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The 17<sup>th</sup> Century Fortress of Kelang:

Past and Present

José Eugenio Borao

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中央研究院台灣史研究所籌備處

# The 17<sup>th</sup> Century Fortress of Kelang: Past and Present

(Draft paper. Not for quotation)

Jose Eugenio Borao

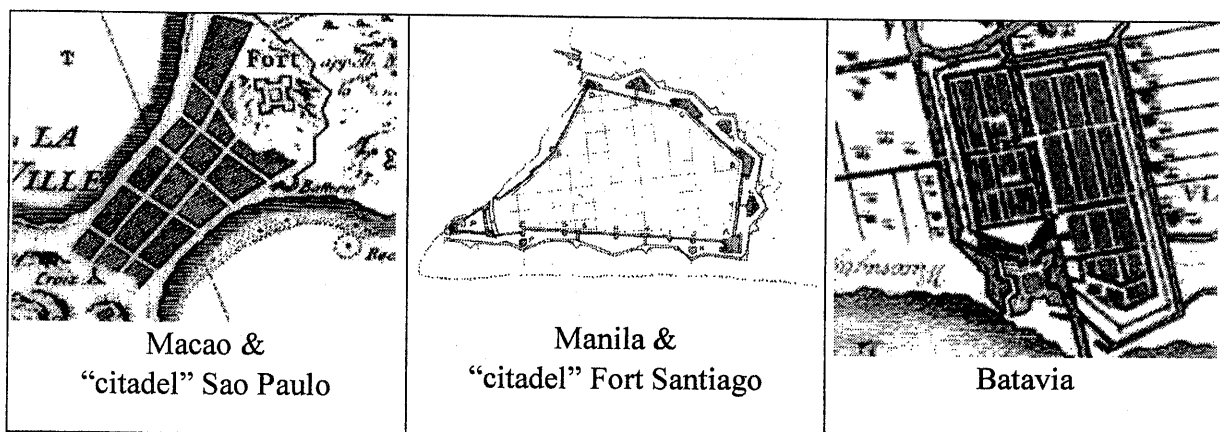
One of the Renaissance techniques exported throughout the world by European powers, and usually neglected by scholars, is the military architecture. The first castle built in the New World was made in Santo Domingo in 1503, latter followed La Real Fuerza (1558) in Cuba, which was a square fortress but very small in size. The trend continued along centuries being one of the most outstanding the castle of San Marcos (1672) in Sant Augustin (Florida). This new architecture developed in Europe in the 16<sup>th</sup> Century reached the Far East at the same time, being brought by the Portuguese (Malacca, Macao, etc.), the Spaniards (The Philippines) and by the Dutch (Indonesia, Taiwan, etc.). After the treaties of Westphalia (1648) some of the castles loosed their strategic value and stated to by ruined. Later, after the breakout of the Opium Wars, new models of fortifications emerged in the coastline of China, outdating totally those Renaissance fortifications.

In this paper I will try to explain the history of the fortress of Kelang in its colonial context, showing that even because of its size it was a model in its type. Finally I will deal with the present situation of the old foundations.

## The European walled cities in South East Asia

The colonial spots usually developed the model of the citadel, which is a fortress attached to the small city that protects. The simplest style for these fortifications was the squared one with four bastions. One treatise of that time define the citadel like: "A fortress of four, five or more bastions, which is placed attached to a city; so, both names [city and citadel] keep the same relation as the one of the two areas".<sup>1</sup>

