It is fairly clear that at least the object form and possibly even the drums themselves were derived from the Dian cultural context. The use to which the drums were put in Huili, however, might have been very different from what was customary further south. That the drums were placed upside down indicates that they may have served as containers rather than as musical instruments. Although their use as burial urns cannot be excluded — after all, bone does not preserve well in most of the research area — their upside-down placement into a pit without any accompanying objects suggests a ritual deposition possibly involving food or other organics.

The case of the six bells from Zhuanchangba is somewhat different. Although they were deposited in a pit just as the drums, they hardly lend themselves to any other usage than as musical instruments, signaling devices, and/or objects with a symbolic meaning. These bells are clearly a set, given their nearly identical shape and decoration (Figure 7.6.). They differ slightly in size with heights of 43 cm to 49.5 cm and a maximum width of 22 cm to 30 cm, showing that they had been made from separate but very similar molds and would produce different tones. All six bells are decorated with line incisions of winding bands that remind of snakes with patterns covering their bodies and four similar decorative bands below. These decorative bands closely resemble those on the drum from Luoluochong.

Bells of a similar form have been found in Yanyuan Laolongtuo M4 and several sites west of Chuxiong in Yunnan (Liangshan and Chengdu 2009: Color Plate 7.1; Yunnansheng 1964: Figure 9; Yunnansheng 1959: Figure 23; Li 1983:23), nearly all of them in graves. The only exception are the bells from Fushilong, which were found 3 m below the surface without clear associated features, and the bells at Zhuanchangba which came from a pit. The bells

usually come in sets of six; the only exceptions are the single bell from Laolongtou and the three specimens from Xiangyun Jiancun in Yunnan. In all cases, the sizes and decorations are similar to those from Zhuanchangba, large animals with curved bodies or geometric motifs. A large number of bells with a sheep's-horn shaped protrusion on top and straight or slightly outward-flaring sides have been found in great numbers all over Yunnan, Guangxi, Guangdong, and northern Vietnam. They were deposited in graves and are either undecorated or carry geometric motifs similar to those usually found on drums (Falkenhausen 1988:561-563). Both types of bells are thus restricted to southwest China, but the second type is even more limited in its range of distribution.

According to the – admittedly very few – material analyses conducted on material from Southwest China, most bells and drums from Yunnan have a similar composition, consisting of 70-80% copper, 13-16% tin, and up to 13.7% lead (Falkenhausen 1993:105; Murowchick 1989:225-226). The bell from Laolongtou has an even higher tin percentage (30.46%) but a fairly low lead content (2.19%) (Liu and Tang 2006:219), and the bells from Huili consist of nearly pure copper (92.49% copper, 7% tin) (Falkenhausen 1993:105). Von Falkenhausen suggests that the Dian bell manufacturers might have been aware of the Chinese bronze casting rules calling for one part tin and six parts copper for musical instruments (Falkenhausen 1988:559). In later periods, so he argues, the southwestern bell casters seem to have moved away from these casting principles, as reflected in the very different composition of the Zhuanchangba bells (Falkenhausen 1988:559).

This model of development, however, does not explain the composition of the similarly late bell from Laolongtou with its unusually high tin content. Such a high percentage of tin would have influenced the playing behavior unfavorably, making it brittle and thus prone to breakage when struck. The tin might have been added to aid in the casting process and/or to enhance the color of the object, suggesting that the object's qualities as a musical instrument were not a primary concern. While the Dian had a specific casting tradition that may indeed have been informed by casting rules from the Central Plains, the casting techniques employed in the Liangshan area seem to represent a local practice that was much less refined.

