

The Fates of Hepingdao and Dashawan: Challenges of coastal archaeological sites in northern Taiwan

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ABSTRACT

Although an in-situ exhibition after an excavation is ideal for public archaeology, it is also challenging for several reasons. This paper compares the cultural heritage management of two coastal archaeological sites in Keelung, northern Taiwan, from excavation to presentation to the public. In 2019, archeologists funded by the government excavated the remaining structures of a seventeenth-century Spanish church at Hepingdao and those of a nineteenth-century Chinese fort at Dashawan. Together, these sites reflect the rich history of Keelung and the dynamics of regional maritime history, as the church is the only tangible cultural heritage of the Spanish colonial period in Taiwan (1626-1642), and the fort is the only excavated archaeological site associated with the Sino-French War (1884-1885). Moreover, the prehistoric and protohistoric cultural layers in both sites provide critical data regarding how indigenous communities used marine resources and participated in maritime networks. Although both sites were designated municipal archaeological sites after the excavations, different arrangements were made: the trenches at Hepingdao remain open, and an in-situ exhibition center is planned, whereas the archeological discovery of the Dashawan fort has been backfilled, even though the archaeologist also promoted an in-situ exhibition strategy. This paper analyzes the environmental and social factors considered and the consequences of the subsequent arrangements from site preservation and public archaeology perspectives.

Keywords: maritime archaeology, cultural heritage management, public archaeology, site preservation

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INTRODUCTION

In-situ exhibitions are ideal for public archaeology once sites with significant educational and economic values have been recognized. In contrast to backfilling the site or moving the unique structure to another place, an in-situ exhibition maintains the integrity and authenticity of the site. Visitors can study archaeological methods and theory at the same time as they view structures and artifacts. Tourism and other indirect profits usually carry a certain weight in decision-making (Murray 1980; Gogová 2016). However, this strategy also faces various practical challenges, ranging from conservation technology to climate (Lu 1993; Dumas 1998). This paper analyses the decision-making and the consequences of managing two archaeological sites along the coast of Keelung, Hepingdao (HPD) and Dashawan (DSW), in northern Taiwan. Both sites contain multicultural layers, from the Neolithic period to the twentieth-century Japanese colonial period. The highlight of Hepingdao is the foundation of Todos los Santos Church, the first Christian monument built during the Spanish colonial period (1626-1642); the latter site features the remaining structure of the Dashawan Fort, a battlefield of the Sino-French War (1884-1885). Both excavations were conducted in the same year, and both were funded by the government. However, very different arrangements were made for each site, as the site at Hepingdao was slated for an in-situ exhibition while that at Dashawan was backfilled to resemble an untouched state. These decisions, influenced by the coastal environment, archaeological findings, and local contexts, had different influences on the two sites and the public visiting them. Aligned with the main thrust of Session 13, the environment emerged as one of the most critical decision-making factors in both cases.

CASE STUDIES

Between 2017 and 2021, Keelung City Government received a grant from the Minister of Culture's 'Regeneration of Historic Sites' program and conducted a project called 'Grand Keelung Historical Site Reconstruction Integration Plan.' The excavations of HPD and DSW between 2019 and 2020 were the only archaeological excavations among the fifty-three sub-projects under this umbrella (Keelung City Government n.d.). The two sites are located east of the present city center: HPD is a small island off Keelung, at the mouth of the port, and DSW falls between HPD and the city center (Figure 1). This was the first time that the Keelung City Government supported large-scale archaeology projects. In both cases, some structures had been identified in previous studies, but not enough information was known to reveal the whole structure nor to evaluate the historical and cultural value of the site. The grant provided unique opportunities for archaeologists to enhance their understanding of these sites.



Figure 1 Locations of Hepingdao, Dashawan, and Keelung City Center

Hepingdao Archaeological Site (HPD)

