

# Philippine Indigenous Forts in Accounts from the 16th to 20th Centuries

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## ***Abstract***

*The paper is an initial attempt at a descriptive summary of the different kinds of indigenous fortifications found in several Philippine provinces. The data for this paper were gathered from library and internet resources containing historical accounts of foreign observers as well as the folklore of some indigenous people. Philippine archaeology, being still in its youth, has only studied the ijangs of Batanes province as natural fortifications. But in different historical accounts and local folklore, there are mentions of fortifications that local inhabitants used as a means of refuge and defence against their enemies long before Spanish colonizers came to the Philippines in the early 16th century. These indigenous fortifications may be classified under two basic groups—natural and man-made. Inaccessible landforms and very tall trees are the usual examples of natural forts. Man-made forts are constructed using materials abundantly found in the environment such as wood, bamboo, rocks, and earth. Much is yet to be studied about Philippine indigenous forts. This paper is an initial attempt at identifying different kinds of indigenous fortifications which can help determine prospective sites that may be studied in the future.*

**Keywords:** fortification, southeast Asian forts, historical warfare

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*"Self- defense is Nature's eldest Law" – John Dryden*

Fortifications have long been a method of defence used by people when there are imminent dangers and threats. There are two general kinds of fortifications: the natural and the man-made. Natural forts are places that are, by nature, difficult to access. These are usually on elevated landforms such as mountains, hills, craggy places; in non-elevated places such as thick vegetation (or forests); and river bends (Rowlands 1973, p. 455). People build settlements either near or in such places since these are ready places of refuge. Some modifications may be made in parts of the natural fort that are deemed penetrable. Man-made forts, on the other hand, are usually built on plains and coastal areas, and defended by thick walls, ditches, moats, pits and other kinds of fortification to strengthen them.

Before the arrival of colonizers in different parts of the world, such as Africa, the Americas, and the Pacific islands, the native inhabitants of these colonized lands had various defensive systems in place as protection against enemies, either from other native inhabitants or foreigners. These defensive systems or fortifications were usually constructed using indigenous materials, or materials found within their immediate environment. In a chapter on Southeast Asian warfare, Charney (2004) notes that the use of natural materials, such as rocks, bamboo, and earth, was a common feature in the construction of indigenous fortifications in Southeast Asian states during 1300-1900. It was a feature that did not change through time. Stone forts took time to build and may have been labor-intensive to construct; thus, the easy availability of materials was an important concern. From the 16th to early 20th CE, forests were everywhere in the Southeast Asian region, bamboo was quite easily available, and so was mud; hence, the use of these materials in the construction of indigenous forts continued (p. 79).

Some of the ethnographic studies done by the colonizers included a glimpse of what the local inhabitants used for offensive and defensive strategies in times of security threats or warfare. Eventually, historical, sociological, and archaeological studies were also written on the topic of indigenous warfare, one aspect of which concerned defensive fortifications. A few examples of such indigenous fortifications are the following: the hillforts in the United Kingdom (Marshall 1978; Rivet 1971); fortified villages, refuge rocks, rock fortifications, and war lodges in the United States and North America (Farmer 1957; Jones 2004; Keener 1999; Kenzle 1997; Larson 1972; Lee 2004; Moss and Erlandson 1992;

Schaepe 2006); the *pukaras* in Peru (Arkush 2008); fortified settlements in East Timor (Lape 2006; Lape and Chao 2008); the *pas* of the Maoris in New Zealand (Hayward 1971, 1983; Reeler 1997); the ring-ditch fortifications in the Fiji Islands (Best 1993; Field 1998; Palmer 1969); hill-top forts in Palau (Wickler 2002); and the war-towns in Sierra Leone (Alldridge 1901; DeCorse 1980, 1981; Siddle 1968).

In the Philippines, the only indigenous forts that have been studied are those in the Batanes group of islands (e.g., Dizon and Santiago 1994, 1996). Other sites that could also be indigenous forts have not yet been studied as such. This paper aims to contribute to the study of forts in the Philippines through the consolidation and classification of data on indigenous forts presented in journal articles, pamphlets, epics and folklore, and historical accounts contained in the library collections of the University of the Philippines–Diliman. Additional data were gathered from various internet sites, such as those on Philippine provinces and the American Colonial Period, in particular from 1900-1905.

### Natural Forts

The concept of a natural fort is a part of the three different concepts of settlements discussed by Salazar (1997) in *Ang 'Real' ni Bonifacio Bilang Teknikang Militar sa Kasaysayan ng Pilipinas*. The Austronesians already had with them these concepts when they first set foot on Philippine shores some hundreds of years ago (Salazar 1997, p. 4). A summary of these concepts are as follows:

The first concept discussed by Salazar (1997) is the *bayan* that means a community or the people who have permanently settled in a particular area. The *bayan* can not just be transferred to another place. This concept is found in Tagalog-speaking areas, Pangasinan, Pampanga, and Batanes provinces. The terms *balei* (Pangasinan), *balen* (Pampanga), *bayan* (Tagalog), and *vahayan* (Batanes) are derived from the word *balay* or *bahay* (p. 4), which loosely translate to "house" or "home".

The second concept is *banua*, meaning a territory that is owned by the people. Unlike *bayan*, *banua* encompasses an entire land area and not just the communities or houses that are built on it. Although there are other provinces with different terms with the same meaning as *banua*, such as *lungsod*, *bongto*, and *inged*, the term *banua* has a deeper origin, for this term can be found in Indonesia, Malaysia, and even in Oceania. *Banua* is part of

the original Austronesian vocabulary. Thus, *banua* is the oldest concept of Philippine settlement (p. 6). This being so, *banua* (territory owned by a group) may also be considered as the first type of indigenous settlement in the Philippines.

Communities can only be permanently settled and thrive when there is relative peace as well as steady sources of food and water (pp. 6-7). In other areas where the threat of war is still present, the safety of the whole community is foremost. Thus, a third concept emerges: that of *ili*, a temporary place of refuge. It is only temporarily occupied which means that the people probably have a more permanent place to return to and live in. Thus, *ili* may be part of the community's concept of *banua* or *bayan* (p. 7).

The *ili* concept is found in many provinces in the Philippines, from Luzon down to Mindanao, as well as in Malaysia. Thus, the concept of *ili* is widely used up to the present (p. 7).

Since the concept of *ili* is a widely used one, we may assume that warfare and the need for fortifications had been part of people's lives in many parts of the country from the time when Austronesian-speaking people first settled in the Philippines.

The following information on natural and man-made forts were gathered from sources accessible to the researcher. The information is organised according to types of sources used: Oral literature, 16th to 19th century accounts, and early 20th century accounts. The periodisation is just to arrange the sources in chronological order and does not pertain to the particular date or period that the forts were constructed. The discussion will focus on the description of the forts' features and construction based on the sources.

### *Concepts of Natural Forts in Oral Literature*

A natural fort—known locally by such names as *ili*, *ilihan*, *idi*, *ijang*, *muog*, and *kuta*—is defined as a place of refuge from imminent danger or threat, or a means of defence. It is located either in difficult-to-access places such as steep mountains, hills, or valleys or at the tops of very tall trees (Barretto 1999; Dampier 1927; de Ronquillo 1598; Dizon and Santiago 1994, 1996; Goiti and Riquel 1570; Mallari 1983; Neri *et al.* 2009; Paz *et al.* 1998; Salazar 1997).

One source of information on natural forts is the oral literature of the Philippines. Anthropologist F. Landa Jocano (1964) considered oral literature as important because it reflects what people value in their community as a whole (Jocano 1964, p. 2). A group's oral literature would include events that have had an impact on their collective lives, such as conflicts with other communities. Such clashes may have necessitated some kind of refuge from their foes and, thus, the search for fortified places, which initially may have just been natural landforms that provided protection.

The concept of a natural fort may be inferred from selected forms of oral literature—in this study, six epics from different provinces were consulted: a piece of local lore, and a song. Two of the epics, *Ulegingen* (Polenda 1992) and *Agyu* (Melendrez-Cruz 1983), are from the Manobos of Bukidnon, a province in northern Mindanao.

In the *Ulegingen*, a fortress is described as having been built "surrounded by several rows of defensive piles...made of large trees..." The exterior consists of a layer of stone, another of molave wood, and a third of limestone (Polenda 1992, p.166). The ridge has "handrails of gold for the people...to hold on to so that they would not fall into the gorge on either side" (p.167).

From the epic *Agyu*, information may be gathered about how people prepared against an imminent threat. First, the *datu* tells his followers to leave their homes for their enemies will soon arrive. Then, he orders them to go to Mount Mabpung, to the ridge where their fortress is located. They are to carefully hide the logs and each one is to collect a hundred stones to be used against the coming invaders. The *datu* also tells them to build houses to live in while waiting for the enemy to arrive. When the enemy from Maguindanao does arrive, the people can defend themselves and emerge victoriously (Melendrez-Cruz 1983, pp. 208-210).

The fortress in *Agyu* is a place where people can both hide from their enemies and defend themselves better if the latter were to attack. The *datu's* order to build temporary houses is an indication that they will live there for an extended period while waiting for the arrival of Maguindanao invaders. Another point of interest is the weapons that are used: stones and logs.

This episode in *Agyu* is one example of how an epic (or any oral literary material for that matter) may have some factual basis, for a similar incident did occur in real life in 1515 when raiders under the command of

Datu Kabungsuan attacked the Manobos, who fled to the interior mountains of Bukidnon (Rodriguez 2001, p. 139).

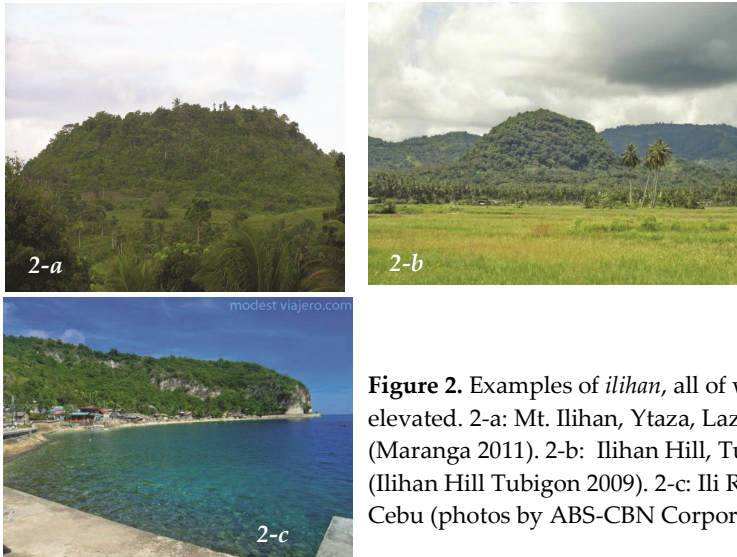
The next two epics are from Zamboanga in the western part of Mindanao where the Suban-ons live. These are *The Guman of Dumalinao* (Malagar 1980) and *Sandayo* (Resma 1982). In these epics, the word "giliyan" means "mountain." A scene in the *Guman* describes the enemy of the people of Dliyag'n climbing the mountain, or *giliyan*, to attack the mountain kingdom. The mountain, however, is so high that it takes them one and a half months to reach the top, causing them to remark that they grew old climbing that mountain (Malagar 1980, p. 283). In the epic *Sandayo*, the mountain of Giliyan is where Sandayo and his parents live (Resma 1982, p. 280). Note the two different uses of the concept of *ilihan* (or *giliyan*) in these epics. In the *Guman*, it is the local word for mountain, while in *Sandayo*, it is the name of the mountain itself.