Another factor to keep in mind is the availability of raw materials. As Murowchick has pointed out, lead levels in bronzes in northern China, northern Vietnam, and Cambodia are considerably higher than in artifacts from southwest China, which could be due to the ready availability of tin in southwest China, making it unnecessary to substitute lead (Murowchick 1989:226). Nevertheless, as high lead levels improve the flow of the material in casting and also make the final tuning of the instruments easier (Falkenhausen 1988:225), technical considerations could have played a role as well. The casting techniques used for the bells in Huili and Shizhaishan have been compared to those common for small *ling* bells found as part of the personal attire in a number of graves throughout the Liangshan area and in Yunnan (Tao 1982). The *ling* bells, however, are usually much coarser in execution and only rarely carry any decoration. Those specimens recovered from Chuxiong Wanjiaba (Yunnansheng 1983) are of nearly pure copper with trace elements of other metals (Murowchick 1989:103), indicating no deliberate alloying, but two specimens retrieved from the art market in Yanyuan have a relatively high tin content (7-12%), combined with a low amount of lead (2-4%).

The specific trace elements found in the bells from Zhuanchangba (Tao 1982), the deliberate alloying with lead, and the casting technique all speak for local production. The forms and decoration motifs, however, show an awareness of object traditions in the Dian culture realm. The usage, however, might have been different, making their sound and striking properties and thus the actual alloy immaterial to the metal workers in Huili. The probable difference in usage and meaning would also explain the difference in interment.

Location Choice

As has become clear in the description above, the different types of object pits seem to have been preferentially located in different parts of the research area. All object pits containing bronzes have been found in Huili, Luoluochong and Guoyuan. The two places with drum finds, are located less than 3 km apart from each other. They are both less than 1 km south of the Chenghe River, and were built on level ground at an elevation of around 1800 m, low in relation with the overall terrain of Huili. The pit containing the bronze bells at Zhuanchangba, similarly was located at an elevation of around 1800 m on the eastern slope of a depression between the mountains, at nearly 6 km distance from the nearest major river. All three sites are located within clusters of graves and settlement sites, all located at similar elevations and on similarly moderate slopes.

All three sites are located in a region with easy access to Yunnan, particularly to Chuxiong, but are difficult to reach from the Anning River Valley. The whole area is particularly rich in metal resources (esp. copper and lead) and functions as the Liangshan region's gateway to Dian. It is therefore not surprising that the bronzes found in these pits show close similarity to finds from Chuxiong but differ markedly from the archaeological assemblages from the Anning River Valley.

The pits with ceramic objects described above are located in a very different area. They mostly cluster around Xichang in the alluvial fan of the Anning River and thus at relatively low elevations (~1500 m asl.). Only Puge Wadaluo is located over 44 km southeast, separated from the other sites by high mountain chain and several rivers. Like the other sites, however, it is very close to a river, the Xiluo River, and – by local standards – at a moderate elevation of 1773 m and on a slope. The site is at only 500 m distance from the megalithic graves of Puge Xiaoxingchang, indicating a direct relationship. Xichang Dayangdui and Maliucun are likewise extremely close to megalithic graves, but on level ground on a wide alluvial plane and not on a mountain slope as observed in Puge. Furthermore, the ceramic assemblages from these two areas are very different from each other, indicating a difference both in ceramic tradition and in megalithic grave construction; however, the offering practices are similar.

It is difficult to tell whether special locations were chosen to conduct the rituals associated with the Xichang Dayangdui layer 5, Qimugou, and Yingpanshan intentional deposits. Dayangdui is located on a manmade platform towering about 10 m above the surrounding landscape. The spot was used as an earth-pit grave cemetery before being used for ritual activities involving ceramic pits of the first type, and it was subsequently occupied by megalithic graves with associated ceramic pits of the second type. Qimugou first served as a settlement with associated graves, followed by a phase that saw the construction of a single grave accompanied by a ceramic pit. The site is very close to the river, on level ground a slightly elevated natural terrace with the mountains at its back and the river in front, making it similar to Dayangdui as well as Yingpanshan but also to most other settlement and grave sites in the area.