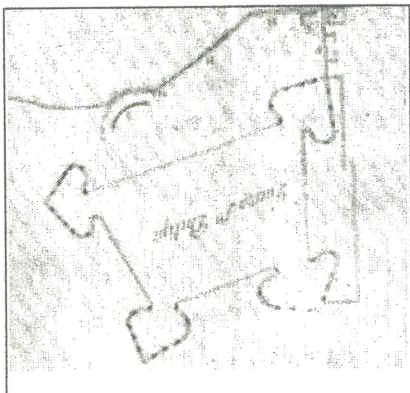
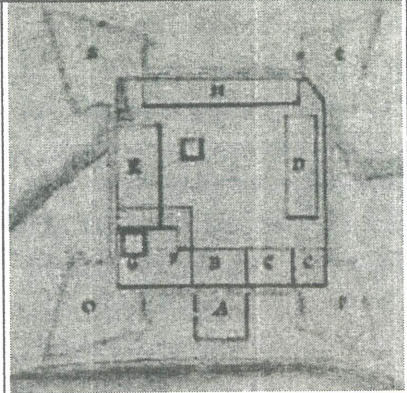
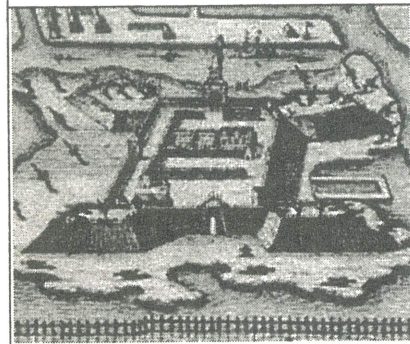
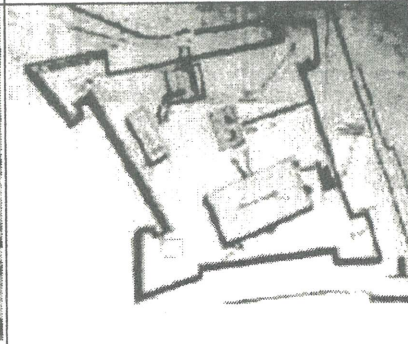
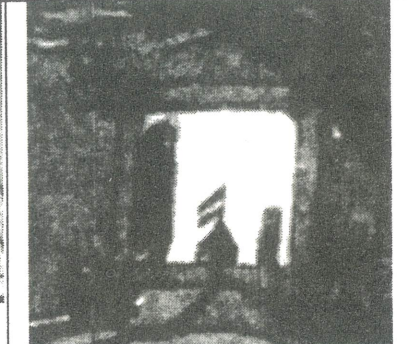
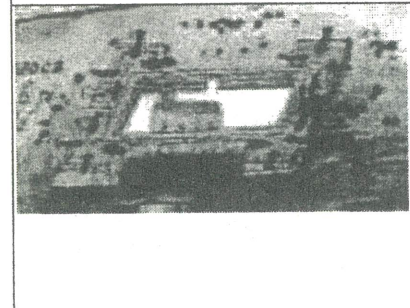
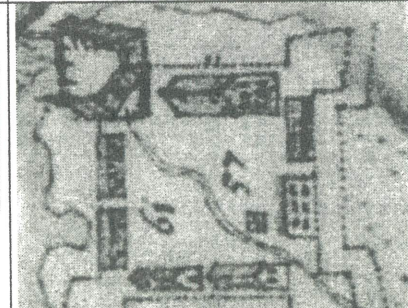
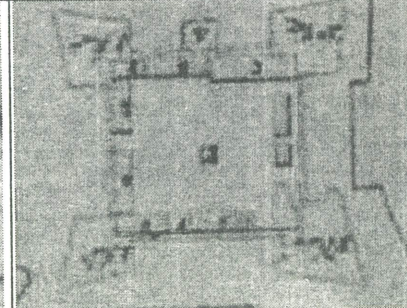
During the 16<sup>th</sup> and 17<sup>th</sup> centuries, the area around present Indonesia, Malaysia, Philippines, Southern China and Taiwan experienced many colonial visitors that got fortified with a common style, the walled cities with bastions in the most strategic angles. Usually the cities have an irregular plain-floor conditioned by the topography of the area. This is the case of the first fortifications of cities like Macao (1555), Manila (1571) or Batavia (1619).