The concept of *ilihan* (natural fort) also figures in the oral history from Initao, Misamis Oriental, where the local inhabitants are said to have sought refuge in two *ilihans*, *Gamay na Ilihan* (small natural fortress) and *Dako na Ilihan* (big natural fortress, see Figure 1), whenever southern Mindanao raiders attacked (Neri et al. 2009, p. 176). To prevent the raiders from climbing the hill, logs would be released from *Gamay na Ilihan*. There are also remnants of Spanish period ruins, believed to be a watchtower, on *Gamay na Ilihan*. The structure seems to have been built for its vantage point to see if any raiders were coming from the sea (pp.176-177).

From the island of Jolo in the Sulu archipelago is a narrative song, the Tausugs' *Parang Sabil*. According to Rita Tuban (1988), the *kissa* is a song which recounts the heroic acts of either "historical or legendary" persons.



**Figure 1.** Photo of Ilihan Hill's *Dako na Ilihan*, Initao, Misamis Oriental. (Photo taken by researcher)



**Figure 2.** Examples of *ilihan*, all of which are elevated. 2-a: Mt. Ilihan, Ytaza, Lazi, Siquijor Island (Maranga 2011). 2-b: Ilihan Hill, Tubigon, Bohol (Ilihan Hill Tubigon 2009). 2-c: Ili Rock, Boljoon, Cebu (photos by ABS-CBN Corporation 2013).

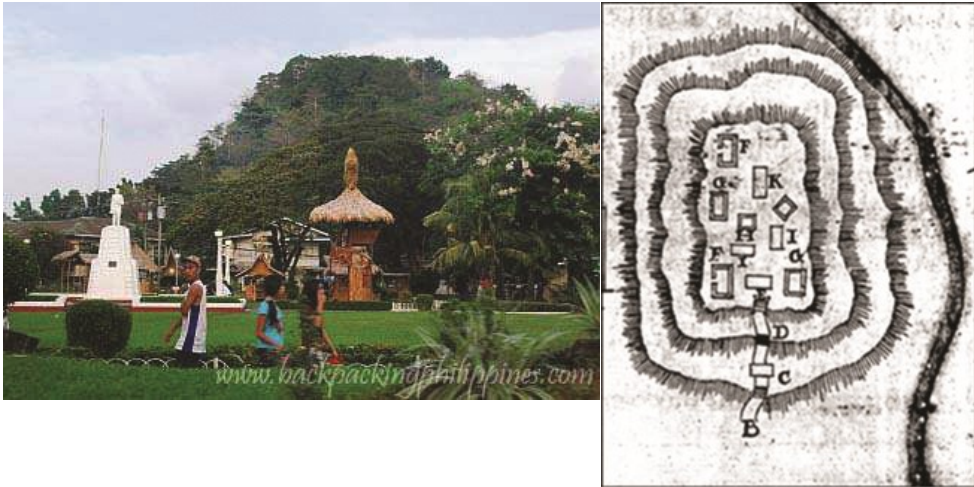
The *parang sabil* is a specific form of *kissa* which relates tales of "outlawry and banditry" and tells the story of a "Muslim hero who seeks an 'innocent' death at the hands of a non-Muslim such as a Christian who may often be a government soldier." (pp. 143-144)

The *Parang Sabil* is relatively recent in origin (the Spanish Colonial Period) for it was borne out of the need to protect Sulu, "the abode of Islam or peace from the threats of the Spaniards and Christianity." (Tuban 1988, p.144) When the word *kissa* is joined to the words *parang sabil*, then the song is about "historical and legendary persons or events, and the purpose is for religious or moral instructions as well as entertainment." (p.144)

The "Kissa Kan Panglima Hassan" tells of the Tausug leader Panglima Hassan and his followers who made their stand against the American colonial government's order for all to secure residence certificates or *cedulas*. For the Tausugs, the acquisition of a *cedula* was tantamount to submission to the colonizers, which also meant the loss of Jolo's independence from a foreign power. The Kissa tells of how the Tausugs prepared to resist against the American colonisers. Tuban narrates that Panglima Hassan and his followers retreated to Bud Bagsak, where they defended themselves against the American troops (pp. 147-149).

So far, the oral literary accounts mentioned above share similar concepts of a natural fortification located in an elevated area, usually a mountain, which is difficult to access. The topography of the provinces could be a factor in the development of this concept, for it was in the high areas that





**Figure 3.** (Left) Ilihan Hill, Dapitan, Zamboanga del Norte (Backpacking Philippines 2009). (Right) Aerial sketch of Dapitan fort (Tamon 1995: 137)

people sought refuge, these being easier places to defend than lowland areas. This particular concept has long been in the consciousness of people, so much so that certain elevated places are still recognised as such, and named "*ilihan*," to this day.<sup>1</sup> Some of these, as their names suggest, may have been *ilihans* in the past (Figure 2).

The Ilihan Hill in Dapitan according to Salazar (1997), was identified as a natural fort based on an aerial view sketch done by Tamon (1995, p. 137) (Figure 3), showing what seemed to be a natural fort's contour, but modified by the Spaniards who built a stone fort on it. Thus, there must also have been other natural or indigenous forts that were converted into stone forts.

It is important to note that, in some cases, the concept of the natural fort was by no means a static one. It evolved as people's situation changed. According to Mary Jane Rodriguez (2001) in her Master's thesis titled, *Ili Ti Amianan: Kamalayang Bayan sa Panghimagsikang Tradisyon ng Hugpuang Kailokuan-Kaigorotoan, 1589–1913*, the *ili* was part of a defensive strategy in the Ilocos region: the people of the community would live in it during times of conflict to avoid being within the enemy's reach. However, as time wore on, the *ili* became permanently settled (pp. 95-96).

The sixth epic studied for this paper bears witness to this evolution. In the Ilocos region's *Epic of Lam-ang* (Yabes 1983), the concept of *ilihan* is evident in a brief segment, where Lam-ang goes to visit Donya Ines

<sup>1</sup> This is not to say, however, that a mountain or hill was not used as a natural fort merely because it has not been named as *ilihan*.



Cannoyan in the town of Calanutian (p. 90). Here, the word *ili* no longer refers to a temporary place of refuge but rather, a "town" or "village," a permanent place to live in. Perhaps the reason for this shift in meaning is that an epic, like other forms of oral literature, is not static. As time passed, the more recent experiences of people are added and integrated into their oral history, causing changes in their epic as these more recent events made an impression on them. In *Lam-ang*, for example, Spanish influence had left its mark: the title "*Donya*" is very Spanish. This version of the epic (or at least the particular segment cited above) was probably composed in a more peaceful time during the Spanish Colonial Period, hence the change in the concept of *ili*.

### *Concepts of Natural Forts in Accounts from the 16th–19th Centuries*

Based on the references to natural forts in oral literature from different provinces, it seems that using land formations such as mountains and hills either to hide from the enemy or make a stand was a common strategy. Elevated places did not have to be fortified with walls since the steep slopes were challenging enough to the would-be attackers. When modifications were made on some parts of a mountain or hill to make it more defensible, these were not enough to alter the overall shape of the mountain or hill—it remained essentially in its natural state.

Details on these natural forts and how local inhabitants protected themselves from their enemies may be gathered from the accounts of foreign chroniclers who wrote of their experiences living in different islands.

The historical accounts cited in this paper are by no means the only ones that have any mention of what the local inhabitants used as natural forts. Perhaps, other sources will provide additional information that would lead to a more complete conception of the different kinds of natural forts used by local inhabitants. The following, however, are the ones that the researcher was able to access.

One account describes what the locals in Lamitan (Maguindanao) called "Ylihan", which consisted of "a sheltered hill," and was a "natural fort". The path was narrow and "difficult to mount...in single file," its sides consisting of "steep precipices and heights" (Lopez n.d., pp. 322- 323).

In Mindoro, according to another account, there were three hills. The first was the smallest and the two others were very rocky, making them

perfect for defending the entrance of the harbour. These two were used as *ilihans* to secure the people's safety (Goiti and Riquel 1570, pp. 73-81).

In Mamburau, Spaniards found two native forts which they described as square-shaped, with 10 to 12 ditches of varying dimensions on every side. Each fort had a 6.68 metre-high wall and a 4.18 metre-deep ditch around it (Unknown Chronicler 1572, pp. 143-144).

Near a small islet, a short distance from Loban, was a "rock" which was used as a fort. There were estimated to be three hundred warriors on the rock. The Spaniards made ladders to assault this native fort (Unknown Chronicler, p. 146).

When the Spaniard Antonio de Morga came to Jolo, he described a fort "situated on a very high hill above some cliffs, and [having] two roads so narrow that they can be reached only in single file. They had fortified the whole place, entrenched it with palms and other woods, and several culverins." (de Morga 1609, p. 241)

Similarly, an unnamed chronicler describes a fort in Jolo as "a stronghold which nature has made in their island—so lofty and so difficult of approach, that there is no better stone castle; for the approach to it is by one path, and it has some artillery which defends it." (Unknown Chronicler 1630, p. 87)

An unknown writer's account gives a clue to how the local inhabitants used the surrounding environment and natural materials to repel the Spaniards. In 1622, some of the Boholanos who refused the amnesty offered by the Spanish government sought refuge on a very high and rocky hilltop. The path to the hill was full of thorns. Very sharp wooden stakes had been driven into the ground on the path leading to the hill. Crossbows were strategically placed on the branches of the trees to discharge arrows as the pursuers moved along the path. At the top of the hill, the inhabitants had gathered rocks which they hurled down at the attackers (Various early writers 1621-83, pp. 90-91).<sup>2</sup>

In 1622, Recollect priests went to the territory of the Cagayan people, whose town was called Himologan. This town was located many miles upstream of the Cagayan River. The priests came to a "towering rock peninsula which jutted into the river." The sides of this peninsula were treeless. The only way to reach the top was by using a *rattan* ladder

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<sup>2</sup> The information in this section of Blair and Robertson, volume 38, was gathered from different sources.

provided by those at the summit (Madigan 1963, p. 87).