Yingpanshan held several layers of settlement remains, object pits, and earth-pit graves, with object pits and graves occurring within the same layers. Given the close similarity between Qimugou and Yingpanshan and their spatial association with megalithic graves, it seems likely that the pits at these two sites were directly associated with burial rituals or might even have served as graves themselves. They are furthermore located within less than 9 km from each other, while Dayangdui is over 20 km further south. Judging by their unique form and content, the pits at Dayangdui might thus belong to a separate tradition, commemorating the earlier burials at the same site or they could have been the outcome of quite different kinds of ritualized actions, likely conducted by a group rather than individuals.

Chance Finds

Most single finds from the Liangshan region were made by private individuals with no subsequent excavation, and their original location is thus unclear and their interpretation problematic. As some of these are groups of objects rather than single items, it is more fitting to refer to them to chance finds rather than single finds. We can distinguish between two main categories with several sub-categories:

- 1) objects recovered from the art market;
- 2) objects found and reported by local residents.
 - a) discoveries followed up by excavation or surface-survey;
 - b) finds for which the original location has been reported but not further explored;
 - c) objects kept in private households as heirlooms with a vague assignation as to find location.

For the first category of objects, the deposition context is usually irretrievably lost; however, there are two large loots retrieved by the police in Huili and Yanyuan respectively that very likely come from one site or at least one river valley each. These finds have been analyzed elsewhere and a comparison with grave finds in both locales has shown that they were probably assemblages from looted graves in Huili and the Yanyuan basin respectively (Hein 2014). They will thus not be discussed here. Examples of 2a are, for instance, the bronze object pits from Huili, which have been described above, as well as many graves which have been analyzed elsewhere together with other grave assemblages from the Liangshan region (Hein 2017b). Below I only discuss finds that could not be assigned to specific features.

Such finds with known location have been reported from Huili Hekoucun and Yimen Xiacunxiang, Ninglan Cunyi, Yongsheng Laoying, Longtan, and Yanjiaqing, and Zhaojue Sikaixiang (Zhongguo 2009). In most cases, no drawings or photographs have been published, making it difficult to assess the object types and potential significance of their occurrence. The bronze sword from Hekoucun was found at a slightly elevated spot on the eastern bank of the Jinshajiang on level ground at 1771 m, close to the foot of the mountain. The weapon has been in the household of local peasants since 1971 and was recorded by archaeologists in March 1933 (Tang Xiang 1933). It has been described as a sword with a three-pronged hilt, measuring more than 32 cm in length (it was broken at the tip). The object was found at 1.5 km distance from the grave site of Huili Yunshuancun and not far from Fenjiwan, Xiaotuanshan, and other sites that have both graves and settlement remains, none of which contain similar weapons. As many of the graves were severely disturbed and robbed, causing similar swords to appear on the art market in Huili, the specimen from Hekoucun could have come from a grave, but it is unclear what kind of grave it was and what kind of objects it might have been associated with. At Huili Yimen Xiacunxiang, a single bronze *yue* axe was discovered on a second-level river terrace at 1789 m asl. Many of the earth-pit graves with or without stone installations in Huili contained bronze *yue* axes, for instance at Guojiabao which is located at 16 km distance. The Xiacunxiang find may thus be from a disturbed grave or an actual object deposit.

The assemblages of surface finds in Yongsheng are very rich and all close to each other within the same valley on level ground at around 1600 m asl.; each collection site is close to a river. At Longtan, over 300 bronze objects have been discovered, among them swords, halberds, spear-heads, *yue* and *fu* axes, hoes, composite swords, bronze and iron spear-heads, and ceramic jars. As no detailed descriptions or pictures of the objects have been published, it is difficult to compare them with provenience objects; however, composite swords are otherwise mainly known from Yanyuan Laolongtou and Han-period stone-cist graves from

Yunnan and Sichuan, indicating that these finds might come from similar graves. Yongsheng Longtan and Yanjiaqing are very close as well and have yielded similar objects, indicating the presence of large cemeteries of several hundreds of graves. Ninglang Cunyi is located in a mountain valley as well, but in a very narrow one at high altitude (2195 m) with no other known sites around. Nevertheless, as various kinds of bronze weapons have continuously come to light, excavations in this area would probably reveal a similar cemetery.

