

Landscapes, Archaeology, and the Search for the First Kagay-anon Settlement

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Introduction

“At present it may be established that the Huluga Open Site (HOS) may have been a habitation site, with people using the space for domestic activities, but were not settled (Neri *et al* 2004: 27).” This may prove to be disappointing for many Kagay-anons who believed for so long that this particular area of present day Cagayan de Oro (CDO) was Huluga, the Kagay-anon settlement that the Spanish encountered in their 17th century conquest of Northern Mindanao (Demetrio 1995). This may also prove that the search for Huluga is far from over. That is why this paper joins in the search for this much sought after settlement site. To do this, it studies the readily available landscape data from the 2004 CDO Archaeological Project and identifies possible areas where settlement sites may have been established.

Landscape Archaeology

This archaeological approach in studying landscapes is called landscape archaeology. Struever (1968) once called it settlement pattern analysis. And Butzer (1971) once called it environmental archaeology. It is a multidisciplinary approach to studying archaeological landscapes, or the interactions of the physical environment with humans, and vice-versa. Among its more popular applications and contributions to archaeology in general is its ways of identifying archaeological sites in the landscape (i.e. Fry *et al* 2004, Kvamme 1991, Zhang 2005, Sand 2002, and Graves *et al* 2002).

Landscape archaeology is not a recently developed subfield in archaeological research. It is most developed in Great Britain and the United States of America where it began in the middle of the 20th century (see Ladefoged and Graves 2002). But in the Philippines, researches have been few, recent, and underdeveloped. In the past few years the different archaeological researches in the country have reflected the diverse methods and topics of this multidisciplinary approach in studying archaeological landscapes.

Towards the end of the last century several archaeological researches carried out by Filipino and foreign archaeologists have made strides in developing Philippine landscape archaeology. Hutterer and Macdonald's (1982) research in Negros Island, the biggest landscape archaeology research in the country by far, was a subsistence settlement investigation that involved, among others, environmental and ethnoarchaeological methods to study the whole spectrum of the Negros past. One of Hutterer's students continues this multidisciplinary research in Negros Island with a similar framework, but with improved analytical techniques (see Junker 2003). Paz (2001) used archaeobotany to analyze plant macro remains across several Philippine sites, as well as across the region, to determine plant use in Northern Wallacea. Siringan *et al* (2002) drilled through the floor of Paoay Lake in Ilocos Norte to obtain sediment samples for analysis that enabled them to reconstruct the paleoenvironment of the area. Consequently, they were also able to answer questions of human-environment interactions, and vice-versa. Acabado (2003) used Geographic Information Systems (GIS) to understand Ifugao land-use

and agricultural intensification practices to build on the archaeological data of the Cordillera region. And Peterson (2003) put the archaeology of Cebu Island in its environmental and cultural context.

As seen above, there are a number of analytical methods that can be used to achieve the objectives of landscape archaeology and answer questions pertaining to sites and settlements. Methods used in Philippine landscape archaeology have ranged from new and high technology equipment such as GIS to simple maps analyses to be able to understand archaeological landscapes. In the Philippine experience, it is the kind of data, the readily available analytical tools, the most appropriate approach, and/or the researcher's specialization that will determine the methods and outcome of each research. Such is the case with this paper where readily available landscape and archaeological data from the 2004 CDO Archaeological Project was used as both study materials and tools in continuing the search for Huluga.

The Site

What was once the single open site of Huluga located in the area of Sitio Taguanao, Barangay Indahag, CDO City now straddles two property sites. These are the Gales and the Dahino Property Sites (see Neri *et al* this volume). The division came about with the construction of the G. Pelaez National Highway that cut across the HOS, drastically changing the landscape. However, the general landscape of Barangay Indahag remains hilly with rising and falling slopes all throughout.

The HOS is situated on a promontory along the east bank of the CDO River. The promontory is popularly called Obsidian Hill for the number of obsidian artefacts recovered from its slope. It is now part of the Gales Property Site. Its geographic coordinates are East 124° 37' 57" and North 8° 25' 19".

The area of the HOS is part of the Indahag Limestone formation. The landscape covers this formation with a gentle sloping layering of pyroclastic material, silty clay sediments, and materials from the Bukidnon formation that is situated south of the Indahag Limestone formation (see Bureau of Mines

and Geosciences, n.d.). These are all generally loose material, and the accumulation of such materials throughout the landscape is a result of volcanic activity, tectonism, recent erosion, and sedimentation (DENR 1999).