Another type of elevated place that inhabitants used long ago as a place of refuge was very tall trees. In the writings of the Jesuit missionary Francisco Alcina (Meras and Higueras 1975), a sketch of two warriors fighting shows two trees in the background with houses atop them. There



**Figure 4.** Sketch of two warriors, an ordinary house, two houses on trees, and a few houses on top of a cliff. (Meras and Higueras 1975).

is a ladder set up as a means of reaching these houses (Meras and Higueras 1975, Plate no. LXXVIII). The scribbled words on the sketch identify their function as: "*Ele - casas que hacian encima de los árboles para su seguridad*" [Houses on top of very tall trees for security] (Figure 4). This is a depiction of another kind of natural fort, in addition to the mountains and hills in the previously cited accounts of natural forts. The shelters built on these places indicate that the inhabitants might have anticipated a prolonged stay.

An interesting detail in this sketch is the background showing two rows of houses on top of an elevated place. This could be a depiction of a naturally fortified settlement atop a cliff.

Although the accounts cited above were written during the 16<sup>th</sup>-18<sup>th</sup> centuries, such fortified places must have been in use very much earlier by the native inhabitants for there was already in their communities an awareness of these forts' existence. As seen in some of these accounts, the native inhabitants who resisted Spanish colonisation knew where to go for refuge and what to do there to defend themselves.

Charney (2004) notes that wars in Southeast Asia from 1300 to 1900 were more likely to occur at sea or in rivers for there were no open fields to wage battles in. The scattered settlements, the ruggedness of the terrain, the lowlands getting flooded during the monsoon seasons, and the use of the rivers as an essential mode of transportation were some of the factors that made sea or river battles the kinds of warfare that were engaged on.

However, there was still a kind of warfare that was waged on land, the siege. In this kind of warfare, the objective is to destroy "fortified positions" and crush the resistance (p. 73).

In the case of the Philippines (and possibly also in other Southeast Asian states), it could be said that the raiders laid siege to coastal communities because their goal was precisely to capture the coastal population for slavery, plunder the communities for food and other items of value, as well as burn the fields, and was not due to the type of terrain that they encountered in their raids.

Most, if not all, of the Philippines' indigenous inhabitants, were aware of the many dangers or threats, human or animal, that lurked in their surroundings. Since the islands that made up this country had a rocky terrain and were covered by forests, the areas that the inhabitants could settle on were few and isolated from each other. Nevertheless, the different groups of indigenous inhabitants had their territories to live and hunt in.

Life was not always peaceful, however. Misunderstandings, disagreements, or worse, violent clashes, within a group or with other groups, arose now and then. Such clashes were so common that the Recollect priests were thought of as crazy by the men of Himologan for not carrying any kind of sidearms when they leave their house, or even more, when they climb down to the river (Madigan 1963, p. 88). Another source of threat was the raiding parties of other indigenous groups that plied the seas and rivers looking for communities to plunder and slaves to capture. When the monsoon season began, the coastal communities in the Visayas and Luzon knew that the raiders from the Mindanao-Sulu areas would come to wreak havoc among them (Cruikshank 1979, p.151).

The strong winds of the southwest monsoon during October to February propelled the raiding ships northward from the Sulu and southern Mindanao areas, making the coastal towns of northern Mindanao, the islands of Panay, Palawan, and the Bicol region, likely targets. During the months of April to September, the northeast monsoon pushed the raiding ships back home through the eastern side of the Philippines, making the islands to the east targets for attacks. Adding another dimension to the coastal communities' fear was the waiting, for they do not know whether their town will be chosen by the raiders to attack that year. According to a 1775 report of a Franciscan priest, the town of Paranas in Samar was attacked for two consecutive years (Cruikshank 1979, pp. 150-152).

In the journal article titled, "The Visayan Raiders of the China coast, 1174-1190 AD" (Isorena 2004), it is proposed that the raiders of the China coast were from the eastern Visayas island of Samar. If this was so, then some coastal towns in the Philippines may have been raided even before 1174, because it would have taken time and experience to develop the skills needed to execute a successful raiding expedition, much more to navigate the waters going to and coming from the Chinese coast.

There is another account of a raid that may have been the first attack by Mindanao raiders after they converted to Islam. Sharif Kabungsuwan ordered the attack on his people who settled in Cotabato because they had ceased to practice Islam and had disregarded the Koran. He and his men drove these people into the mountains. These people were the forefathers of the Manobos and Tirurais (Majul 1999, p. 72).<sup>3</sup> This incident may have been the 1515 attack mentioned in Rodriguez's 2001 study (p. 139), or perhaps the first in several such raids.

Based on the documents furnished by the religious orders that were assigned to different areas, such as northern Mindanao, Samar, Leyte, and the Bicol region, raiding activities were numerous, from the 1600s until the 1800s. The following are some examples of these incidents:

- In 1614-1634, Maguindanao and Sulu raiders attacked northern Mindanao and the Visayas. In 1636, The Calamianes Islands were attacked by a host of Maguindanao raiders. In 1658, the Tausugs destroyed towns in the Visayas, specifically in Bohol, Leyte, and Samar, and even went up to the coast of Luzon (Madigan 1963, pp. 117, 124).
- In 1768, after the dispersal of the Iligan fleet, the Mindanao raiders came back to raid northern Mindanao. On December 2, 1773, a fleet of raiders sailed to Paranas for a twenty-one-day siege (Cruikshank 1979, p. 146). From 1754-1778, Samar was a witness to numerous remarkable raids involving 200 boats with 40 to 50 men aboard each boat (p. 152).
- In 1874-1876, there were no safe places in Misamis Oriental, for even as the sea-going raiding ships were cleared off from the seas of northern Mindanao, the land raidings continued up to the 1890s. In 1875, the raiders attacked Pigtao in the Lumbia municipality. The last raid in northern Mindanao was in 1892, in the town of Tambaling,

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<sup>3</sup> Another version of the story was that there were people of the lower Pulangi Valley who refused to convert to Islam. Thus, they were driven out. (Madigan 1963, p. 78.)

situated between El Salvador and Molugan, Misamis Oriental (Madigan 1963, pp. 126-127).

The sufferings caused by these raids did not end when the raiders left the towns. The houses could be rebuilt with the materials found in the nearby areas. That was the least of their problems. In Samar, the effects of a siege on a town were not only the immediate devastation that the raiders left in their wake. There was what is called the "deferred mortality" of these raids that was also a cause for concern for the inhabitants. Sieges lasted for several days if not for weeks. The health of the inhabitants, who were confined either in enclosed spaces (such as walled forts or *baluartes*) with not enough food or water, or in the mountains where they had no supply of food and water for the length of the siege, could gradually deteriorate. There was also exposure to the elements due to a siege. Many inhabitants died due to these factors, long after the siege was over (Cruikshank 1979, p. 151). Added to these sufferings was the psychological trauma that manifested in those who survived the raids. An example of this was when a European boat, which did not in any way look like a boat from Mindanao or Sulu, caused panic among the inhabitants of a community along the eastern coast of Samar. The inhabitants fled to the mountains as soon as they saw the boat (p. 155). This trauma may also have been felt by survivors in other affected provinces.

Mallari (1979) tells about deceptions that the raiders used to capture the local inhabitants. They would hide their large ships (the *joanga* and the *panco*) in a hidden part of the coast or island and set out in their small boats. They would then set out to capture anyone unfortunate enough to be out in their boats or on the shore. When the provisions were not enough for the captives, the raiders would kill some of them, mostly the old people and the children (pp. 41-42).

The local inhabitants needed to fight off these raiders to protect their towns. In Camarines province, thorny bamboos were planted so thickly around their towns, that neither people nor animals could easily enter. This was done to conceal their houses and make the entrance to the towns difficult. Outside of the towns, the people scattered reed spikes or "star thistle" on the path to inflict pain on bare feet. Watchtowers and palisades were among the structures built to defend the towns from the raiders (Mallari 1989, pp. 42-50.) The watchtowers enabled the inhabitants to have an early warning system against attacks. In northern Mindanao, the watchmen would blow their conch, signalling to the townsfolk the imminent danger coming their way. The *palaua* (war boat) would then be

sent to sea with the young and strongest warriors on board to meet the raiders head-on (Madigan 1963, p. 126).

In the mid-18<sup>th</sup> to mid-19<sup>th</sup> centuries, the need arose for a larger labour force to serve the developing economies of Southeast Asian states as well as that of the Sulu Zone. Thus, the slave market became a lucrative endeavour. As the need for more slaves increased, the Mindanao raiders responded by capturing inhabitants from the different provinces in the Visayas such, as Samar, Bohol and Leyte; the northern coasts of Mindanao; and Luzon, including Manila. These raids were intensive, resulting in the capture of hundreds of able-bodied men and women, and the decimation of populations and towns (Mallari 1989; Warren 2002).

Although the lucrative commercial aspect of the raids was a good motivation to engage in raiding, it was primarily an anti-colonial sentiment driving the Mindanao raiders. Resistance to Spanish rule had become another motivating factor for the raids, with the Mindanao raiders attacking Christianised towns as a means of attacking the colonizers (Dery 1997, p. 9). Thus, the combination of an anti-Spanish campaign and a growing demand for slaves can be regarded as a profitable venture wherein food supplies, valuable items and captives can be traded for other items or money while targeting and destroying Spanish-ruled communities or provinces to the detriment of the coastal inhabitants.

As these raids were going on, those who were organising revolutionary movements against Spain in other parts of the country were already incorporating the use of natural/indigenous forts in their plans. Before Andres Bonifacio and the *Katipuneros* started the revolution, Bonifacio had already intended to use the mountains as places to evade capture and commence attacks on nearby towns (Salazar 1997, pp. 23-24).

The indigenous forts continued to play a role in anti-colonial resistance in many parts of the country during the Philippine-American War, when Filipino revolutionaries, refusing to be colonised for the second time, used these forts for refuge and defence.

### *Concepts of Natural Forts in Accounts from the Early 20th Century*

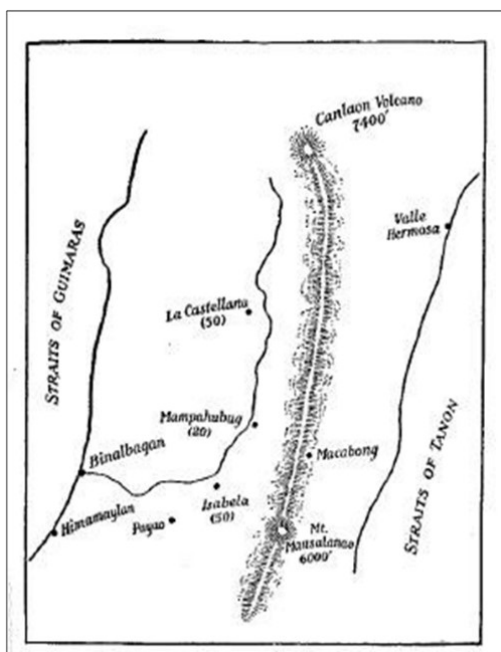
An account written during the American colonial period in the early 20<sup>th</sup> century provides further documentation on natural forts. It is an autobiography of Colonel John R. White (1928), a captain in the



Philippine Constabulary who was sent to Himamaylan in Negros Occidental to strengthen the police presence in the southern part of that province. Among his duties was to stop cattle rustlers, bandits, and other lawbreakers, including a religious-military sect that operated in the area. One such group that he and his men encountered were the *babaylanes* led by Papa Isio (Dionisio Magbuelas) who, along with his followers, fought both the Spaniards and—with the change in colonizers—the Americans. According to White, Papa Isio and his followers had two forts south of Mount Canlaon: one at Macabong and a larger one on Mt. Mansalanao (Figure 5). On May 16, 1902, he set out to find these hideouts.