At Yongsheng Laoying, a bundle of 20 swords was found 0.6-0.8 m below surface while a number of other items appeared on the surface (1 bronze cauldron, 1 bronze bracelet, 5 ceramic beakers). The surface finds might have come from disturbed graves but the bundling and burying of the swords suggests a deposit, maybe an offering to higher powers or items for several deceased in a group offering. The chance find of one bronze sword and one halberd in Jinyang Munagou, a place located on a first-level terrace at an elevation of 1892 m asl., may have been a disturbed grave as well, but as no images of the objects have been published, it is impossible to evaluate the material properly.

The situation in Zhaojue Sikaixiang is rather different. Here, a pile of 17 Han coins was discovered 10 m below the surface on the alluvial fan of a river at the considerable elevation of 2444 m asl., but surrounded by even higher mountains. The location is close to a Han settlement site and a number of earlier and later graves and settlements, close to ancient roads and river courses. It is therefore highly likely that they were either offerings for the safety on the road or as money hidden for safe-keeping in case of a bandit attack.

Discussion: The Nature of the Object Deposits in Southwest China

Based on the analyses above, the occurrence of an assemblage of intact objects in a pit can be the result of a wide variety of different behaviors. In the Liangshan region alone, three different kinds of practices were identified. These phenomena are deposits of precious metal objects (connected with the two separate traditions of interring either bells in their own right, or single drums serving as a containers for offerings), deposits of one large and one or several small ceramic vessels (connected with fire treatment and/or libation/transition rituals), and the interment of a larger number of ceramic vessels, probably in connection with burial rituals as the spatial association with megalithic graves shows.

As has been shown elsewhere, the megalithic graves of the Anning River Valley were the center of ritualized actions that took place at certain intervals and involved the building, reopening, and accessing of graves, eating/drinking and/or libation/food offerings in and around the graves, and potential processions or other forms of movement between graves located at close vicinity toward each other (Hein 2017b). One type of ceramic deposit was associated with these peri- or post-burial practices. The other type of ceramic deposits reflect community-based ritualized actions of a different nature that did not involve graves and were earlier in date. Given that these earlier pits at Dayangdui are superimposed by megalithic graves which can be associated with ceramic deposits as well, the two customs may be linked. It was only in connection with megalithic graves, however, that the custom became wide-spread, especially during the late period when similar deposits occurred all throughout the Anning River Valley and even the eastern mountains.

All types of ceramic deposits were generally located in the alluvial fan of rivers or on lower-level terraces and often close to settlements and/or burial sites rather than in special sacred locals were chosen, indicating that the ritualized acts conducted there were not secret but closely linked to community life.

The pits at Xichang Dayangdui and Maliucun were clearly used in connection with the multiple secondary burials of the megalithic graves, either for offerings to the dead or for depositing objects used in ritual meals or other activities that precluded them from being employed in everyday consumption afterward; the same interpretation likely applies to Puge Wadaluo. The remaining ceramic deposits are very different in content, even though they are located in the vicinity of megalithic graves. Xichang Qimugou and Yingpanshan might be either symbolic or actual urn burials from which the ash remains have not been reported, originally holding the bones of infants and juveniles that for religious or social reasons could not be buried in the megalithic graves that were reserved for older people. Both sites are relatively close to each other, while the ceramic pit of Xichang Dayangdui is located significantly further south and reflects a very different practice. The pits at Dayangdui hold ceramics clearly used in libation rituals and are paired with pits containing fine yellow silt, which might have come from a special or sacred location, a custom that is unique within the research area and does not seem to have any parallels in adjoining regions either.