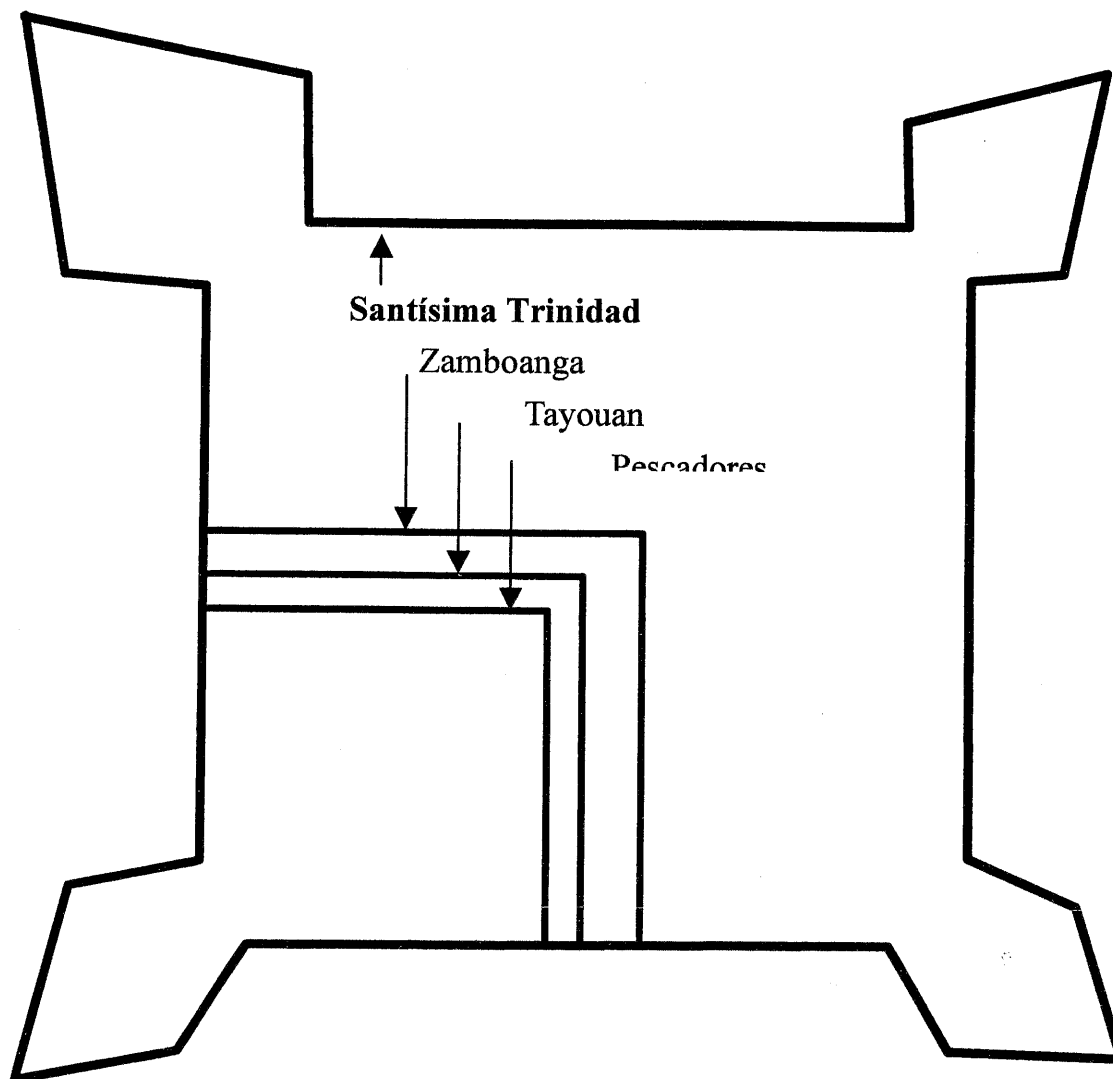
<sup>1</sup> Sebastián Fernández de Medrano, *El Architecto perfecto en el Arte Militar*, Brussels, 1700.