On Macabong, White and his men found "twoscore houses, a wooden church, and a large palm-thatched barracks...." The place provided a view of "...the east coast of Negros, the sea, and Cebu island..." and allowed for food production; "...immediately below snuggled a valley, hemmed in by mountains and dotted with *caingins* which supplied the *babaylanes* with food." (White 1928, p. 79)

White decided to search for the group's second hideout, the location of which was provided by his guide, Julian, who spoke of Mansalanao as "...one of the highest peaks south of Canlaon...." According to Julian, the capture of Papa Isio's *cuartel-general* was impossible since the peak was



**Figure 5.** Map of Mt. Kanlaon mountain range showing the locations of Macabong and Mansalanao. (White 1928)

nearly perpendicular and approach to the mountaintop led "straight up to the trenches." Trees and undergrowth had been cleared to allow the defenders to fire from the stronghold. "[I]ndeed it was so steep that ladders of *bejuco* were let down from the trenches to the trail beneath" (White 1928, p. 83). Julian also described the weapons stored at the fort as stones, spears, as well as boulders ready to roll down the mountain's side (pp. 83-84).

Also, Julian said that there was only one way to the Mt. Mansalanao fort and that it was a winding trail on the ridge that was "narrow and sown with man-traps—*suyacs* (sharply pointed stakes) underfoot and *balatigs* (spring-traps) in the brush" (p. 84).

White and his group discovered the trail to be so narrow in some parts that steps had to be carved to gain a foothold. The *suyacs* were caltrops made of bamboo. These were planted on the steps and were sharp enough to puncture one's bare foot or a worn-out shoe. The *balatigs* were pointed hardwood spears tied to bent saplings. A twig, attached to the sapling, was then laid on the ground across the path. When an unsuspecting victim tripped on the twig, the spear would shoot across the path. The *balatigs* that White described were set up to hit their victims in the chest (p. 97).

White, unfortunately, did not have a camera on hand to take a picture of the Mt. Mansalanao fort. However, he mentions that there was a plateau with houses and gardens, planted with different vegetables and fruits, scattered across it. Pigs and chickens were also raised, making the fort self-sufficient (pp. 103–104). The fort had a vantage point over a wide stretch of the coastal area below it, giving the inhabitants a panoramic view of their surroundings (p. 105).

Another stronghold of the Filipino rebels were the Sohoton cliffs in Samar. These cliffs were described as "well over 200 feet high" with a network of caves. Bamboo ladders connected the "ledges and shelves" on the cliff's wall. The American soldiers attacked this stronghold on November 17, 1901 (Schott 1964, p. 90).

In 1902-1903, Arnold Henry S. Landor (1904), a traveller, journeyed through the Philippines' islands to write about the land and its people. In Palawan, he and his companions came across Bakit Peak<sup>4</sup> (Figure 6). This mountain and its caves in Palawan were once a place of refuge for local

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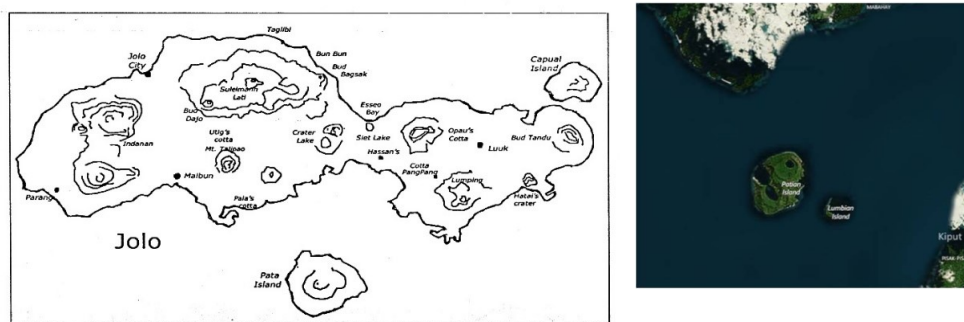
<sup>4</sup> The information in this section of Blair and Robertson, volume 38, was gathered from different sources.



**Figure 6.** (Left) Map of El Nido, Palawan (El Nido Resorts Environment and Sustainability 2013) showing the location of Bacuit Bay (or Bakit Bay according to Landor [1904]). (Right) A view of the bay from one of its island's peaks (Bacuit Bay Archipelago 2019).

inhabitants in times of danger. It was described as being 457.2 m high, with narrow gaps at the top that made it look like a "gigantic fortress wall." There was a network of large caves around 36.58 m high from the beach, fortified with palisades. The only access to the caves above was by using a bamboo ladder which was pulled up or destroyed in times of danger. The approach from the first cave to two smaller caves were notches that were carved into the cliff, to serve as steps. The larger cave could hold some three hundred people. It also had an altar (p. 125).

Similar to those in Luzon and the Visayas, the mountains in Mindanao, some of them are volcanoes, were also used as defensive strongholds by the local inhabitants. Jolo Island in the Sulu Archipelago had forts, both natural and man-made, scattered in many parts of the island (Figure 7).



**Figure 7.** (Left) Map of Jolo Island showing the location of several forts (Fulton 2009, p. xiii). At the eastern end of the island is Datu Hatai's fort, which was a dormant volcano. (Right) Google Earth Satellite image of islands to the south of Jolo Island. The larger island is Patian, which is called Pata on the map above.

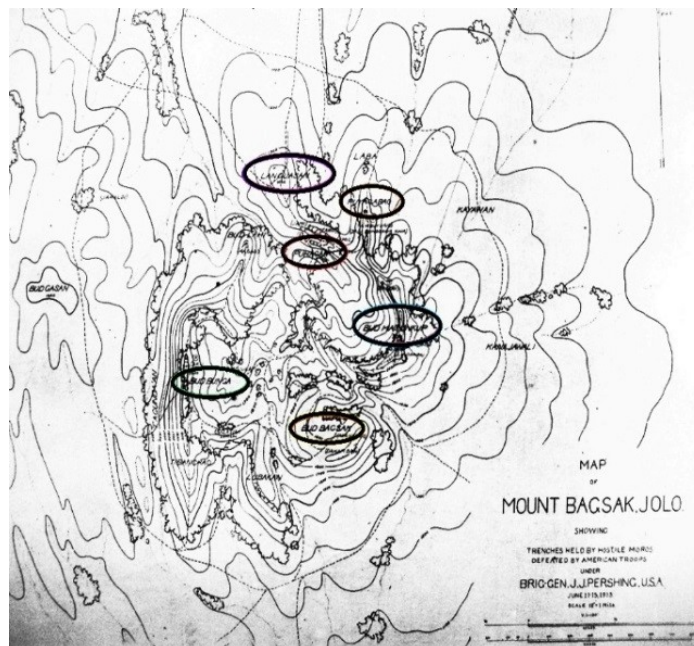
South of the main island of Jolo is Pata Island (but was also called Patian Island, see Figure 7) with its lone volcano. This is where Jikiri, the Samal raider, made his last stand against the American colonizers in July 1909. (Fulton 2009, p. 353)

On May 8, 1906, an expedition of American soldiers came to the eastern part of Jolo Island, a volcanic crater that was used as a stronghold by Datu Hatai (see Figure 7). It was located near the sea and had an elevation of 365 m. The crater's seaside was exposed, but the side facing land was



**Figure 8.** Photo of Bud Bagsak.

(Fulton 2009 <http://www.morolandhistory.com/>)



**Figure 9.** Topographical map of Bud Bagsak with its six strategic positions. From the topmost position on the map - Languasan, Puyacabao, Puhagan, Matumkup, Bunga and Bagsak. (Fulton 2009 <http://www.morolandhistory.com/>)

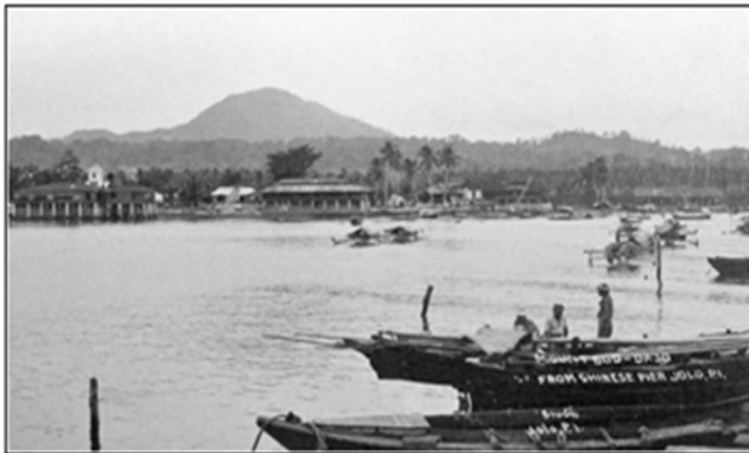
"very steep, with thick jungle growth, and would have presented a difficult assault" (Fulton 2009, p. 250).

Also on Jolo Island is Bud Bagsak, another dormant volcano utilised as a natural fort (Figure 8).