The Settlement

The site was allegedly the settlement of Huluga or Himologan. It is depicted in the early accounts of the Recollect missionaries in the area as a huge settlement on top of a hill whose slopes were so steep that the only way in and out of it would be to use rattan ladders (Madigan 1995). It was also documented that Huluga:

“...consisted of one large (possibly elliptical) structure which housed all the town’s inhabitants (more than five hundred according to the chronicler). A rough stone or wood wall constituted the outer fortification of this, while the inside was divided into living quarters connected by passages, reminding the Recollects of a monastery cloister. A small temple, set at the center of the fort which was open like a large patio, furthered this impression.” (Madigan 1995: 9)

Furthermore, the settlement is said to have no water source. Thus, it could be presumed that regular excursions were conducted to fetch water. Although it was documented that the inhabitants practiced sedentary agriculture of “rice, sugar-cane, coconuts, and many varieties of fruits and vegetables” there is no physical description of the fields that they tilled.

Finding Huluga

The historical accounts of Huluga give archaeologists a good idea of the archaeological landscape features they should look for at a particular site. When they find most of these features then ground truthing through excavations can commence. When a substantial amount of artefacts and

features indicating settlements are found with the right dates attributed to them only then can anyone safely say that what has been unearthed is the settlement that the Recollects encountered some four hundred years ago.

Since the 1970s Philippine archaeology has paid special attention to the HOS. Indeed, there are a number of artefacts that have been recovered here. But the 2004 CDO Archaeological Project, the most extensive so far, has preliminarily concluded that the HOS was a habitation. Interestingly, several observations made from studying the stratigraphy, the site map, and aerial and panoramic photographs led to these new insights and hypotheses regarding the HOS and the greater possibility of finding Huluga.

Agricultural Land and not the Settlement Space

The present vicinity where excavations at the HOS have been concentrated for the last thirty years has consistently been identified to be a habitation. However, the area can also be hypothesized to be part of the agricultural area of the Huluga settlement, or the area where “rice, sugar cane, coconuts, and many varieties of fruits and vegetables” were grown. The settlement did not have a source of water since it was situated on a rather steep and elevated flat portion of land overlooking the river. Therefore, the best place to grow crops in the area was on the slopes of the hills and the narrow alluvial plains below them (See Plate 1). Ethnographic data from across Southeast Asia shows that rice among other crops are grown on sloping terrain usually fashioned into terraces. Sugar cane, though not a popular source of food in the area today, may also be cultivated in sloping areas (see Conklin 1975 and Spencer 1966). In the prehistory of Oceania the crop has been noted to be raised in the highlands of New Guinea just southeast of Mindanao (see Daniels and Daniels 1993). Coconuts too are readily found on slopes and on foothills as seen in such places as Majayjay, Laguna and even in the present CDO. Fruits and vegetables too grow very well as seen in the slopes of such areas as the Bukidnon highlands and in the Cordilleras of Northern Luzon, which produce more than fifty percent of the country’s fruits and vegetables. It was also noted by Neri *et al* (2004) that corn farming did

take place in the areas of excavation in the last fifty years. There may be a good possibility that it was used this way four hundred years ago rather than used as a settlement.

Where They Likely Planted Their Rice and Root Crops

Dry rice cultivation on hillslopes was most likely practiced just like in many Visayan communities during Spanish contact (Scott 1994: 36-39). This may certainly be the case in the HOS since there have been no reports of terracing features, or vestiges of it, that may indicate the cultivation of wet rice in the past. By observing the contours on the site map the cultivation of dry rice may have been done on the southeast portion of land, around the area of Trench 4. The evidence of soil beneath the top colluvial layer, as seen in the stratigraphic record in Figure 4, supports this hypothesis. But since it was known that Visayans did not produce a year's supply of rice (Scott 1994:35) there is great possibility that root crops were also raised in Huluga's agricultural lands. The lowest elevations on the site map are the alluvial plain and the area that is now cut by the G. Pelaez National Highway. These areas are joined together to form what looks like a natural ditch that drains out into the river. This land feature is relatively similar to that of the New Guinea highlands, particularly at the Kuk site, where the oldest evidence, so far, of root crop cultivation was encountered (see Golson 1977 and Denham *et al.* 2003 as cited in Denham 2005). It is also most likely in this natural drainage and less likely in the alluvial plain that these crops were cultivated. Geologists have studied the reclamation of CDO land by the CDO River sediments covering the last several hundred years (Jaraula *et al* 2001). The coast is said to be closer in-land than it is today. And since erosion has contributed to forming much of the present landscape it can therefore be said that much of the sediments of the reclaimed land was most probably from the CDO highlands. If this is so then the highlands would have then been steeper. The alluvial plains would have also been narrower. And such drainage channels would have been conducive enough to plant domestic root crops.