Hepingdao, or the island named Heping (meaning peace), was once the earliest location of 'Keelung' in historical records. However, it had been neglected for decades after the current city center was developed. The HPD archaeology project no doubt uncovered a Golden Age of the island. There are three targeted locations in the HPD Archaeology project. Location A is at the shipyard of the CSBC Corporation, and it is the potential location of the Spanish Fort San Salvador. Due to the restrictions of the current shipyard, no excavation could have been conducted. Location B is in a parking lot, a small piece of land that has escaped heavy development on the island, and has been in excavations since 2011, while Location C was recently discovered in the middle of the 2019-2020 season. This paper focuses on Location B in reference to 'Hepingdao Site (HPD)'. In 2019-2020, the HPD Archaeology project conducted by National Tsing Hua University (NTHU) continued excavations based on the results of previous small projects and revealed most of the remaining foundation of the Todos los Santos Church. The orientation of the structure, the shape of the apse, and the size of the building were clarified for the first time. The church faces southwest toward the seashore, and the thirty-meter-long ruin suggests that the original building could have been up to fifty meters in length. In addition, burials were discovered inside and outside the church. Most individuals were found in a praying posture, clearly associated with the church and the earliest Catholic mission in Taiwan (Tsang, Hsieh, and Cruz Berrocal 2021).

In addition to Spanish colonial history, this excavation uncovered the *longue durée* history of human activities on the island in trenches less than two meters deep. The Yuanshan cultural layer (3500-2000 B.P.) contained jade ornaments and tools from the east coast of Taiwan, suggesting a connection to the early networks surrounding Taiwan Island. The rich marine animal bones and associated fishing tools also provide clues about maritime culture and human impacts on ecosystems. The Metal Age Shihsanhang cultural layer (2000 B.P.- 400 B.P.) contained glass beads that reflect the maritime exchange networks in Asian waters. The latest phase of this period would be directly connected to the Basay indigenous people who actively interacted with the Europeans during the early modern period. Finally, the remains of the dormitories of the shipyard employees during the Japanese period were also documented. In short, the discoveries in HPD reflect northern Taiwan's diverse and rich maritime history (Tsang, Hsieh, and Cruz Berrocal 2021; Cruz Berrocal et al. 2020; Cruz Berrocal et al. 2018).

The PIs of the HPD archaeology project recognized the value of the site for exhibition and suggested keeping the trench open after the excavation. This included the remaining church foundation and burial pits, some Japanese structures that cut through or connected with the Spanish walls, a few Qing Dynasty stone pavements and post holes outside the church, and a portion of the Neolithic archaeological layer inside the church. The trenches with the above features thus were not fully excavated. The Keelung City Cultural Affairs Bureau initiated a plan for an on-site exhibition center. Further, it evaluated the potential of creating a Hepingdao Archaeology Park, integrating most of the cultural and natural heritage on the island.

Dashawan Archaeological Site (DSW)

Dashawan, meaning 'the great sandy bay,' is opposite the Zhongzheng District Office and beside a busy road. According to historical documents, the Qing government built a fort on the flat area of Dashawan in the 1840s. Called 'La Galissonnière Fort' or 'Fort Neuf' in some French records, the fort did not leave many traces in historical documents. However, as the main battlefield of the Sino-French War, which led to the establishment of Taiwan as an independent province of Qing China, the site's historical value is unquestionable. After the war, the governor changed his defense strategy and built new forts on the hills of Keelung. As a result, Dashawan Fort, already heavily damaged during the war, was abandoned. During the Japanese period, the area was developed as a public recreational beach, thus further destroying the remaining structures. The region's landscape changed again after the local government filled the beach for the port facilities. Before the 2019-2020 excavation conducted by Long Men Archaeo Company (LMAC), the few portions of walls still standing and visible on the surface (some even merged with local residential houses) were insufficient for scholars to understand

the original design of the fort. Only one portion of a wall, three meters high and two meters wide, is visible to the public. The view to the water is blocked by the Eastern Container Port Terminal.

The new excavation found more surviving structures of the site and revealed the impressive earthwork below the observable structure, including rammed earth, iron bars, and wooden piles. With further historical research, the original size of the fort was determined to be 50 meters long and 16.4 meters wide. Moreover, like the case of HPD, archaeologists found remains before and after the Qing occupation. These range from prehistoric materials traced back to the Shuntangpu Culture (4500-3500 B.P.) to Japanese toilet remains (Lu 2021).

Based on the unique findings at Dashawan, the archaeologist also suggested exhibiting the revealed structure *in situ* in the future. However, the site was backfilled at the end of the project. Since 2021, the Keelung City Government has tidied up the area where one small portion of the Dashawan walls is visible and grouped it with other nearby historical monuments, including the French Cemetery, the Fortress Commander's Residence, and the dormitories of the Fortress Command (some also recently reconstructed with the same funding source as the excavation). Together, these formed the Dashawn History Cultural Park.