The volcanic crater had six elevated points and these were fortified (Figure 9). Second Lt. James I. Collins gave this description:

*"Imagine a huge warped horseshoe with an elevation slightly greater than 2000 ft [610 m]. Puyacabao is one heel and Bunga, at a distance of about 800 yards [731.52 m] and approximately the same elevation is the other. The Cotta, known as Bagsak Cotta, is the toe and about 200 ft [60.96 m] higher than either heel. From the toe to heel is approximately 1000 yd [914.4 m]. Matunkup is on the north or warped side of the horseshoe and about midway between Puyacabao and Bagsak Cotta. Languasan is a bald knoll and Pujagan, at about the same elevation, a strong cotta, corresponding to the frog (area of a horse's foot outside of the horseshoe) and the apex of the frog, respectively. The sides of the mountain are very precipitous and for the most part heavily wooded."* (Fulton 2009, pp. 434-435; measurements in metres supplied by the researcher)

Still on Jolo Island, a mountain called Bud Dajo (Figure 10) was used by the Tausugs when they fought against the Americans. (There were two attacks made on this fort: the first battle was from March 4 to 8 in 1906, and the second was from December 14 to 19 in 1911). Though not as naturally defensible as Bud Bagsak, it was nevertheless more impressive. The Tausugs also modified the mountain to suit their needs, making it more defensible by carving out the soil to lower the floor level and



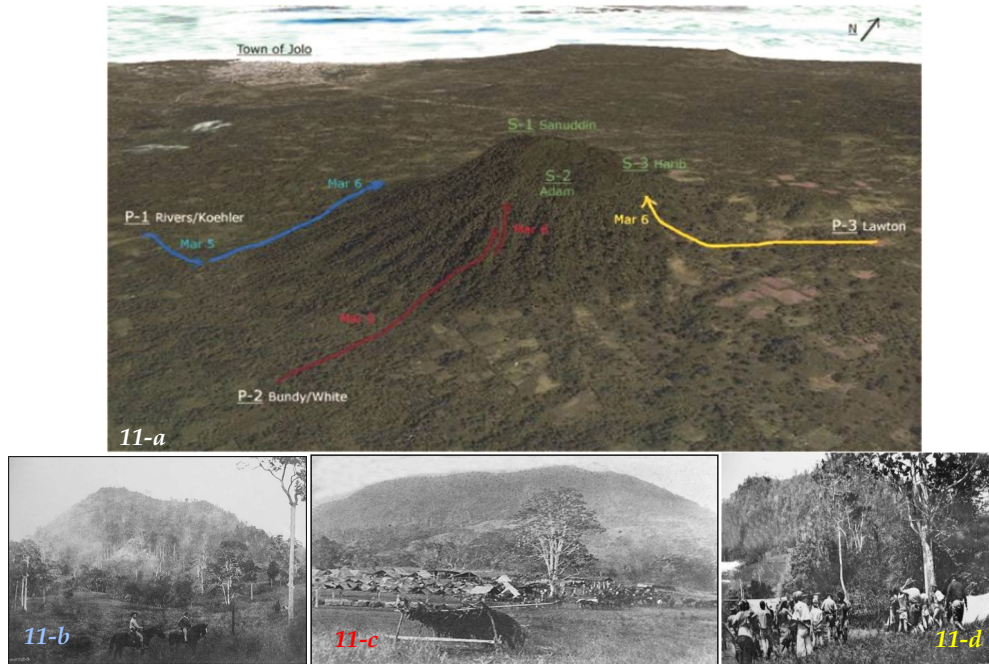
**Figure 10.** Bud Dajo as viewed from the Chinese port in Jolo.

(Fulton 2009 <http://www.morolandhistory.com/>)



fortifying earthen walls with logs. These trenches were located in different spots along, as well as at the top of, the mountain. They also set up traps along the trails, using "rocks, large stones and sharpened bamboo spikes." (Fulton 2009, p. 277)

There were three trails on Bud Dajo, which the American troops used in their assault: the West, East, and South trails (Figure 11). Near the crest, through the West Trail, the Americans found the mountainside "so steep

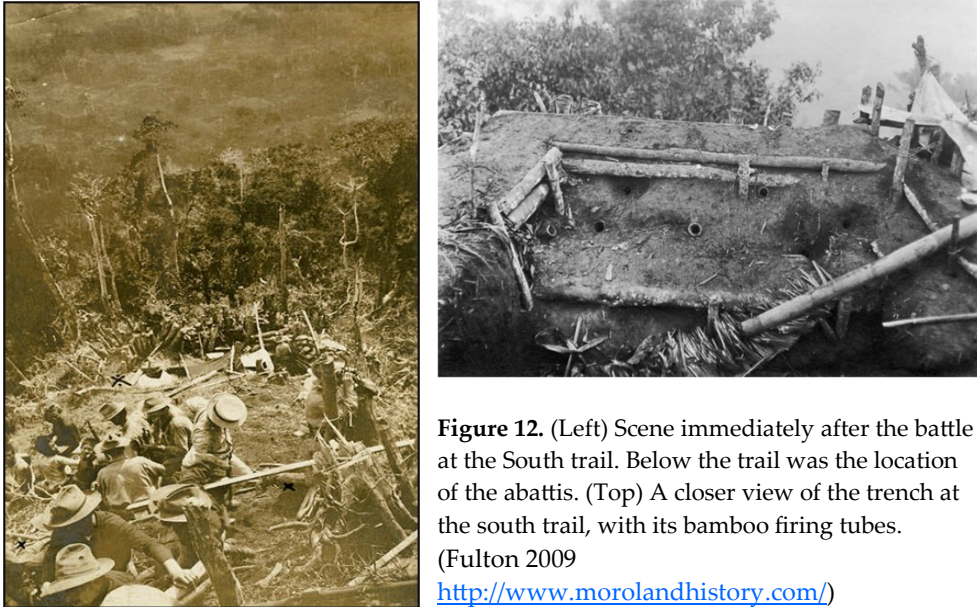


**Figure 11.** (a) Image of Bud Dajo showing the three trails used for the assault. (b) Troopers from the 4th cavalry scout at the west side of Bud Dajo. (c) First artillery base, near East Trail. (d) Base camp of U.S. troops at South trail.

(Fulton 2009 <http://www.morolandhistory.com/>)

in places that steps have been cut by the natives, and we found it necessary to pull ourselves up from place to place by holding on to roots and vines." (Fulton 2009, p. 282) The East Trail, on the other hand, was protected by trenches, and large boulders set up from above were let loose to roll down the mountainside towards the enemies (p. 282).

On the South Trail was "an abattis, a hedgehog-like, impassable fence made from sharpened tree logs, spanning the entire width of the hogback ridge and presenting no easy way to get around it." (Fulton 2009, p. 280) A trench made of earth and bamboo was espied as 68.58 m from the abattis (Figure 12-a). On the walls of the trench, from 0.914 to 1.22 m high,



**Figure 12.** (Left) Scene immediately after the battle at the South trail. Below the trail was the location of the abattis. (Top) A closer view of the trench at the south trail, with its bamboo firing tubes.

(Fulton 2009

<http://www.morolandhistory.com/>)

bamboo firing tubes (p. 285) were set up to keep enemies at bay if ever they got through the abattis. At the top of Bud Dajo were trenches and one of these is the one shown in Figure 12 top.

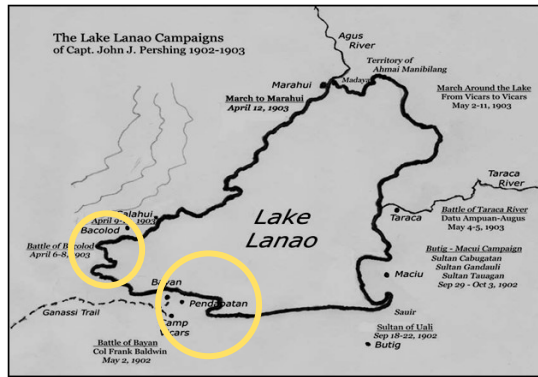
Aside from the mountain forts in Jolo Island and its neighbouring island of Patian, there were also natural forts on the main island of Mindanao, in the mountains or hills surrounding Lake Lanao (Figure 13). These forts were used by the Maranaos in their bid to oppose American subjugation.

According to Federico V. Magdalena (2002a), former Professor of Sociology and Director of the Mamitua Saber Research Center in Mindanao State University in Marawi City, Lanao del Sur, "Every established Moro village was fortified by a *cotta* (fort) for defence, the strength of which varied according to the prestige and power of the local chief. In the *cotta*, the warriors and their families stood pat to protect themselves from their enemies." (p. 34)

The people only sought refuge in the *cotta* when there was a threat to their village. According to Gen. John J. Pershing, "unlike the American Indian warrior, who usually held his position, the Moro retreats to his fort or *cotta* to make his stand....The Moro *cottas* are the natural product of years or perhaps centuries of internecine warfare and were primarily intended to protect themselves and their property from covetous neighbours." (Magdalena 2002a, p. 34)

Magdalena describes the *cotta* as a fort with 3 to 3.65 metre-high walls of either rocks or earth. In front of it was a great trench, and a very high





**Figure 13.** Map of Lake Lanao and its surrounding areas. Locations of Bacolod, Bayan, and Pandapatan (spelled "Pendapatan" on the map) are encircled. (Fulton 2009 <http://www.morolandhistory.com/>). In **Figure 21**, the map shows Bayan as the area where the Pandapatan and Binadayan forts are located,

earthen wall with a dense growth of bamboo on top to naturally conceal it (p. 34).

There were many such elevated places used as forts on the main island of Mindanao. Around Lake Lanao, several forts were built and among them were the ones in Bacolod, Binadayan, and Pandapatan.

### *The Bacolod Fort*

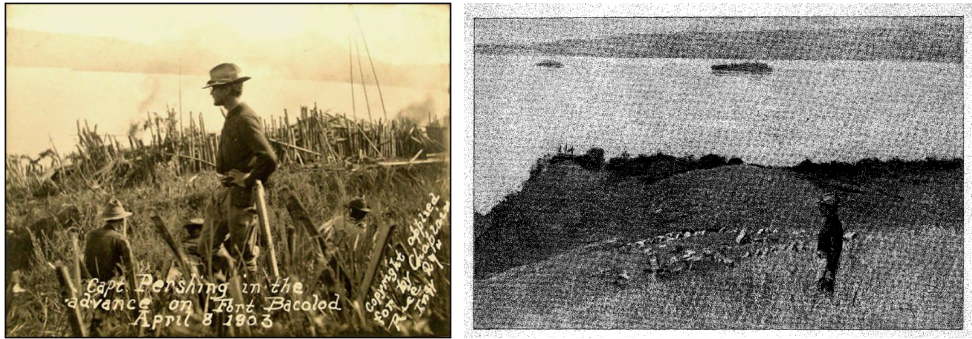
The Bacolod fort (Figure 14) was situated on a peninsula near Lake Lanao. On a visit to the Lake Lanao Region, Landor (1904) described the Bacolod fort as surrounded by huge trenches, and situated on a protruding ridge at the southwestern section of the lake (p. 287).

On closer inspection of the fort, Landor observed that it was surrounded by a big trench. There was an escape route of 4.26m wide and 7.62m deep, running northward from the fort. This escape trench had a minor trench alongside it for protection (p. 292) (Figure 15).

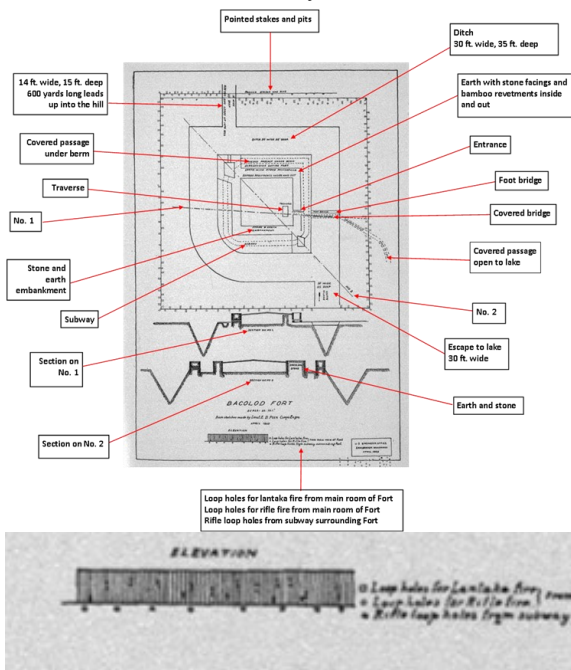
Blocking the path to the big trench were deep pits and a labyrinth of sharpened stakes (Landor 1904, p. 295) (Figure 16).