No Likely Settlement Features to be Found in the HOS

Hearths and middens as settlement features are least likely to be found in the HOS, especially towards the ridge of the Gales Property hill and areas where slopes dip more than 2° (See stratigraphic profiles, Figures 2-5). Studies show that active slope processes occur where there are more than 2° angles, even beneath woodland (Young 1972, Waters 1992: 302, and French 2003: 22). And these processes are significant to the preservation and the destruction of archaeological sites and landscapes (French 2003: 20). Processes like erosion, soil creep, and landslides can readily bury, expose, or take features and artefacts along with sediments and other material during its occurrence (Waters 1992). So that middens in the HOS would likely be exposed and dispersed, and hearths, if there are any, would have been swept away by these processes, or destroyed by recent, and even past plowing activity.

Now these slope processes and/or plowing that can obscure, if not destroy, original landscapes cannot simply and easily be used to explain the destruction of deeply preserved archaeological features like the postholes. That would especially be true for those thought to be massive enough to serve as the “well-made log-wall fortifications” of Huluga – a quite popular Kagayanon belief (see Madigan 1995). Recent archaeological researches with similar objectives that were more successful in identifying posthole features, or even the recovery of the very posts themselves have proven this well (See Paz 2002 and 2004). The idea is not that these activities and processes in the HOS destroyed such sought after features, but that simply they were never present in the excavated areas. And though there is still a chance that postholes would be found in the HOS these are doubtfully a part of the remains of the grandly described Huluga settlement.

Flatlands Rather Than Slivers and Slopes

Relatively flat landscapes rather than these slivers of land and slopes are the areas that are the most likely sites of settlements in the area. The particular site that many are looking for was a promontory overlooking the

river that was so steep that it required a rattan ladder to get in or out. Consideration should also be given to the population that the area can accommodate. Since it is known that there were no less than five hundred inhabitants at the time that the Recollect missionaries came, then archaeologists should be looking for a relatively flat land area that can accommodate no less than five hundred people. So if one person occupied 1 square meter of land then the land should be no less than five hundred square meters. Initially this can be identified in panoramic and aerial photographs of the HOS (See Plate 2 and Plate 3). Right now, the HOS is a doubtful candidate as the Huluga settlement since its land area is, first, no greater than five hundred square meters, second, too undulating to accommodate the structures that were described in historical accounts, and third, devoid of any settlement features like postholes, hearths, and middens which are seen in prominent archaeological settlement sites in the Philippines like in Calatagan, Batangas (see Fox and Maine 1982) and in Porac in Pampanga (see Paz 2002). And that is considering both sites as one.

New Directions in the Search for Huluga

For three decades now archaeologists have been digging up what can be called colluvial materials or materials that have been deposited in areas because of gravity. It is gravity, among other natural factors, which transport these materials – sediments and artefacts – through these rising and falling hill-slopes. And this is verified by a statistical analysis of the distribution of artefacts in the site (see Eusebio in this volume). So far, this has been the nature of the archaeology dug in the last three decades. By taking note of this, the historical accounts, and the landscape data it is clear that the search for Huluga must now take new directions if it truly wants to find the very site of the Huluga settlement. Neri *et al* (2004) has already paved the way for exploring other possible sites to find Huluga. But by what has been presented here directions point towards higher elevations, steeper hills, flatter and greater land areas, a good view of the river, and maybe even several rattan ladders to get in and out of an area that may have once been the Huluga. Along the way,

testing the “HOS as the agricultural land hypothesis” would be a good first step to take. After all if you find the place where people once produced their food, how far can their homes be from it?

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Abstract

This paper advances the study of the Huluga Open Site's landscape using data from the 2004 Cagayan de Oro Archaeological Project. It briefly discusses what landscape archaeology is, and cites several examples of this kind of research in the Philippines. It then discusses hypotheses made from observations on the data studied. It concludes by offering new directions from overlooked data to finding Cagayan de Oro's first settlement.