The bronze deposits are of a different nature. The drums are likely imports from the Dian culture sphere, deposited as ritual offerings of special objects, possibly in reference to the near-by river or other landmarks. The singular deposition of bronze bells was observed over 40 km further southwest and separated by a high mountain ridge both from the other sites with bronze deposits and from the nearest river. The meaning of both groups of bronze deposits might nevertheless be similar as they both contained ritual musical instruments used in graves in the Dian culture area but otherwise unknown from Huili. It is remarkable, however, that the bells were local products imitating foreign objects but not meant for actual use as musical instruments. All three deposits therefore show the high esteem in which Dian objects were held and reflect ways in which foreign items were received locally, in somewhat of a parallel to what Fontijn and others suggested for the case of imported bronzes in deposits in the Netherlands.

Bronze drums in particular have a wide distribution far beyond the Dian realm, extending throughout most of Yunnan and much of Southeast Asia. Apart from their usage in various rituals and as grave goods, historical sources show that the drums were symbols of authority as well as instruments for summoning the gods (Cooler 1995:9, Pirazzoli-t'Serstevens 1974:29-31). Pictographic evidence from Dian cowrie containers indicates that they might have had a similar function during earlier times as well. Alice Yao (2010) suggests that the drums might have symbolized formalized alliance networks, and it is conceivable that the specimens from the research area did indeed reach Huili as tokens of mutual political agreements between the groups living there and the Dian. This might apply to the drums found in Yanyuan as well, but there they were placed inside graves and not object pits, reflecting the high status, far-reaching connections, and political importance of the tomb owner. Yanyuan is furthermore characterized by the contrast between large and very richly furnished elite burials and small graves with only minimal equipment (Hein 2015), while the cemeteries in Huili speak of a society that — at least in death — seems to have been considerably more egalitarian (Hein 2014). The bronze drums therefore likely took on a slightly different meaning in these two places — in Huili as tokens of a bond between the Dian and the local community as a whole, in Yanyuan a symbol of elite exchange and high status of a few — which would explain the differences in deposition practice. The close connections with Yunnan visible in the assemblages from both regions and the lack of bronze drums and bells in other parts of the research area can be easily explained by geomorphological factors. Both areas are separated from the Anning River Valley by high mountain ranges not easy to traverse, while in Huili the terrain gently slopes down toward Yunnan, making Huili the gateway to Dian. Yanyuan is

further away from the region that the Dian inhabited in the past, but has relatively easy access to northwest Yunnan and thus indirectly to Dian.

The practice of depositing bronze objects in pits is unique within the research area, but the objects show clear signs of outside influence, so do many of the single finds. From a comparison of both the provenienced single finds and the objects retrieved from the antiquities market it has become clear that most of them come from earth-pit graves with or without stone-construction parts in the southwest of the research area, i.e., Yanyuan, Yongsheng, and Ninglang. Only a few may have been non-mortuary deposits of weapons, most prominently the bundle of swords at Yongsheng Laoying and maybe some of the single items as well, however, these occurrences are too rare to suggest the existence of a deposition custom as seen in Bronze Age Europe. Nevertheless, we have to keep in mind that the region is very under-researched and there no private detectorists systematically combing the landscape and reporting their findings. Looting is a major problem but with artefacts retrieved from the antiquities market it is virtually impossible to reconstruct the find context. The general assumption is that they come from looted graves, but this may not always be the case. The stash of Han coins from Zhaojue Sikaixiang is a singular occurrence of a different type and may be a one-off rather than a representative of a custom or behavioral pattern. Again, further systematic field research is necessary to establish the nature of the actions underlying these finds.