When the Americans charged the hill, the defenders "dashed out from covered trenches and squeezed through loop-holes" (Landor 1904, p. 295). The defenders fired their *lantakas* (native cannons) through the rectangular windows (Figure 17).

One soldier "was looking down into the trench when two Maranaos sprang up from behind out of a covered underground passage and



**Figure 14.** (Left) Capt. John Pershing led the siege of the Bacolod fort in the background. (Right) Bacolod fort in the background. Beyond the fort is Lake Lanao with two of its islands in view. (Landor 1904, pp. 290-291) (Fulton, morolandhistory.com, 2009).



**Figure 15.** (Top) The plan of Bacolod Fort. (Bottom) Bottom part of the plan is a sketch of the fort's wall. The square shapes at mid-height on the wall are the loopholes for the lantakas. The circles on the wall are the loop holes for the rifle. The circles below are the loop holes for rifles from the underground trench. (Landor 1904, pp. 296-297)

slashed him furiously." (Landor 1904, p. 296) (Figure 18).

Landor (1904) described the fort (Figure 19) as "angular at three corners but rounded on the fourth,...[with] a battlement of earth and stone between strong facings and revetments of bamboo, inside and out...[It] had its main entrance to the east duly protected by a traverse." The wall was 4.57 m wide at the bottom and 3.048 m at the top. The roof was made of bamboo and earth which was effective in withstanding bombardments. The sunken floor of the fort was 15.24 m<sup>2</sup> on the outside, the north wall was 4.57 m high although the south wall was just 1.82 m high. Two defence towers, placed on oblique corners, were built with bamboo walls.



**Figure 16.** A maze of sharpened bamboo stakes to be navigated to get close to the fort.

(Fulton, [www.morolandhistory.com](http://www.morolandhistory.com), 2009)

**Figure 17.** A portion of the fort's wall, made of sharpened bamboo stakes. To the left of the wall is a rectangular window for firing *lantakas*. (Fulton, [www.morolandhistory.com](http://www.morolandhistory.com), 2009)



**Figure 18.** A soldier peers down into the covered underground passage on the wall.

(Fulton, [www.morolandhistory.com](http://www.morolandhistory.com), 2009)



These walls protect the northern escape route, a ditch going up the hill and measuring 4.26 m wide, 7.62 m deep, 548.64 m long; and the southern escape route going to the lake, a ditch measuring 9.14 m wide and 10.66 m deep. Another escape route at the eastern part of the fort also led to the lake (p. 297).



**Figure 19.** The interior of Fort Bacolod.

(Fulton, [www.morolandhistory.com](http://www.morolandhistory.com), 2009)

**The Calahui Fort**

Not far from the Bacolod fort was another one, called Calahui Fort (Figure 20), also located at the lakeside of a ridge with steep eastern and southern slopes. At the western side was a big trench that was linked to the lake. The ditch was 9.14 m wide and 13.71 m deep. It could be crossed by using a bridge. The fort could not be surrounded since two sides of it were protected by the water. The tiered north wall was strongly constructed. Fortified by palisades and covered by a bamboo and earthen roof, giving the occupants protection from bombardments. A rifle trench and a parapet were located outside the north wall, and there was another rifle trench on the west-side palisade that was packed with earth. There were also "rifle-pits" and a 1.82 metre-deep pit (Landor 1904, pp. 298-300).

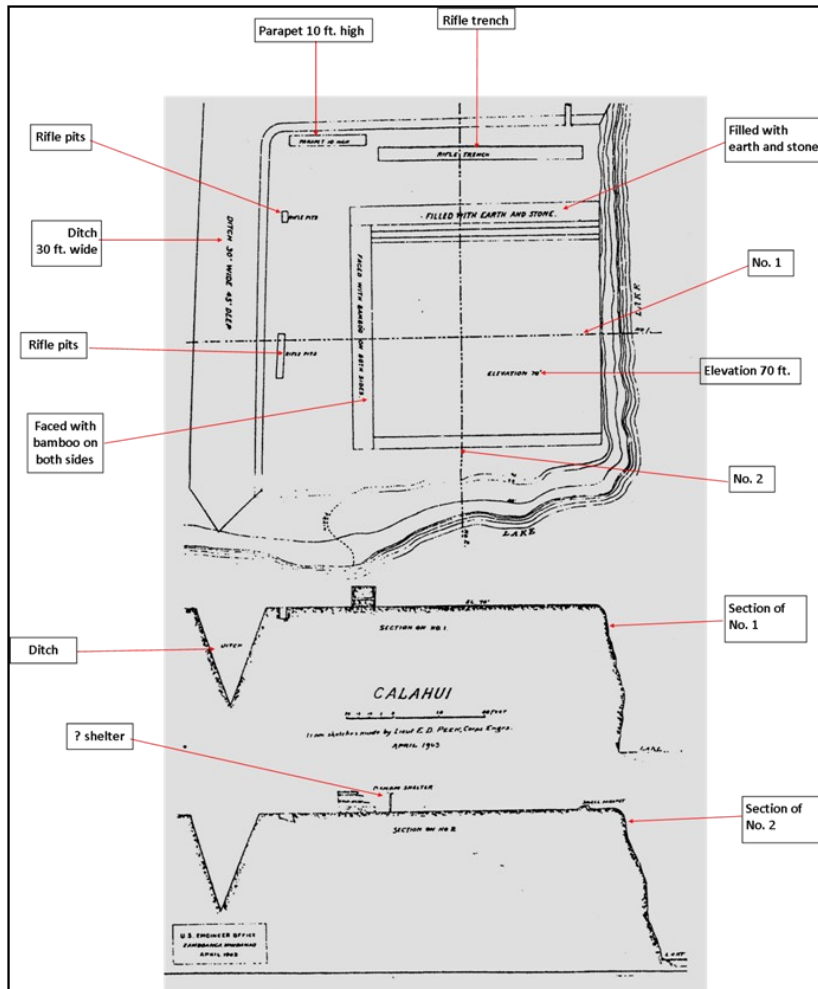
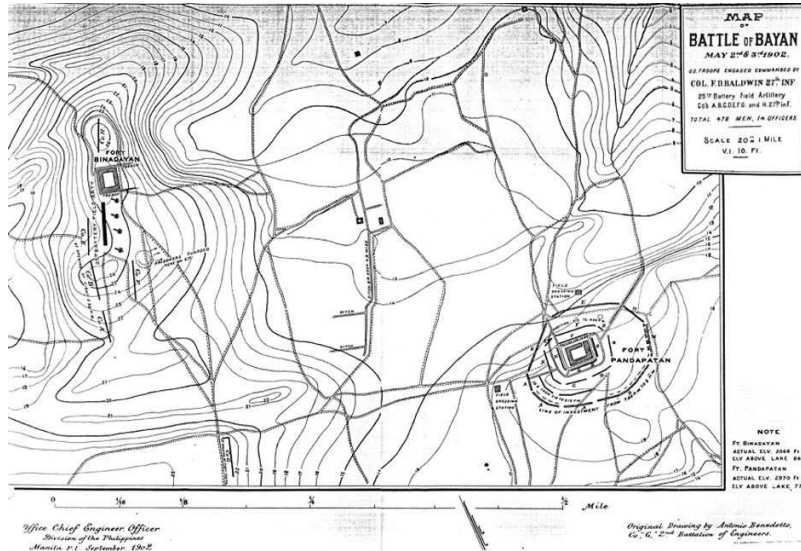


Figure 20. Calahui Fort plan. (Magdalena 2002, p. 82)



*The Binadayan and Pandapatan forts*

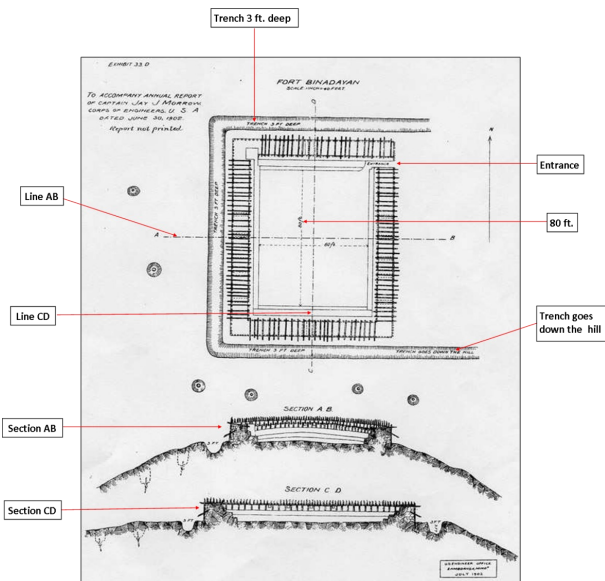
Two more significant forts were Binadayan and Pandapatan (Figure 21).



**Figure 21.** Topographic map of the two Bayan area forts. The Binadayan fort (at left) is 914.4 m. from the Pandapatan fort (at right). (Fulton, 2009)

The Binadayan Fort

The Binadayan fort's cross-section in Figure 22 reveals a floor dug into the ground. The plan view also shows a trench along the fort's perimeter, with the words "trench goes down the hill" scribbled on the lower right of the illustration.



**Figure 22.** Binadayan Fort plan (Fulton, www.morolandhistory.com, 2009)

The trenches were 0.9144 m in depth and width, used for hiding in while the defenders waited for their enemies to approach. The Maranaos built this fort using what was found in their environment. Bamboo seems to have been used as a camouflage, for it covers the whole fort (Figure 23). The fort had a good view of Lake Lanao and its surrounding area.



