Archaeological Assessment of Battery Bouillé (SE 69)
St. Eustatius, Caribbean Netherlands

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Acknowledgements

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Project Description

The Battery Bouillé is located on the western side of the island, on top of the cliff, and just south of the city. Nowadays, it can be reached by a small dirt road off the main road to Fort de Windt. The battery is also located just to the south of the large gut that leads to Crooks Castle and is therefore strategically placed to protect the southern part of the bay. The battery consists of a defensive wall and three large cannons, including the largest cannon on the island. Most of the area is overgrown, but the cannons and the wall are still visible.

This project was initiated after local reports of significant finds. First, S.E.C.A.R. was informed of a large find of 10 blue beads in one area. Although the person informing us did not know exactly where it was, it was near White Wall and on the slope of the Quill. As this description did not provide us any specific data, S.E.C.A.R. did not pursue it. Later, however, we heard that more blue beads were found (30 in total) and that these were found in close association with Battery Bouillé. This information provided us details of its location, but also indicated that the beads were very likely found in situ and in relation to a known historical site.

The find of these blue beads led to looting practices of the local workers. The area is on a terrain where a new house is built and during construction efforts the workers encountered these beads. As these beads represent monetary value and can be sold relatively easy for a significant amount ($100-150 per bead), these workers were eager to find more. They excavated shallow pits and screened all the soil, trying to uncover more blue beads. The area is now very disturbed, with shallow pits and piles of screened soil lying around. Further, larger piles of bulldozed materials are concentrated in the corner of the road. In sum, the area is heavily disturbed.

Blue beads, as an artifact without context, have little archaeological value. The beads are numerous and their significance is well-known to St. Eustatius’ history. Additional blue beads do not change this specific perspective significantly. However, blue beads in context and in association with other archaeological finds do provide additional information and may reveal answers to questions if these beads were only used by slaves or colonists also engaged in their exchange, what their function was in different context of exchange and how these beads functioned in the exchange economy on St. Eustatius. As the pentagon shaped blue beads are specific to the island, it can be assumed that these items had a very specific function here.

In addition, the large concentration of blue beads in relation to the close proximity of the battery suggested that structures or other features were encountered. As other structures, so far, were unknown, S.E.C.A.R. deemed it necessary to investigate these findings. The goal of the project was to establish and investigate the possible existence of multiple ancillary structures near the battery. After a quick survey of the area, S.E.C.A.R. archaeologist Ruud Stelten found multiple broken walls and a significant amount of building materials at the site. This was enough to validate a more detailed archaeological investigation of the area.

These building materials seemed to be coming from a couple of pits, most likely dug by looters to find the blue beads. A large sieve was lying right beside the pits, which was used to screen the content of the holes and extract the blue beads. It seemed that these building materials were found in situ and that a structure was located in the corner of the property.

On our arrival of the first field day, we were approached by the neighbor of this property. He told us that he had never seen a wall or any other structure in close proximity of the battery. He had cleaned the area before of vegetation, but it quickly grew back and he never maintained it. He also showed us a building in the back of his yard. This was a large dome like structure, with the walls made of basalt stones to about 1 m in height. The dome structure and ceiling were
constructed by red bricks. The total structure was approximately 2 m high and 8 m deep. The opening of the structure was damaged and the front wall was likely broken to allow greater access to the dome. This structure was likely used for storage, maybe of gunpowder or other supplies for the battery.

The presence of this structure also validated a more detailed investigation of the site where the blue beads were found. As the location where the finds were made was located exactly in between the dome structure and the battery, it is very likely that the area in between was also in use and that other structures were built here. Obviously, the dome located approximately 100 m away from the battery showed that a larger area was used for purposes related to the battery.