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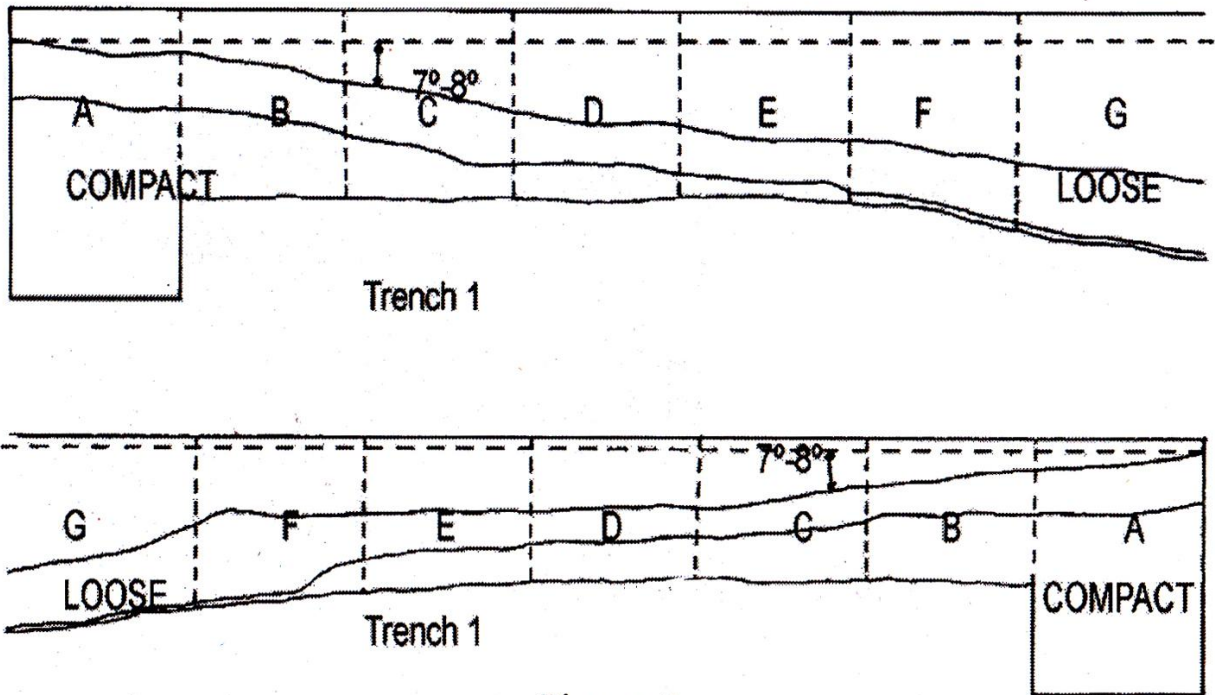