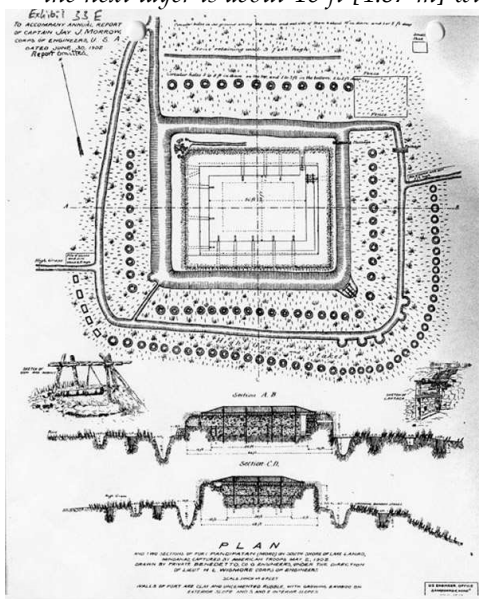
**Figure 23.** (Left) Photo of Binadayan Fort. (Right) View of Lanao Lake from the fort. (Fulton, [www.morolandhistory.com](http://www.morolandhistory.com), 2009)

The Pandapatan Fort

The Pandapatan fort (see plan view, Figure 24) is where one of the most important battles was fought on the 2nd of May 1902, with about 300 of the warriors defending the fort killed (Magdalena 2002a, p. 34).

Gen. Adna R. Chaffee gave the following lengthy description of that fort:

*"I should imagine that the Fort of the datto of Pandapatan... was over 100 years old. Its construction is mainly of sod, faced with rocks on the outside on two sides. The interior was about 80 ft [24.38 m] square, and the bottom of the raised work at the ground is about 20 ft [6.09 m] thick for about four feet [1.21 m] high; the next layer is about 16 ft [4.87 m] wide, four feet [1.21 m] high, and the next*



**Figure 24.** Plan view of the Pandapatan Fort. (Fulton, [www.morolandhistory.com](http://www.morolandhistory.com), 2009)

layer is six feet [1.82 m] thick and four feet [1.21 m] high. There were various holes in all of this for serving the lantakas which were laid on the ground and discharged through the holes. The exterior side of the fort was completely hidden by live bamboos (Figure 25-a) so thick that a field mouse could hardly get through it. The tops of these bamboos had been lopped off by the Moros when our troops arrived at the vicinity, leaving a foot [0.3 m] or two [0.6 m] above the wall. Outside of the walls about 12 ft [3.65 m] from the same was a large ditch probably 10 ft [3.04 m] deep and 12 ft [3.65 m] wide at the top, then a space of undisturbed ground about 10 ft [3.04 m] wide. On this ground was driven split bamboo slanting outward very close together, perhaps six [0.15 m] or eight inches [0.20 m] apart and about three feet [0.91 m] high, forming a chevaux de fries (Figure 25-b) which a man would find difficult in walking over. Then another ditch about six feet [1.82 m] wide and six feet [1.82 m] deep. This was the runway around the fort; after this came a cleared space ground about four feet wide [1.21 m] and another circle of split bamboo driven into the ground as above mentioned, about eight feet [2.43 m] wide. Outside of this were sunk wells about eight feet [2.43 m] deep and three feet [0.91 m] in diameter and separated apart about three feet [0.91 m]. A man could not rise out of one of these walls [sic] should he fall into it as the sides were vertical. Immediately outside of this line of walls [sic] was another line of split bamboo about 12 ft [3.65 m] wide....then a line of oblong wells, three [0.91 m] by six feet [1.82 m] and six feet [1.82 m] deep, separated one from the other by about a yard [0.91 m], outside of these was another chevaux de frise of split bamboo from 20 [6.09 m] to 30 ft [9.14 m] wide. The Moros outside the fort occupied the second line or ditch, lying upon the four feet [1.21 m] of cleared space referred to and firing either through or over the bamboo spikes. There was but one entrance to the fort, at the northeast corner. It was in an endeavour to get into the fort at this point where all our officers were wounded. To defend this entrance, the Moros had a swinging piece of artillery rather uniquely suspended on what I may call a carpenter's saw horse, the horizontal piece being about eight feet [2.43 m] from the ground, the cannon (3" calibre) was swung by ropes or bamboo strips from the cross piece attached to the trunnions of the guns. They could revolve it in any direction...." (Magdalena 2002a, pp. 34-35) (measurement conversion supplied by the author)



**Figure 25.** (Left) Pandapatan fort. (Right) The bamboo stakes that were placed in the ground along the fort's perimeter. (Fulton, morolandhistory.com, 2009)



At the bottom of the plan (Figure 24), the fort's walls (Figure 26) are described, which partly reads: "Walls of the fort are clay and uncemented rubble...."

The abovementioned forts, located in elevated landforms such as mountains and hills in different provinces, are a few examples of natural forts. But were elevated places the only ones that were fortified for defence? Definitely not. Observations of forts in low-lying areas were recorded in accounts from the early years of contact between the Spanish colonizers and the inhabitants of these areas, indicating that man-made forts were already being used long before the Spaniards arrived in the Philippines.



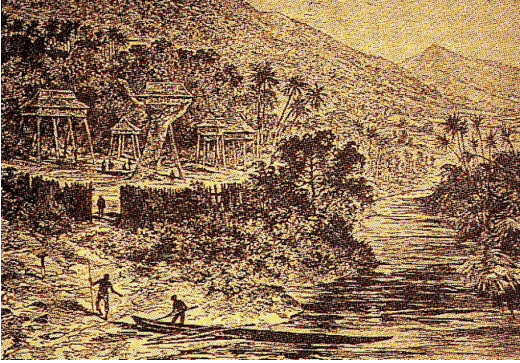
**Figure 26.** The walls of Pandapatan Fort. (Fulton, morolandhistory.com, 2009)

### Man-Made Forts

Unlike natural forts, such as landforms and land covers with only modifications made deliberately, man-made forts were constructed using materials found in the environment and shaped by their builders to make them defensible.

There are historical accounts of such man-made forts in low-lying areas. One of the earlier accounts tells of Rajah Sulayman's fort, located somewhere on the coast of what is now Manila Bay, and was made of "palm-tree logs" built over a "very narrow mound, with the pieces of artillery protruding from immense gaps" (Unknown Chronicler 1572, p. 150).

The same account also refers to a fortified village along a branch of what is now called the Pasig River. This village "had about a thousand inhabitants, and was surrounded by very tall and very dense bamboo thickets, and fortified with a wall and a few small culverins. The same river as that of Manilla [sic] circles around the village and a branch of it passes through the middle dividing it into two sections...." (p.158). Note



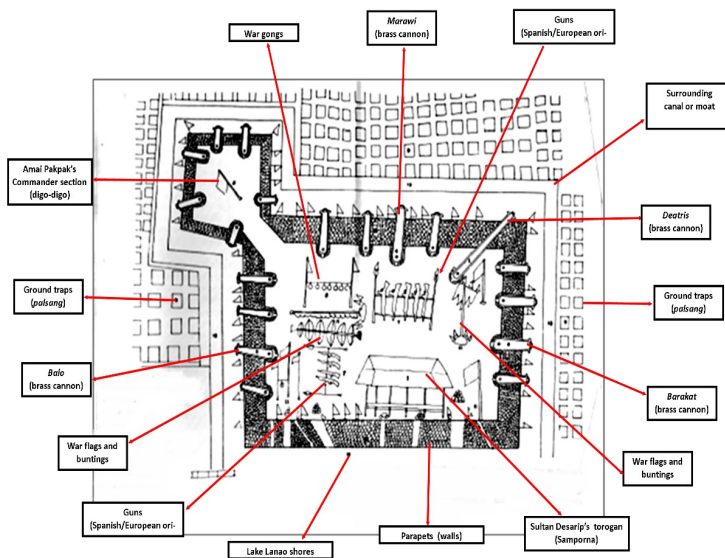
**Figure 27.** The walls of Pandapatan Fort. (Fulton, morolandhistory.com, 2009)

that the village had two kinds of fortifications: natural (the thick bamboo growth and the river which enclosed it) and man-made (the wall). Other than this brief description of the village and its surroundings, no other description was given.

Fortified villages were also observed in Mindanao. The Mandaya community depicted in this engraving (Figure 27) had their houses built on trees and surrounded by a wooden enclosure.

Aside from fortified villages, there were also forts built before the Spaniards came. In Mindanao, forts were called "kuta." (According to Magdalena [2002a] the "kuta" is usually a man-made fort, but it may also refer to natural forts [p. 35].)

In Lanao del Sur, there was a fort called Fort Marahui (Kota a Wato) (Figure 28) built in Sultan Desarip's territory (the present location of Marawi City). This was the strongest of the three forts that the Spaniards



**Figure 28.** Plan of Kota a Wato or Fort Marahui. (page insert, Saber 1980)

came across in March 1895. It was made "of rocks and stones," (the name "Kota a Wato" or "Kotawato" means "stonefort" [Saber 1980, p. 3]), and "covered on the sides by thick vegetation" (p. 5). Its shape was that of "two squares joined at an angle" (p. 23). On the grounds outside of the fort's wall, around a hundred metres away and covered by the thick undergrowth, were *palsang* (traps). These traps were bamboo stakes planted under the vegetation as well as at the bottom of human-sized holes. The fort's walls were "made of earth and thick logs," with "sharpened bamboo" at the uppermost portion. *Lantacas* (native cannons) defended the fort and the only way to overcome it was to breach the walls. It was a formidable structure (p. 23).

Interesting as Fort Marahui may be, there is another kind of man-made fort that was indigenous to Mindanao, specifically (at least so far as the sources found for this study show) in the Lake Lanao area and Jolo Island. This kind of fort was found in low-lying areas.

An example of this kind of fort, and it could have been the largest, was what Datu Ali was constructing in Seranaya (in Cotabato) in 1904. It consisted of "three connected forts with two more under construction, and...21 muzzle-loading cannons and 124 *lantacas* had been installed...." (Fulton 2009, p. 217). This was the equivalent of five forts, enough to contain hundreds—perhaps even thousands—of people. This fort, however, was not finished—the Americans destroyed it.

Nevertheless, the building of forts continued, for, in 1905, a fort in Seranaya was overrun by the American troops. It is not known whether this was the fort of Datu Ali, rebuilt after being destroyed by the Americans, while still under construction, in 1904, or an entirely different fort located in another area in Seranaya. In any case, the fort described by General Leonard Wood in 1905 seems like it was already fully constructed. It was described as being bigger than the twenty biggest found either in the Sulu or in the Lanao Lake region. Four thousand to five thousand men could easily occupy the cotta. It was well-positioned, well-made, and well-fortified with weapons (Magdalena 2002a, p.37).

Not mentioned in the description are the materials used for the fort, or what it looked like. It may have been like Fort Marahui, constructed out of logs and earth, or a modified fort similar to the Pandapatan fort which was made not only of earth and rocks but also of live bamboo trees.

Aside from the forts made in elevated areas or on flatlands, there were forts built near the rivers. The following photos of forts in the Lake Lanao

region give an idea of what a typical lowland fort might have looked like. Around the Lake Lanao region, the Americans described the structure (Figure 29) they encountered. It was a cotta of immense size, with 6.09 metre-high walls, surrounded by a 6.09 metre-deep trench, and filled with flowing water. A 1.21 metre-wide inclined trail led up to what looked like a big bamboo gate. On one side of this gate was a narrow access that could only be entered in single file. The big gate held back boulders that could be released by pulling a lever outwards, throwing the gate open. The fort was well-built and could easily withstand bombardments (1-22 Infantry.org, 1904-1905).