From an academic viewpoint, the discoveries of the two sites are equally important and worth displaying for public education. However, the resulting arrangements of the two sites were quite different, directly influencing the site's future. What were the main factors considered in this division-making process? Moreover, how would these policies impact the site's preservation and public archaeology?

RESOURCES

The resources available to conduct this research include the final reports of the two archaeological sites, government media, and records of the meetings relating to the site management, which are all open to the public. Furthermore, as one of the PIs of the Hepingdao archaeological project and a council member of the archaeological review committee of Keelung City, the author participated in the discussion about the Hepingdao site and attended some meetings for the Dashawan Site. In addition, the author interviewed several stakeholders, including locals who lived next to the sites.

FRAMEWORK

The Keelung City government only had a little experience in archaeological site management before the excavations of HPD and DSW. Nevertheless, the Cultural Affairs Bureau of Keelung City, as the competent authority of archaeological sites based on the revision of the Cultural Heritage Preservation Act in 2012, actively developed the sites. The nomination of the two cases as municipal archaeological sites and the plans for their integration into the public sites mentioned above happened even before the final archaeological reports were submitted. Most discussions regarding the future of the sites went beyond academic perspectives.

Impact factors

Environmental issues

Located in a rainy city where people need umbrellas during two third of the year, the yearly average pH scales of the rain in the past twenty years were always below 5.0, and the relative humidity is consistently above 70 percent, an in-situ exhibition plan is generally challenging due to the expectable water damage. In addition, the coastal environments make the task even more difficult. The main structures at the two sites were both built close to the original seashore, and the locations today still belong to the tsunami risk area. Although the current distance between the HPD site and the present

coastline is shorter than the case of DSW (150 meters and 200 meters, respectively), the location of the former is relatively higher (12 meters and 4 meters above sea level, respectively) and safe. Furthermore, the stone foundation in HPD stands on the bedrock of the island, whereas the earthen foundation in DSW sits on the original beach over a thin layer of artificial clay. The excellent condition of the skeletons found in HPD testified that the site's environment is relatively stable. On the other hand, the earthen structure discovered at DSW is 60-150cm below the surface, where underground water threatened the trenches during the excavation. In short, compared with HPD, the location of DSW and the materiality of the underground structure make it extremely challenging to arrange an in-situ exhibition. Consolidating the deep sandy trench would not be an easy task, and the change of humidity and salinity might threaten the stability of the structure.

One church, many forts

The uniqueness of the finding is another consideration for the policymakers, especially when the budget is limited. Because the city is located at a strategic point in Taiwan, fortresses are the primary monument type. Although the archaeologist highlighted that the DSW fort is one of the earliest Qing forts, the only fort located on the beach and not modified by later political powers, and the only fort of this type studied by archaeological methods, its educational and recreational value is not apparent for the non-professionals. On the other hand, the remaining Todos los Santos church and burial pits are easy to recognize and understand. Although most Taiwanese are not Christian, the discovery of the church not only surprised the Catholic communities in Taiwan but also raised general curiosity. It is the first church in Taiwan and the only tangible cultural heritage of Spanish colonial history. Although both HPD and DSW are sites with multiple cultural layers, the latter only showcased the Qing military structure. In contrast, the features of various periods displayed at HPD could attract visitors with a variety of interests and demonstrate the complex findings in a historical archaeology site.

Public awareness

Promotion of the site was part of the contract in both cases, and NTHU and LMAC fulfilled these requirements differently. The excavation of DSW was out of the public eye. After the dig, the LMAC team invited historians and archaeologists, hosted a series of professional lectures for the public, and published the content of academic presentations. In contrast, since the beginning of the excavation, the NTHU team saw the excavation of HPD as an excellent opportunity for archaeology outreach and student training and promoted the site through various open archaeology events and social media. After the structure of the church foundation was fully revealed, the site served as the mayor's reception room, and even the president was invited to visit. In addition, an introductory book was published in a tone for a more public than academic audience. All these efforts made the public more aware of HPD than DSW. In addition, for the government, backfilling HPD and withdrawing the site's former function as a parking lot were likely to cause much public grievance. No similar complaints would have arisen at DSW.