Figure 2
Slope of 7°-8° angles, loose top sediments

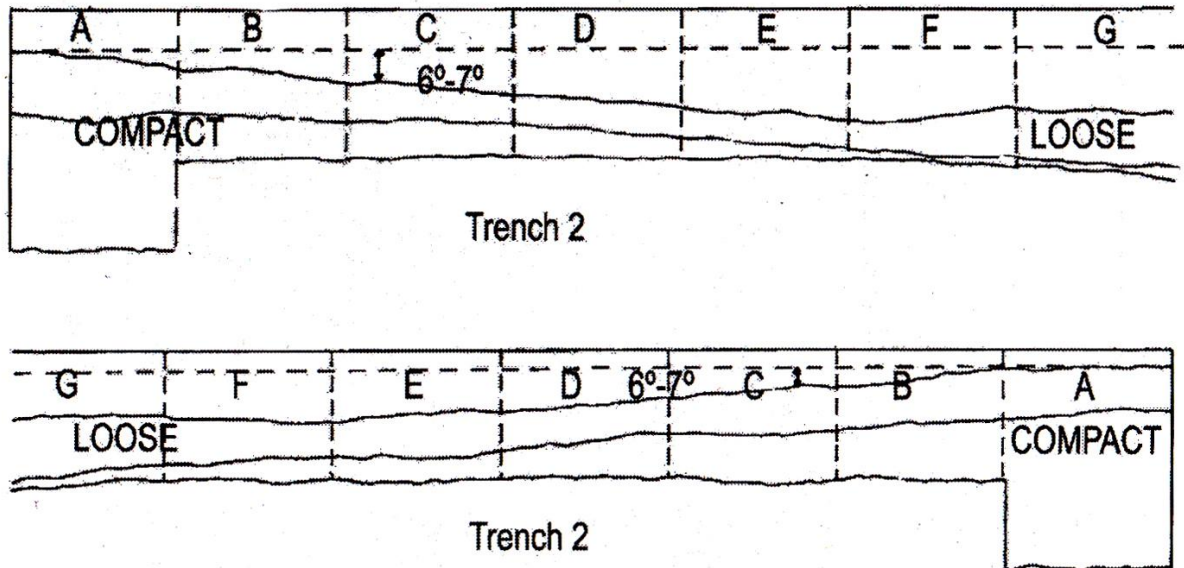


Figure 3
Slope of 6°-7° angles, loose top sediments

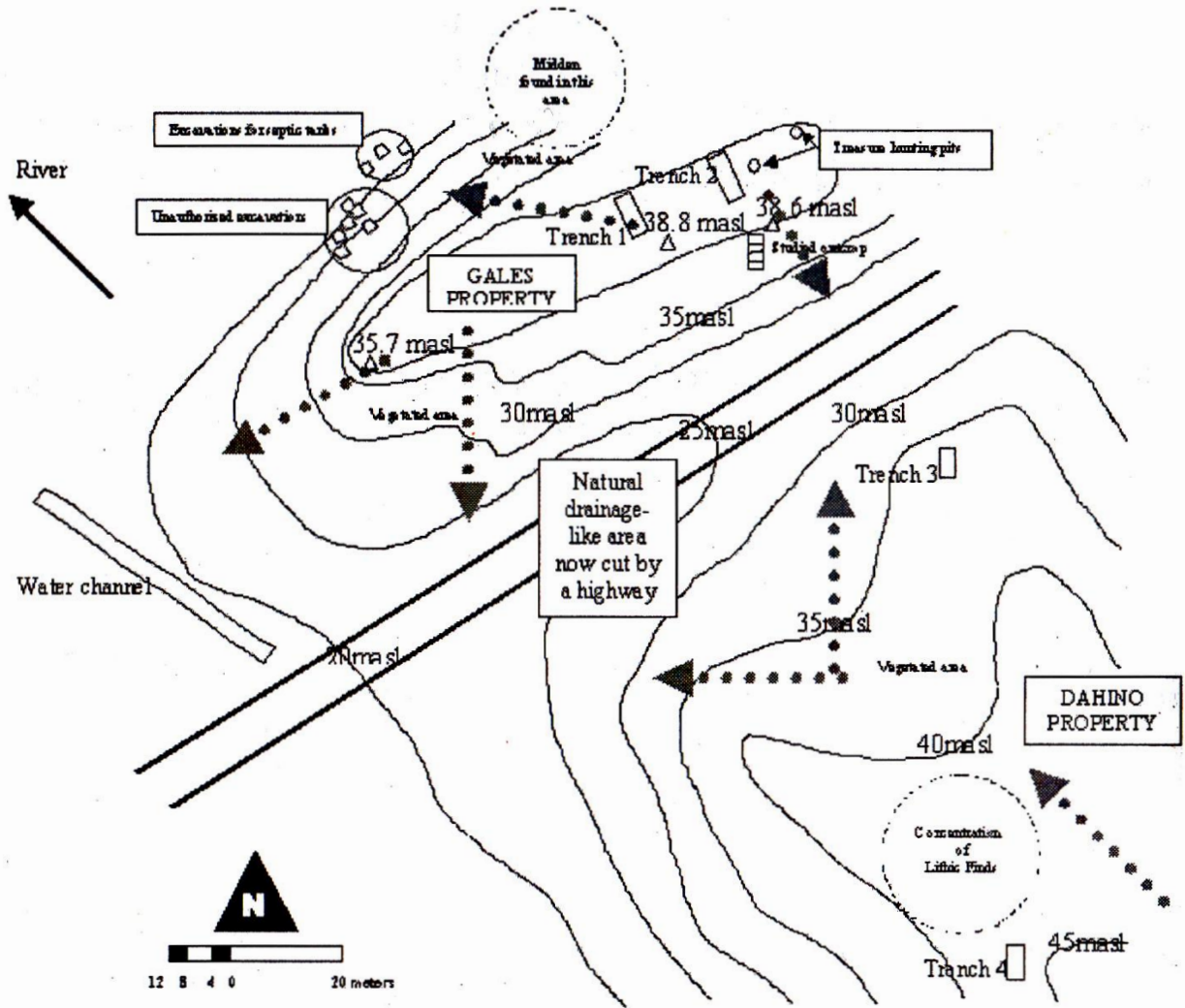


Figure 1

Modified site map of the Huluga Open Site (Dahino and Gales Properties).

Excavation areas done in the last five years are reflected here. Dotted arrows point to depositional areas, or areas where there is high probability of dense archaeological deposits and where other significant finds were recovered. Elevation is measured in meters above sea level (modified from Neri *et al* 2004).