The goal of this project was to investigate the possible remains of ancillary structures to the battery. The indication of a large find of blue beads was an indication of the possible presence of structures in the area. Artifact recovery, including blue beads, was not the main purpose of this study. As mentioned before, additional artifacts are not vital in understanding St. Eustatius’ history, as the island is covered with artifacts. However, the presence and exact location of ancillary structures near Battery Bouillé are unknown and would provide valuable archaeological information.
Historical Background

Battery Bouillé is described in detail by Hartog (1976). Here follows a summary from his account. After the invasion of the French on November 24 and 25, 1781, the island changed possession from the English to the French. The French were interested in maintaining the island and quickly reassessed the defensive works on the island. It was noted that multiple structures were neglected over the past years and were not in good condition, including Fort de Windt. The French, under guidance of governor of Martinique Francois Claude Amour, marquis de Bouillé, decided to fortify the island and built additional structures, including Battery Bouillé. A second battery was also planned by the French, but never executed.

Commander O’Reilly, who was asked to check all fortifications on the island after Dutch authority was reinstalled in 1795, found that French fortifications were not well-build, except for Fort Panga. This was probably due to the severe threat of the English, after the French took the island in 1781. The French were afraid that England would retaliate and try to take St. Eustatius back. To protect the island, multiple batteries were built in a short amount of time to counter this threat. The French left the island in 1784, so all these buildings were installed in three years only.

The construction of Battery Bouillé was good enough for the Dutch, after 1784, to continue its use and maintenance. Documentation mentioned a wooden guard house of 24 by 12 feet, consisting of two rooms, and a wooden shed. The battery was considerably armed, with nine cannons, of which five were heavy 24-pounders, two light 4-pounders and two howitzers. The strategic placing of the battery was appreciated to such a degree that the Dutch even considered finishing the French plan of building a second battery nearby.

After 1800 there is no mention of Battery Bouillé in the sources. It seems that the decline of the island’s economic impact on the region affected the battery, and little attention was given to defensive buildings. The port of St. Eustatius became less and less used and the economic trade shifted to other islands. With significant fewer amounts of wealth stored in Lower Town, the need to protect the island from invaders also diminished. The battery, with only three cannons as it can be seen today, has been like this for over a couple of decades and what happened to the associated wooden structures is unknown.
Research Methodology

This research was aimed at finding structural features near Battery Bouillé. Although the sources mention the existence of two wooden structures, the large amount of bricks and parts of walls in the field were reason to believe that another, more permanent structure was built here as well. To investigate the archaeological remains, three small-scale test excavations were placed in three locations. The methods will be described below in more detail.

Excavation

To test the subsurface presence of walls, features, and density of the artifact scatters, three test units were placed across the landscape. All units measured 1 x 1 m. The first unit was placed in the last untouched and undisturbed part east of the road. In previous days, the local workers on the house that is built at Battery Bouillé looted the area. This location was chosen to understand local geography and understanding how further the archaeological remains were scattered across the landscape.

The second test unit was placed just east of the road, just around the corner. This unit is placed closest the battery. There was a small surface where the soil was not turned over during the looting. During the excavation of the looting pits, a large amount of building materials was found. These materials were thrown to the side and prohibited further excavation underneath them. As this location was undisturbed, we removed the building materials and excavated here.

The last unit was placed a little further to the east of unit 2. In between unit 2 and 3 were all the looting pits. This unit was placed as close to the looting pits as possible to expose possible walls to this part of the site. Unit 2 and 3 were both placed in close proximity of the building materials that were uncovered to see if there was any wall found here.

Excavations of the test units were initially conducted in increments of 10 cm levels and the excavated dirt was screened through 5 mm. As the looting pits already exposed the local geology, it was quickly decided to follow stratigraphic layers. The top layer, approximately 20 cm deep, was a dark brown soil. Underneath, a thin layer of grey and hard soil was encountered. Underneath, a yellow silty soil with rocks was located. This geology is consistent with other locations on the island, where a darker layer with artifacts supersedes a yellow layer of natural soil. In all three test pits, layer 1 includes all dark soil to approximately the transition to the yellow soil. The small screen was used to trap all possible materials that were found here, including smaller beads and valuable artifacts. Closing levels in each unit were drawn and described. The final levels were also photographed. North profiles were drawn of all units.
Results

In total, 285 artifacts, weighing 1958 g, were found during this field project. This includes three artifacts, weighing 594 g, collected from the surface in the immediate vicinity of the three test units. The results are discussed here.