This situation change in the fortresses far away from the colonial capitals. These fortresses, built between 1600 and 1640, followed a very similar pattern: "the square four bastioned compound". Sometimes this square has irregularities, but the perfect square model it seems to be the ideal fortification. We can recognize them in the following places, and with the following shapes:

*Plan-floors of South East Asia fortresses built between 1595 and 1635*

		
<p>1595 Cavite (Philippines)</p>		<p>1616 Iloilo (Philippines)</p>
		
<p>1619 Batavia (Yakarta, Indonesia)</p>	<p>1620 Sao Paulo do Monte (Macao)</p>	<p>1622 Pescadores (Taiwan)</p>
		
<p>1624 Tayouan (Taiwan)</p>	<p>1626 Kelang (Taiwan)</p>	<p>1635 Zamboanga (Philippines)</p>

Something appears quite obvious when we compared the size of the previous fortress, and it is that Fortress La Santísima Trinidad is the biggest with a strong difference to the next one. There is no wonder the comment of Lamotius: "The eyes of commander Harouse may had experienced a greater pleasure when seeing for the first time the fortress Santísima Trinidad from the top of the La Retirada."



**The fortress of Kelang: a "synthetic image".**

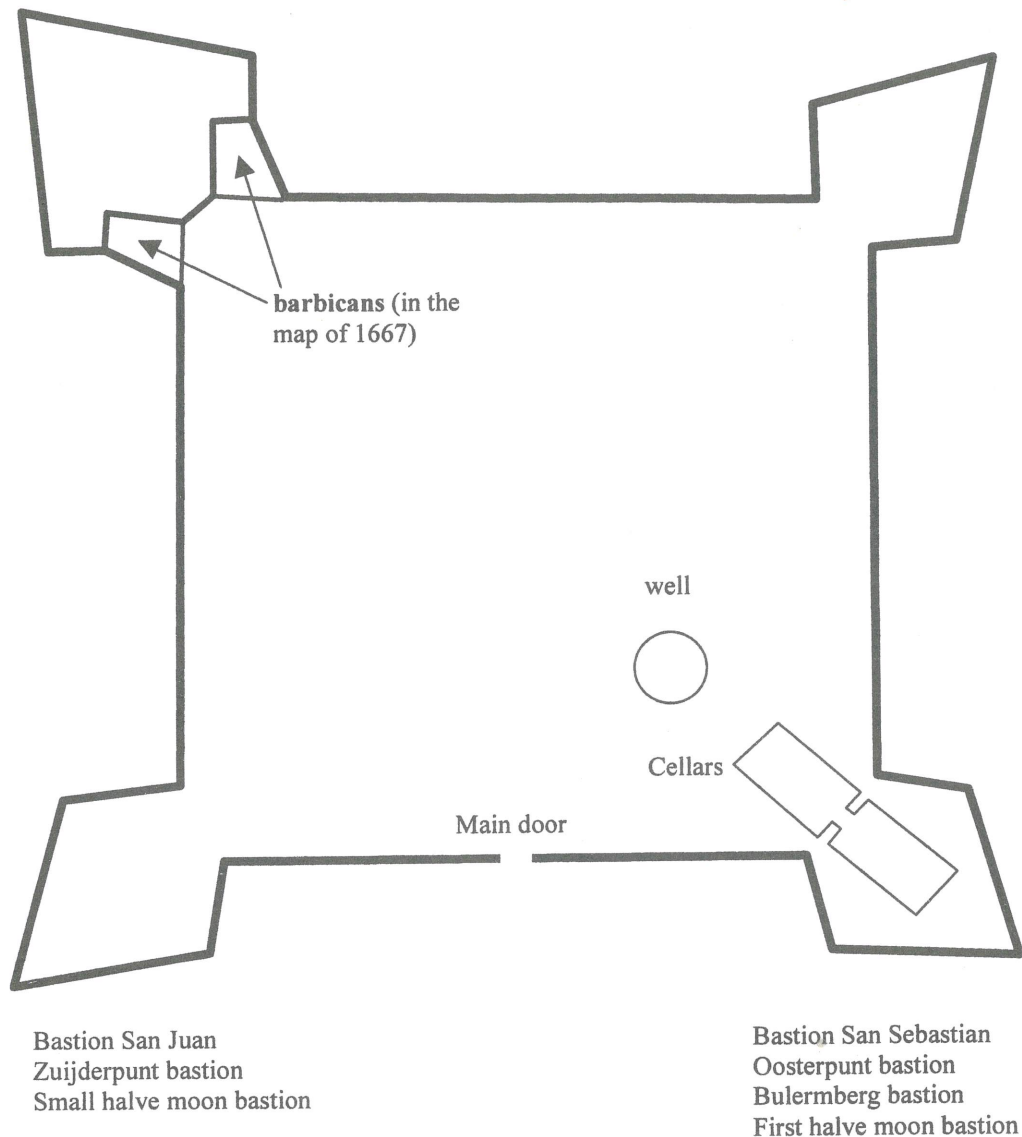
The fortress started construction in 1626 under the name of Santísima Trinidad and later was renamed by the Dutch as Noord Holland. Doesn't exist an ideal model of the fortress because, as we will see, it was remodeled several times. Nevertheless, considering the bastions as the more permanent features, and taking for granted that all the renovations respected the original foundations, we can render a "synthetic image"<sup>2</sup> (see next page). Other elements worth to mention were the barbicans, made in the late stage of the fortress, the well, in the center and the vaults inside some of the bastions to make cellars for storage of gunpowder. The barracks inside the castle were the most changeable construction.