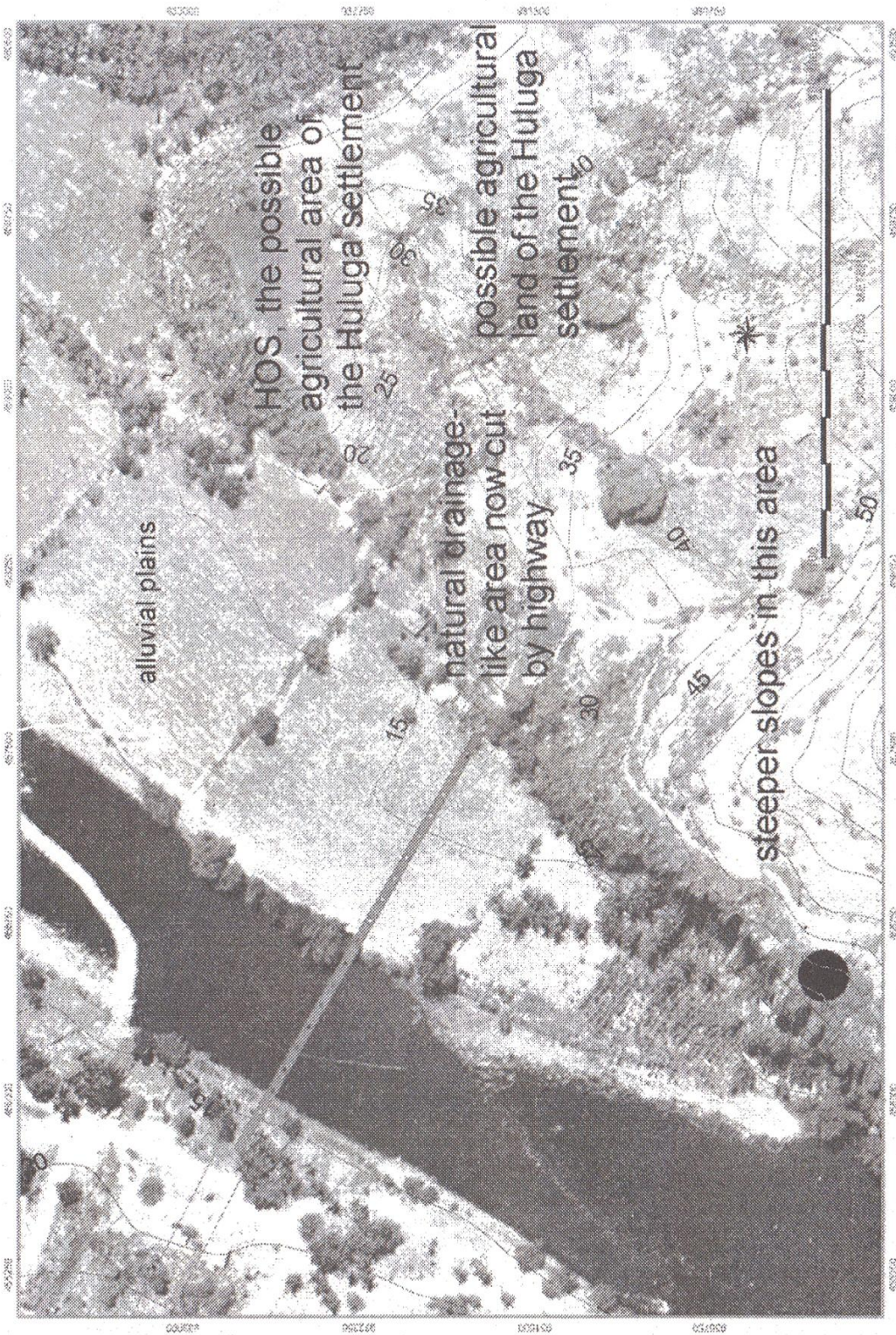


Plate 1
Aerial photo of the HOS with reflected contour lines

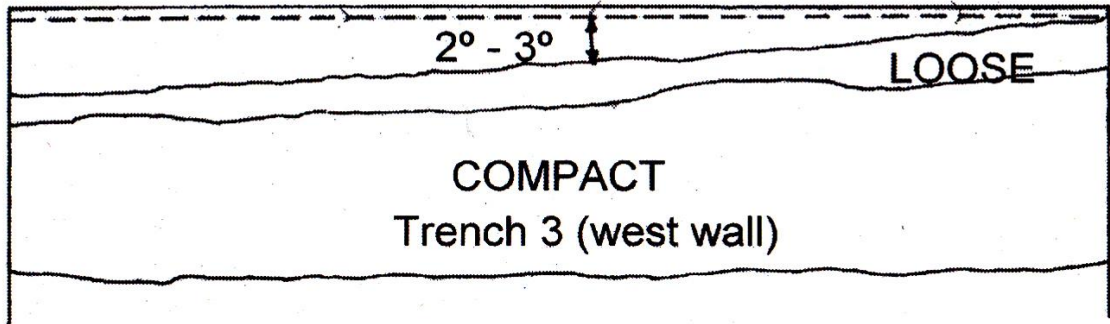


Figure 4
Slope of $2^\circ - 3^\circ$ angles, loose top sediments

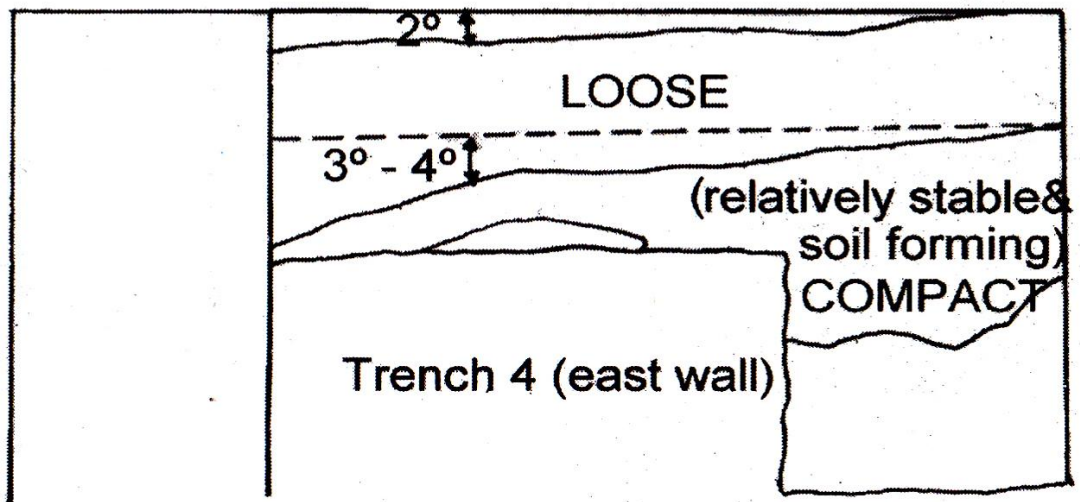


Figure 5