Conclusion

The case study from the Liangshan region in Southwest China has shown how insights gained from the European debate on hoards/deposits can successfully be applied to other parts of the world. The study has confirmed that deposits need to be interpreted together with other kinds of archaeological finds to understand their significance, in the case of later ceramic deposits especially together with the megalithic graves. In the European context, it is generally agreed that single finds need to be considered together with multi-piece deposits as single items can be offerings, too. In Southwest China, however, all kinds of chance finds (meaning both single- and multi-piece items) have to be evaluated together and compared with settlement and especially grave finds as well as deposits. In the European case, it is sometimes possible to evaluate items found by detectorists or other private individuals as they will often report where they found the items, which in turn makes further archaeological investigation possible. Unfortunately, in Southwest China, the majority of non-excavated finds were retrieved from the antiquities market with no chance of reconstructing the original place of deposition. In all cases, stylistic and technological comparison can help situate the items to a degree. However this can only go so far. Metal objects seem to have been traded and exchanged between the Dian area and surrounding regions, so it is impossible to determine where looted Dian items had come out of the ground, in Yunnan or somewhere in Sichuan or Guizhou.

In the case of object with clear provenience that come from non-mortuary deposits, for the European material a multifaceted approach considering production, life history, treatment, and deposit location has been shown to be useful for determining the nature of the deposits. In Southwest China, such research is hampered by the fact that the majority of such finds have been published only in preliminary reports with no information on traces of object production processes or use wear and only rarely information on object treatment or precise deposition location. Future research thus needs to revisit the original objects and excavation documentation where available to gain deeper insights into the details of past deposition practices.

Relying only on the published material it has still been possible to gain some insights into local deposition practices. Some are different from the European material, while others show similarities in behavioral patterns. A particularly intriguing practice observable in both regions is the deposition of imported items that might reflect dealing with the foreign by integrating it into the local context via various ritual actions. A major difference can be seen in the type of items deposited. According to our current knowledge, in the Liangshan region ceramic deposits seem to be more common than metal deposits. The present case study thus provides a further argument for refocusing the debate around hoards/intentional deposits to include also non-metal deposition practices instead of focusing only on issues of value and prestige. This will require taking a renewed look at items that may hold no apparent value for the modern observer, thus questioning our own perception of value, as done in a recent volume on that topic (Papadopoulou and Urton 2012).

Like examples in Europe, the Liangshan region deposits result from a wide variety of different behaviors, making it clear that no single explanation will fit them all. Some deposits are related to graves (e.g., ritual refuse, items for the dead), others to non-mortuary related ritualized actions (e.g., offerings), others again might be hidden treasure or offerings (coins). Of particular interest is the connection between ceramic deposits and megalithic graves, a phenomenon that may have been much more widely spread than the current number of reported cases indicates. In this case, only systematic survey and auguring around megalithic graves – something that has never been done before – can provide further insights.

Another lesson learned from the material at hand is the insight that seemingly similar deposits (i.e., ceramic pits) may be the outcome of a variety of different behavioral patterns even if the assemblages superficially look alike. It is therefore crucial to consider object treatment, place of deposition, and association with other types of sites before suggesting an interpretation. This is an insight that may be applied to other parts of the world as well. Similarly, the phenomenon of “misunderstood” or redefined imported items that received a new context and meaning via deposition practices may be applied to other regions, too. Especially for bronze drums and the far-reaching exchange networks throughout Southwest China and Southeast Asia that they represent, it now seems advisable to reinvestigate how and where they were used and deposited to understand how they were understood and reinterpreted throughout this vast region.

At present, there are admittedly too few cases known from the Liangshan region to provide a conclusive interpretation, but there is enough to suggest that ceramic and bronze deposits are not one-off occurrences but were part of practices that so far have been under-reported. Additionally, the material provides a useful case study outside Europe for testing general ideas on human behavior developed on the European material.

Acknowledgements

This paper is based on parts of my dissertation research conducted under the supervision of Lothar von Falkenhausen to whom I owe great thanks for never-ceasing support and encouragement throughout my studies and to the present. This paper was originally presented at the celebration of the 60th birthday of Lothar von Falkenhausen but has been much-revised with critical editorial help from Rowan Flad and Bryan Miller. I would also like to express my thanks to Sun Hua, Jiang Zhanghua, Liu Hong, Tang Xiang, and everybody at the Chengdu City Institute of Archaeology, the Liangshan Yi Autonomous Prefecture Museum and the Xichang City Museum who made this research possible.

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