Figure 1: Project area and approximate location of test units.

Surface

Three selected surface finds were collected, all based on specific characteristics. First, a cannonball of 534 g was collected. This is an extraordinary find and was laying right on the surface next to one of the looting pits. It is very likely that this ball was found in the soil during looting and placed to the side. A piece of Chinese porcelain, hand painted blue, was collected as well. This was a rather large piece (23 g) with design and indicated that some less mundane activities associated with the battery also took place. Finally, a mold blown neck and lip were found. The mold line extends all the way on the neck to the lip, so it is dated to 1880-1890. The porcelain and glass give a general impression of what is found on the surface.
Figure 2: Artifacts found on the surface. Cannonball is the most right artifact.
Figure 3: Overview of the site. Test Unit 1 is located in the background, near the car. Test unit 2 is the one in the foreground. Test unit 3 is on the right.

**Test Unit 1**

Test unit 1 consisted of two layers. The top layer was a brown grey silt with underneath a yellow silt. The top layer was the plough zone, whereas the layer underneath was the natural soils (see appendix A). Artifacts were collected per stratigraphic unit, because these were easily distinguished in the field. The drawing of the bottom of layer 1 shows a lot of larger rocks, which were part of the top of layer 2 on which layer 1 was situated.

Test unit 1 had the highest density of artifacts. In total, 219 artifacts were found for the combined weight of 751 g (TABLE 1 and 2). Glass was the dominant artifact category, with a total of 147 pieces and 538 g (TABLE 3 and 4). This is unusual, as most excavations yield more pottery in weight and count. The pottery assemblage from this unit was very diverse. Seven pieces of tin-glazed pottery, possibly Delftware, were found indicating a 17-18th century occupation of the area. However, creamware was dominant (N=25, 43 g), pushing the date post 1762. Stoneware, coarse earthenware, porcelain and pearl ware were found as well. One large rim of Afro-Caribbean ware of 25 g was found. This piece came from an open bowl.

Eleven specimens of shell were found, all parts of snails or *Cittarium pica*. These shells do not seem to be part of the diet. It is very likely that local soldier crabs moved these shells into the area. Five pipe fragments (6 g) and eight metal pieces (85 g) were found as well. Of the metal artifacts, one piece might have been part of a hinge of lock, as it is larger and flat. Also, four nails were found. Finally, two blue beads were found; one larger and one smaller bead. Both beads have the pentagon shape so specific to St Eustatius.
Figure 4: The bottom of Test Unit 1. The yellow natural soil is clearly visible in the photo.

Figure 5: Two blue beads found in test unit 1.

Table 1: Total weight per context

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<td>Test Unit 1</td>
<td>751</td>
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<td>Test Unit 2</td>
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<td>Test Unit 3</td>
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Table 2: Total count per context

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<td>27</td>
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<tr>
<td><strong>Grand Total</strong></td>
<td><strong>285</strong></td>
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Table 3: Total weight per context

<table>
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<th>Context</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Surface</td>
<td></td>
</tr>
<tr>
<td>Test Unit 1</td>
<td></td>
</tr>
<tr>
<td>Test Unit 2</td>
<td></td>
</tr>
<tr>
<td>Test Unit 3</td>
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Table 4: Total count per context
Table 5: Total weight per artifact category. Note the high amount of glass in this sample.

<table>
<thead>
<tr>
<th>Total Weight per Artifact Category</th>
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<tr>
<td>Pottery</td>
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Table 6: Total count per artifact category. Note the high amount of glass in this sample.