<sup>2</sup> The location of the Spanish names is not totally sure, except for San Antonio el Grande, but they are quite probable.



Bastion San Antonio el Grande  
Noord Holland bastion

Bastión San Antonio el Chico  
Zeeburg bastion



### Architectonic history of the fortress of Kelang during the Spanish period (1626-1642)

The first news about the fortress comes from the Spanish Period, and during the times of first governor **Antonio Carreño de Valdés (1626-1629)**. The Spaniards started to build the fortress as soon as they reached the island in 1626, as it is stated in the map of Pedro de Vera (1626), where it can be read: "Here fortifications are made".

We know that the planner of the construction was an engineer named Nicolás Bolen, whose surname already belies that he was at least of Flemish or Dutch descent. We know that Bolen arrived to Isla Hermosa at the very beginning with the assignment of making the design and supervision of the construction of the fortress. His job was quite specialized, because his salary in Manila as "artilleryman" was 200 pesos a year.<sup>3</sup> Besides we know that his job was done with satisfaction of his superiors, that's why in a Royal Treasury Council, held in

<sup>3</sup> A simple soldier earned at the same time 48 a year, while the governor of Jilong 516 (See *SIT*, pp. 336-342).

Manila two years after the conquest, in 1628, the Governor General recognized his real qualification as an engineer, and upgraded his salary to 250 pesos a year.<sup>4</sup> Besides this information, we don't have more details of Bolen.

Just the second governor, Juan de Alcarazo (1629-1632), took office the Dutch yacht *Domburch* arrived to Jilong in a spy mission to the north of the island<sup>5</sup>. Through the map made by Gerbrantsz Black aboard the *Domburch* we can see clearly the main bastion of San Antonio el Grande drawn from the said ship, where we can count 3 cannons in each side of the angle. Also this map renders a clear picture of the situation of the Spanish garrison: a big house can be identified, probably the one of the Spanish Governor, and also a group of thirty tents for the soldiers.