Slope of 2° angles, loose top sediments, lower shows relatively stable surface (soil formation) maybe an indication of agriculture

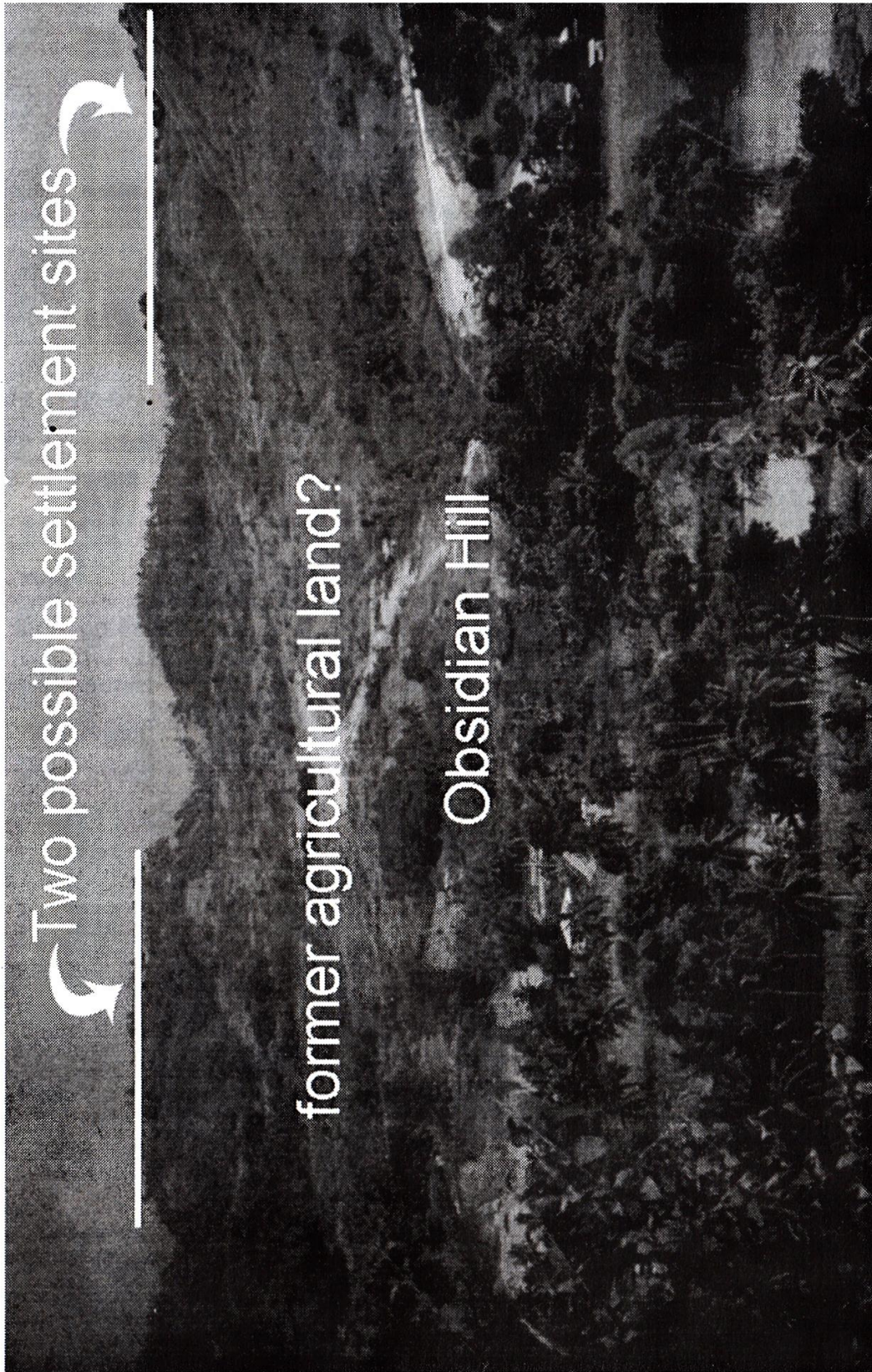


Plate 2

Panoramic photograph of the HOS and adjoining areas. Cagayan River is shown below.