<table>
<thead>
<tr>
<th>Total Count per Artifact Category</th>
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</thead>
<tbody>
<tr>
<td>Pottery</td>
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</tbody>
</table>

Test Unit 2

Test unit 2 consisted of two layers. The top layer was a brown grey silt with underneath a yellow silt. The top layer was the plough zone, whereas the layer underneath was the natural soils (see appendix A). Artifacts were collected per stratigraphic unit, because these were easily distinguished in the field. Layer two did not yield any artifacts.

The layers were not horizontal toward the road. Near the road, the top layer seemed to go deeper. However, no artifacts were found in the deeper parts of this layer. The boundaries in this part of the unit were also extremely vague, so it was difficult to assess where the layer went deeper. The absence of artifacts in this part does suggest that this was not a cultural layer and of little archaeological interest.

Test unit 2 yielded significantly less artifacts than unit 1. Only 36 artifacts were recovered, weighing 237 g. With twelve pieces, pottery was the category that weighted the most: 128 g. One artifact is of special interest, a piece of Metropolitan coarseware. The artifact is small, only weighing 1 g, which can be dated to 1625 and 1680. Also, eight pieces of coarse earthenware, weighing 118 g, were found. Only six metals were also encountered, of which three
were nails. One shell (4 g) of *Cittarium pica* was probably introduced by a soldier crab in this context, rather than it being discarded after food consumption.

**Figure 6: Bottom of Test unit 2.**

**Test Unit 3**

Test unit 3 consisted of two layers. The top layer was a brown grey silt with underneath a yellow silt. The top layer was the plough zone, whereas the layer underneath was the natural soils (see appendix A). Artifacts were collected per stratigraphic unit, because these were easily distinguished in the field. All soil in this unit was very loose, not compact and heterogeneous. This might indicate that part of the soil was already disturbed by previous work at this location.

Test Unit 3 yielded 27 artifacts for 376 g. By count, glass was the highest category with 12 specimens. By weight, pottery was by far the highest category with 268 g (compared to glass, 43 g and metal for 63 g). This was largely due to one specimen, a large handle of Green Bacin or Green Lebrillo pottery. This lead-glazed pottery was produced in Spain between 1490 and 1600 (FLMNH 2013), weighing 245 g. In the same context, a hand-painted over-glazed porcelain sherd was found as well. This specimen can be dated to 1680-1730. The last specimen of special interest is a white stoneware molded salt-glazed piece, which can be dated to 1740-1775.

These artifacts also argue that this was a disturbed context. None of the dates of these artifacts overlap and these was a significant amount of distance in time between the oldest and the youngest dates. This information in combination with the loose texture of the soil in this part supports the hypothesis that this area was tilled at some point and artifacts and soil was re-deposited at this location. The primary context of the artifacts is unknown, but it is still likely that these were used in this immediate vicinity.
Summary

There are a number of finds that are of particular interest here. First, the large amount of glass, especially in Test Unit 1, was not expected. Normally, pottery is by count and weight the largest artifact category. This pattern might suggest that drinking of gin and wine (there was a significant proportion of case bottles in the sample) was very common in this location. Drinking might have been a common practice for the soldiers that were working at the nearby battery. The empty bottles were discarded in the back of the battery, instead of thrown off the cliff.

The dates on the pottery also indicate that there is a long history of habitation at this site. Although a large amount of the pottery indicates an overlap with the use of the battery, the Green Lebrillo signifies earlier practices in this location too. The tin-glazed pottery is normally earlier as well, but there are very few pieces in this sample and all are very small. These pottery sherds might have been deposited in this location after eroding from higher ends of the island. The fact that these pieces were only found sporadically throughout the sample, it seems that these parts were not deposited in high densities in this location.

The overall majority of pottery dates to the same period as the battery was built and used. It is clear that the most intense use of the area was during the time that the battery was in place. Earlier buildings might have been there, but very little material evidence was recovered.