Consequences

Based on the above factors, it is understandable that HPD became the preferred location for an in-situ exhibition rather than DSW. Today, the trenches of HPD are still open, and the plan for the exhibition center is ongoing (Figure 2), including rescue archaeology for the placement of the pillars that will support the center of the building. In contrast, although the environment around the Dashawan ruins has been beautified, the landscape features remain the same as before the excavation (Figure 3). These arrangements led to different consequences regarding the preservation and public archaeology of the sites.



Figure 2 Hepingdao Site under the current tent



Figure 3 Dashawan Site after backfill

Site preservation

Site preservation decisions are related to the protection of archaeological structures. Backfilling offers the most protection, while an in-situ exhibition requires treatments that assist in preserving the site. Although the decision to create an in-situ exhibition of HPD quickly gained general agreement, preserving the open-air trenches took more work than expected. The change in the site is visible: the exposed bedrock quickly weathered, and the geological joints faded away. The walls of the trenches, especially the backfill portions made by previous excavation seasons, have partially collapsed. Under the extremely wet climate, soil consolidation is urgent for the site; however, the cost is unaffordable for the local government. A solid tent with an award-winning design replaced the previous one for the Keelung City Expo, but it is not wide enough. The pouring rain still resulted in the corner of the structure being inevitably occupied by moss and weeds. The idea of filling the site and opening it again was brought out once, but there would be a risk of damaging the site during the process. Moreover, an additional considerable expense was needed for this proposal. The discussion and action around conservation have been slow compared with other actions. A microclimate monitoring system will be set up in mid-2023 to collect data for future decisions. The forthcoming exhibition building, designed to transfer the site into an indoor exhibition, should slow the weathering process. An active environmental control strategy should be integrated into the design (Luo et al. 2015).

In contrast, for the DSW site, the LMAC team had provided three preservation strategies: fully backfill, partially backfill, and total exposure for exhibition. The final decision to fully backfill was recognized as a low-impact method for the site. However, the archaeologist noted that the wooden piles in the structure would still eventually corrode under the current environment. In addition, weeds, acid rain, and air pollution from heavy traffic would still cause biological and chemical weathering of the structure on the ground.

Public Archaeology

Public archaeology hopes to engage the public in the value of archaeology and local history. Despite its preservation challenges, visual and physical access to the results of excavation support this goal and offer other community benefits. As an open site with easy access, public archaeology events hosted by different stakeholders, including government, scholars, and local NGOs, continue happening at HPD, creating various conversations and narratives. The site has become a popular attraction in Keelung, promising economic value for the local government, who even foresee that the archaeology park can push private sectors to help renew the cityscape. However, the rotation of political parties brings some uncertainty to site management, and the new government incumbent in 2023 still needs to take responsibility for the site.

In DSW, since the trenches were never visible to the public, the idea of an in-situ exhibition hardly reached a greater audience. The government nevertheless spent many resources to enhance the cityscape of the DSW area, and the remaining fort structure was integrated into the new plan. However, the small wall is overshadowed by other historical buildings and colorful modern artworks, and the tiny information board does not draw much attention from visitors. The fort's potential economic value then was hard to evaluate. After the temporary events are finished, the site remains quiet. Although opening the site again once the government terminates the current Container Port Terminal has been proposed by urban designers, there is no timeline for such a dreamy plan; thus, changing the site's status is not a priority for the government.

CONCLUDING REMARKS

This comparative study provides insights into the balance between site preservation and public archaeology. From the viewpoint of preservation, restoring the site to make it close to its pre-excavated condition, like what has been practiced for most underwater archaeological features, might be the best way to protect the site. However, making the sites accessible to the public has

various advantages in terms of public education, tourism, and promoting the discipline. Moreover, these case studies also illustrate that the relationships between archaeology and urban development are not always conflicting. HPD and DSW are equally invaluable for academia, but various natural and social factors have led to different fates of the sites. What we can learn from these cases is that a better preservation plan is needed, especially when working in the coastal region. The decision to establish an in-situ exhibition could not be easily made due to its high cost, but there are other ways to enhance the site's accessibility and sustainability. For example, 3D documentation and virtual exhibitions have provided new experiences for appreciating archaeological sites, although the lack of authenticity is still debatable. What is critical is to keep the discussion going. HPD and DSW should be situated in a connected relationship rather than a competing one. Since the prehistoric period, the development of the two areas jointly tells the remarkable history of Keelung. The future HPD exhibition center could be transformed into a space that represents the region's maritime history and incorporates resources from the greater area.

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