During the period of the third governor **Bartolomé Díaz Barrera (1632-1634)**, and the fourth one **Alonso García Romero (1634-1635)** we don't have special news on the development of the fortress, but back in Manila in 1636, García Romero wrote a very detailed report of the situation of the castle, the number and quality of cannons, etc., in the moment of his departure. Among many other things, he states clearly:

"The principal fortification forms a square that consists of four bastions. Two are of solid stone; only one has the base made of stone, near the moat; the other is made of wood. All four stretches of wall are of solid stone and lack only the parapets".<sup>6</sup>

We can be sure that San Antonio el Grande was one of the two made by stone. The other must be San Antonio el Chico, because is the first facing the entrance of the harbor. The one that only its base was made of stone, must be bastion San Sebastian, because, is the only one left near the moat. In fact, we will see how San Sebastian bastion still was under construction in 1638. And the forth one, made of wood, must be the southern one, which we identify with the so-called bastion San Juan. The four bastions were "well armed with cannons", as the Dutch stated in 1636 after interrogating some Spaniards who were rescued in the sea.<sup>7</sup>

The fifth governor was **Francisco Hernández (1635-1637)**. In the middle of his governorship, in 1636, happened the killing of some Spanish soldiers in Tamsui, and two missionaries. This fact, together with the general situation in the whole Philippines, made Governor General Hurtado de Mendoza to summit a special meeting in 22 January 1637 with all the military commanders in Manila. The only point to be discussed was the advisability of withdrawing the forts of Isla Hermosa and Zamboanga (a fort recently made), which they were located in the most furthers points from Manila, towards the North and the South respectively. The Council advice was on withdrawing, but Corcuera decided to do it only in the case of Zamboanga, while for the case of Taiwan he will wait for an answer from the king. For the meantime, only will order the dismantling of some parts.

Certainly, at the beginning of 1637 and order from Manila reached governor Hernandez, telling him to withdraw from Tamsui all the troops, after burning the wooden fortress of Tamsui and teaching a lesson to the natives that have massacred the Spaniards.

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<sup>4</sup> *SIT*, pp. 126-127

<sup>5</sup> *SIT*, pp. 139-142

<sup>6</sup> *SIT*, p. 259

<sup>7</sup> *SIT*, p. 245

Also, the cannons of fort Santo Domingo should be transfer to the main fortress, La Santísima Trinidad in Jilong. Probably, this accelerated indirectly the construction work in Jilong.<sup>8</sup>

We also know that, before he was going to be replaced, he received orders to improve the living conditions inside the castle, because the governor that was going to replace him was expected to arrive in August 1637. Also he was ordered to build inside the castle the customary allotment for the captain of the Pampangan soldiers, also the house for a senior chaplain, and the barracks for a total of 125 men, with the additional storehouses needed for their provisions.<sup>9</sup>

The expected new governor was **Pedro Palomino (1637-1639)**, who reached Jilong in August. He came not only with the orders of fulfilling the withdrawing from Tamsui (if not yet done), but also with the clear assignment of concentrating all the defense in the main fortress, which should be totally completed. This implied additionally the destruction of the three surrounding fortresses: la Mira, la Retirada and el Cubo.

We can know with some detail the construction work of the fortress because the Crown accountant, Jerónimo de Herrera, was dispatched by the Governor General to Jilong to check on the performance of governor Palomino. He made the statements from August 1637 to September 1638, which is the first half period of Palomino governorship; he recorded all the expenses and income in the royal coffer, and this material handed down to us tell us, for example, the amount of lime supplied during these 14 months:

**Table 1: Supply of lime from August 1637 to September 1638**

Date	Provider	Cavans of lime	Lime price per cavan
1637, 25 November	Sangley Benua	850	12 cavans = 1 peso
1637, 23 December	Francisco Hernández	2540	10 cavans = 1 peso
1638, 2 January	Sangley Benua	550	10 cavans = 1 peso
1638, 2 January	Sergeant Andres Narváez	1200	12 cavans = 1 peso
1638, 27 February	7 sangleys	1237	12 cavans = 1 peso
1638, 4 May	5 limeworkers	1300	13 cavans = 1 peso
1638, 3 July	Sergeant Andres Narváez	180	20 cavans = 1 peso

Source: *SIT*, pp. 282-284 (note: 1 cavan = 75 liters aprox.)