**Figure 29.** Probably the entrance of the fort that the US fort that the US Soldiers attacked. (1-22 [Infantry.org](http://Infantry.org), 1904-1905)

Still in the Lake Lanao region, this time along what is now called the Ragain-Ditsaan River, were more man-made forts, in the village of Ragain on the north bank and in Ditsaan on the south bank. The last fort (Figure 30) on the north bank was a large one. Its entrance was "narrow....closed by a high gate of bamboo" (1st Battalion 22nd Infantry: The Ragain Expedition 1904, n.d.).

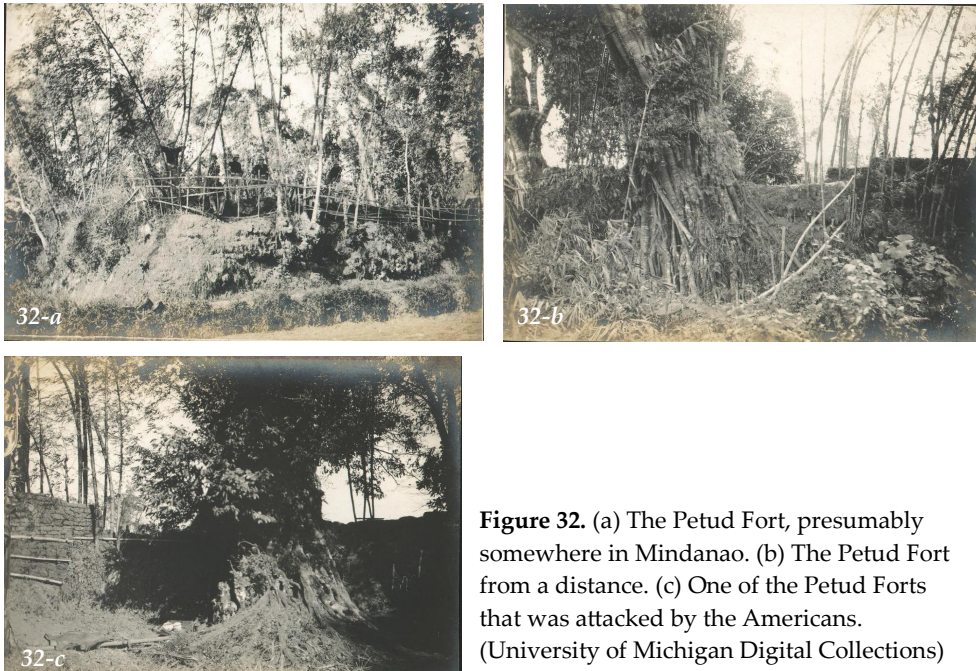


**Figure 30.** A fort along the Ragain River. Its entrance can be seen on the right side of the photo, just above the boat's roof. (1st Battalion 22nd Infantry: The Ragain Expedition 1904))



**Figure 31.** Interior of a fort somewhere in Jolo Island. (1st Battalion 22nd Infantry: Operations 1904-1905, Mindanao)





**Figure 32.** (a) The Petud Fort, presumably somewhere in Mindanao. (b) The Petud Fort from a distance. (c) One of the Petud Forts that was attacked by the Americans. (University of Michigan Digital Collections)

The photo opposite here (Figure 31) is an example of the interior of another man-made fort, this time in Jolo Island. The fort was described as made of earth and bamboo, and one way that the walls were constructed was with the use of mud bricks (1st Battalion 22nd Infantry: Operations 1904-1905, Mindanao 1902-1905, n.d.). This is an easy way to pile up earth to form an elevated structure such as a wall. The mud-brick walls are noticeable in the photo below.

Three photos from the University of Michigan Library Digital Collections are of a fort called Petud (presumably somewhere in Mindanao): from a distance (Figure 32-a); a closer look, most probably at its wall (Figure 32-b); and its interior with a section of its wall made of mud bricks (Figure 32-c).

There is another fort, Pang-Pang, in Jolo Island (Figure 33) which was briefly described as "well-constructed and formidable" with walls "so thick that the mountain guns had no effect" (Fulton 2009, p. 214). From what can be seen in Figure 33, the wall of this fort is made of large rocks and earth, with bamboo as a covering (camouflage) for the fort. Logs seem to have been used as a covering for a kind of tunnel or trench.

As discussed in the section on natural forts above, the kind of forts that people built from the 16<sup>th</sup> to the 20<sup>th</sup> century are made of the immediate environment and took advantage of the natural deterrent provided by the shapes of hills and mountains.



**Figure 33.** Cota Pang-Pang after the battle. (Fulton, morolandandhistory.com, 2009)

For those in the lowlands, however, being on level ground (or not so steep incline) made the construction of a barrier against the enemies necessary. Thus, fortified walls were built out of earth, logs, or live bamboo trees.

### Archaeological Data

Archaeology is a field of study that helps us to understand how people in the past lived their lives. Although the majority of the materials used centuries ago may have disintegrated over time, archaeological methods and theories combined with analytical tools from auxiliary disciplines, provide a means to piece together the story of a place and its people.

This study puts forward the concept of Philippine indigenous forts as a possible framework for studying some sites that may have been used as forts in the past. Archaeology can help us to understand how people used their environment to their advantage. The numerous raids in a span of at least three centuries can leave their mark on the people's consciousness through their local history, and on the land through the ruins that stand as silent reminders of a more chaotic time in the past. Archaeology can help us further to understand the history of people and the places they inhabit in the past especially in the absence of written records.

In attempting to better understand indigenous fortifications in the Philippines, certain questions must be addressed. Are there enough archaeological data to help us determine if a particular site was an indigenous fort? Are there enough archival/historical data to assess if a particular place may have been used as an indigenous fort in the past?

The studies done on the *ijangs* (Ivatan term for natural fort) of Batanes are an initial step towards gathering data on indigenous natural forts. A natural, elevated land formation was where people usually went when there was a threat, local or foreign. The rugged hills of Batanes were suitable sites for *ijangs*.

In 1687, English Captain William Dampier wrote his observations regarding the houses that he saw (among other things) on an island north of Luzon. The island was identified as the Ivuhos island (Dizon and Santiago 1994, p. 18), part of the Batanes group of islands. In that entry, he described villages built on the side of a cliff, with three or four houses "one above another." The cliff was so steep that the inhabitants used wooden ladders to go to the next row of houses above (Dampier 1927, p. 289). Could this have been a natural fort or were these houses just built on high places since there were no other places to settle in? The construction of houses on elevated places would have been necessary if the surrounding low-lying areas were being used only as agricultural land, or if there were no low-lying areas at all, making these high places the only sites that could be settled. However, there was another island within that island group which Dampier observed to be fertile and not hilly, and yet was uninhabited (p. 290). This raises the possibility that the Ivuhos inhabitants' purpose for choosing to live on elevated, inaccessible places was security.

Archaeological excavations have been done in some of the *ijangs* in Batanes. These sites were found in steep, elevated places or near settlement sites, and were said to be habitation sites. There were artefacts and features uncovered that were common in these sites (Dizon and Santiago 1994, 1996; Dizon 1997; Barretto 2007).

Based on the data gathered from the excavated sites, the commonly associated materials from these sites were earthenware sherds and stone tools (such as a pestle), artefacts usually found in either settlement or habitation sites. Features found in most of these sites were the stonewalls.

In the 1997 Status Report on the Batanes Archaeological Project, Dizon (1997) wrote that they "observed that the *ijangs* were primarily used as habitation and fortification" (p. 119). He further explained that in an island environment, the scarce resources were used to their maximum potential. One example of such was the use of local stones as construction material in the making of terraces in some of the *ijangs* (p. 122).

However interesting the natural forts in Batanes are, these are not the only kind of forts that can be found in the Philippines. Other archaeological sites which may have been natural forts in the past still have to be excavated.

Perhaps one way to look for potential sites of indigenous forts is to

consult historical and ethnographic records, such as those cited in the preceding section of this paper, for these may contain indications as to where people used to seek refuge. Another is Vicente Villan's (2000) *General Juan Arce: Dakilang Hangaway ng KKK at Himagsikan sa Capiz*, where he identified three places in Panay Island which were used as forts during the Philippine Revolution. Mount Isarog in the Bicol region was also a natural fort utilised by the *remontados* (Mallari 1983, p. 105).

In studying these sites, it is important to expand the concept of "indigenous forts" to include not just natural forts but also man-made forts. So far, the studies of the Batanes *ijangs* have focused on the common concept of a fort as being located on a steep, elevated place. Another common concept is of houses built on the top branches of very tall trees where a whole community would hide in times of war.

To these concepts should be added those that are shown in the historical photos of the modified and man-made forts in Lake Lanao area and Jolo Island. The photos show that the Maranaos modified an elevated land form by carving out the interior to make room for the warriors or constructed a fort with the use of packed earth, stones and logs. Examples of this kind of modified forts are the forts of Bacolod and Bud Dajo, which were also dug out to give the rebels room to hide and take positions. These were the forts that the local inhabitants used against their enemies long before the Spaniards (as well as the Americans) attempted to colonise them.

Such information is not yet found in Philippine archaeology, perhaps because these forts do not resemble the typical kind of settlement or habitation site which one can right away recognise as either a natural or a man-made indigenous fort. But one thing that the study of the Batanes *ijangs* provides is a starting point to build on in the study of indigenous forts, for it can be a way to compare and contrast the data that will be gathered and see what other sites may be considered as indigenous forts. Moreover, this can further our understanding of how Philippine indigenous peoples defended themselves from attacks, either from outside of their community or from inside.

There are also archaeological sites mentioned or described as natural forts in local histories but have not yet been studied as such. An example is in northern Mindanao, where the local histories of El Salvador City (Neri et al., 2012), as well as of the municipalities of Alubijid (Neri et al., 2014) and Initao (Neri et al., 2009), tell of certain hills that were used as a refuge by





Figure 32. Philippine map with the general location of indigenous forts mentioned in this paper.

local inhabitants against raiders. There are similarities among these three sites, namely: their location in coastal, elevated areas; the presence of earthenware sherds (cookwares); and the presence of Spanish period ruins which may have been used as a kind of lookout place or a place of refuge. These similarities raise the possibility that these three sites were indeed natural forts in the past. The Spanish period ruins *may* have been a church or watchtower built to serve also as a lookout place so that people could be warned of imminent danger. By studying sites such as these, we could get a bigger picture of how the early inhabitants had defended their villages from threats, adding to the knowledge that we have of our past.

Building fortifications was one of the defence strategies in times of war. In these structures, people sought shelter from their enemies and made a stand against them. Adding the concept of an indigenous fort (natural or man-made) as possible use of a particular site will certainly expand the scope of future archaeological studies in the Philippines. Most certainly, it will enhance knowledge and appreciation of their own locality's history.

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