Considering the blue beads, it seems that the looting pits just targeted a couple of very specific locations where a large amount of these beads were concentrated. The two test units, 2
and 3, that were located right beside it did not yield any beads. Test Unit 1, the one unit furthest away from the looting pits, did yield two beads.

The data from Test Unit 3 are interesting in relation to the degree of disturbance of the local stratigraphy and possible intact structures. The loose ground and the pottery with non-overlapping dates suggest that some restructuring of the soil took place in relatively recent times. The original soil was also modified in Test Unit 2. This means that recent construction works, related to the house, a telephone/electricity post and the road, in the last couple of decades had an impact on the archaeological remains in the area.

The battery and the dome structure in this area strongly suggest that multiple other structures were located in the area. Also, two wooden structures, a guard house and storage shed, are mentioned in historic sources. Unfortunately, our investigations did not yield evidence for any of the structures. The high density of artifacts does warrant close archaeological inspection in the future. The structures are not found as of yet, but were there at some point. Remnants are to be expected.
Conclusion

This field study indicated that there are no remains of structures present east of battery Bouillé. Although recent construction efforts unearthed a significant amount of construction materials in this area, these remains do not seem to be related to an in situ structure. No walls or floors were encountered in any of the test units. Further, bricks and stones that were part of a building at some point were found mostly without mortar, and few pieces existed of 2 or more bricks. The context of these finds suggests that there was no building here.

In addition, the artifacts recovered in all three test units were limited to the top brown grey silty layer. This plough zone is heavily disturbed and eroded. The artifacts in this layer are not found in their original context. It is very likely that these artifacts were used in the vicinity of the location where they are found, but the slight sloping angle toward the cliff has been affected by erosion. During rains, for example, previously buried artifacts were uncovered and washed out their original context. Most artifacts would not have moved to far from their original location, but all artifacts were moved at some point.

The artifacts found in the area date to the same period as the battery. This suggests that there were more activities in the immediate vicinity of the battery than just guarding the island. Most ceramic artifacts are relatively common objects, meaning that these were probably used in quotidian activities. More elaborate and expensive artifacts, which would be associated with richer people and more exclusive practices, were not found.

Multiple blue beads, as encountered during these excavations and previous looting, were deposited in this location. The function and reason of the high quantity of beads at this location is unknown and could not be determined from the excavated data. The beads are often associated with slaves and slave life, but there are no other artifacts that suggest the presence of slaves or activities associated with slaves at this location.

It is possible, however, that there was a storage facility close to the battery. This facility would also be a perfect place to store valuables, including blue beads. The storage facility could be locked, but it was also protected by soldiers that manned the battery. Soldiers were present at the battery to protect St. Eustatius from invaders, but would concomitantly be assigned to protect valuables stored in nearby facilities. Although no structures were found, the high quantity of blue beads does suggest that some sort of quantity was stored in the area and has now been spread over the land.

The high density of artifacts suggests that more archaeological remains are expected in this area. Although the tested area in this report did not yield any information on the location of any possible structures, it is expected that structures are present. Most of the area is now disturbed, by looting or a bulldozer, but subsurface structures might still be encountered. It is important to monitor future construction efforts and be aware of the potential presence of significant archaeological remains.
References

FLMNH
2013 Digital Historical Artifact Collection.

Hartog, J.
Appendix A

Test Unit 1 Layer 1

S1000

= Rock

Drawing made at transition to S1001

North Profile Test Unit 1

S1000

S1001

S1000: brown grey silt 7.5 YR 4/3
Plough zone, contains artifacts

S1001: Yellow silt 10 YR 5/8
Natural subsoil. No artifacts

S1002: Light Grey silt. Hard layer without artifacts
At 30 cmbs, no artifacts were encountered anymore. All artifacts were limited to top 20 cm of soil.
Test Unit 3 Layer 1

Test Unit 3 Layer 2

North Profile Test Unit 3

S1002
S1001

S1000
S1001

S1000 – Very heterogeneous and loose. Possibly recently disturbed.