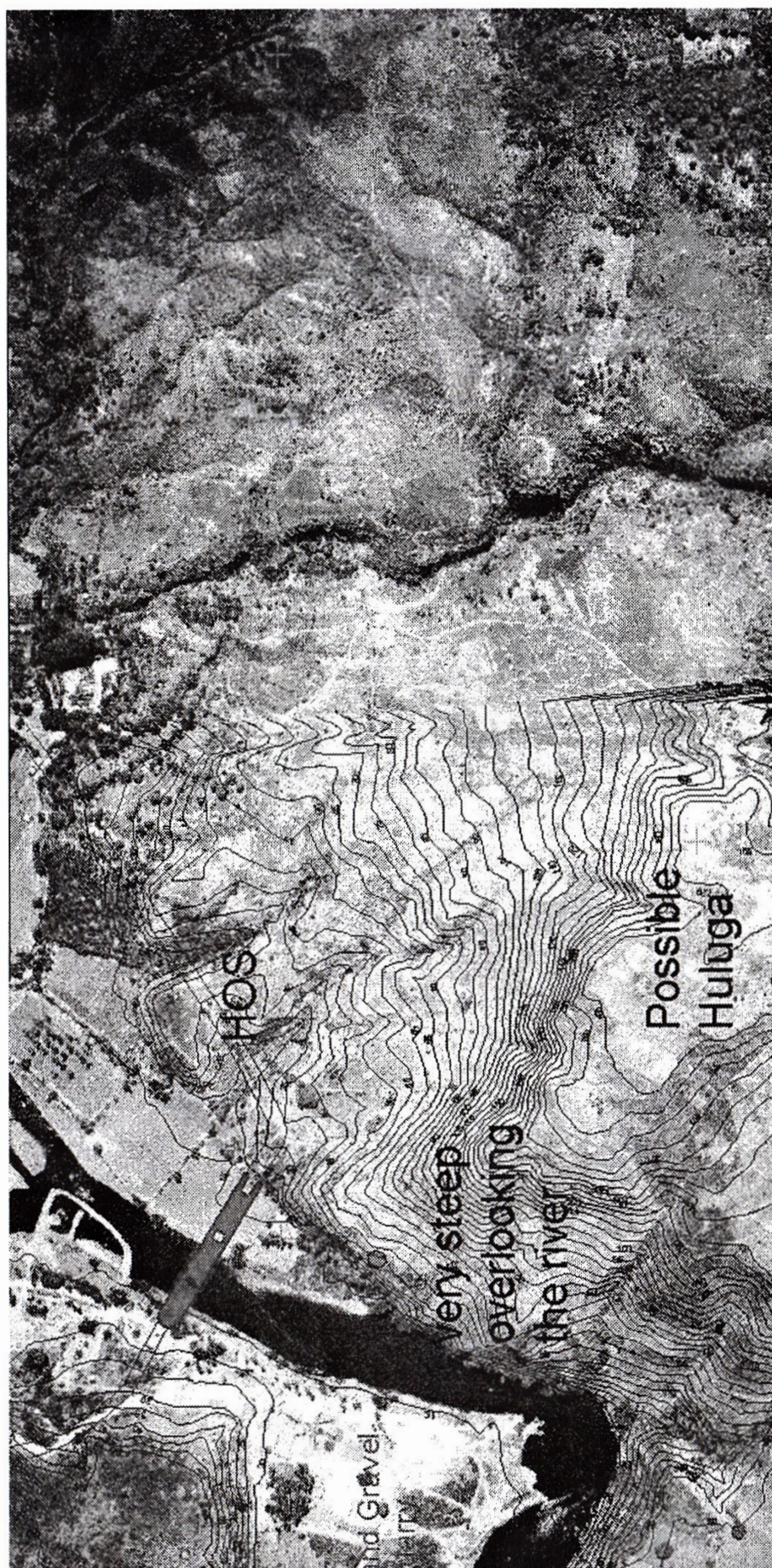


Plate 3

The possible site of Huluga settlement. This area is seen as the identified flat land on the right of the panoramic photo.