This table offers us more ideas on the construction work of the fortress. First of all we can see that sergeants Francisco Hernandez<sup>10</sup> and Andres Narváez were involved in the production and supply of lime. May be this was an additional job that officers with the help of some soldiers may volunteer to do. But this activity must be open to anyone that can provide this material as states the entry of 27 February 1638, referring to a 5 unspecified lime workers. Regarding the variability of the price, 1 peso for 10 or 12 (even 20) cavans, might be depending of the quality of the lime, because the same person (sangley Benua) got different price in two occasions; and on the same day (January 2<sup>nd</sup>) two different suppliers got also different price.

On the other hand, we can see how the construction work relied on the Chinese work force. They provide lime, like sangley Benua en two occasions, or the group of 7 sangleys;

<sup>8</sup> *SIT*, p. 272

<sup>9</sup> At that time Corcuera had decided to reduce the number of soldiers in Isla Hermosa. In this document he acknowledge that this number of 125 men is not big, implying that in fact the fortress can lodge more people.

<sup>10</sup> He was the former governor. His situation was different because he was permanently in Jilong, and having the category of Sergeant Major he was appointed governor for two years.

but also they are in charge on the construction itself. In the same record we can read another entry saying that on 29 April 1638, Sangley Lanco, a mason, was paid 190 pesos for making 97 fathoms of the wall of bastion San Sebastian, being paid 2 pesos and 4 reals for every fathom. This reference to the work done in bastion San Sebastian seems to confirm our previous statement that this bastion was the one with a stoned base, but lacking the correspondent stone walls.

When the Crown accountant Jerónimo de Herrera was going to leave the place, he made a detailed description of the construction work done emphasizing these points:

1. There is a bastion [probably San Sebastian] that was finished around March after some months of work and is now in good condition.
2. In bastion San Juan [probably the southern one] Palomino had made a splendid vault, and it can be very useful to storage gunpowder.
3. Bastion San Antonio, which was too low and not at all fortified with quicklime, was improved.
4. The house of stone, serving as a hospital inside the fort, had fell. And a very good hospital was built for the sick in a spot by the seashore, as a replacement. Also, in this other house lives the Governor.
5. The construction work was carried out at very little cost to the Royal Treasury. For many of the men from Pampanga who came recently turned out to be very good officers because the one who works most gets promoted as a sergeant or bailiff.
6. Also the expenses have been reduced because recently a limestone quarry was finished, yielding 8000 cavans of quicklime.<sup>11</sup>

We think that the construction of the fortress was finished a few years before the final engagement with the Dutch. Thus, in those last years of Spanish presence, the bulk of the work consisted in implementing the orders of demolition of fort Santo Domingo in Tamsui, La Mira, el Cubo and La Retirada. Nevertheless, the last governor of Jilong, Gonzalo Portillo (1641-1642) rebuilt El Cubo and La Retirada, shortly before the final battle, thinking that without these fortresses, the main one will be defenseless.

We can presume that in the sieges of 1641 and 1642 the fortress was fully operative. According to the inventory of 1641 the fortress had 33 cannons of different size, and 5 more additional in El Cubo<sup>12</sup>. The ones that had been placed in La Retirada and in La Mira before their dismantling now will be either inside the main fortress or back to Manila. This figure matches with the one provided by Dutch sources after they conquered Kelang island and made an inventory of everything; the number of cannons reached the figure of 40.<sup>13</sup> After which the fortress underwent a series of reconstruction and demolition, depending on the strategic requirements of the Island's new masters.

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<sup>11</sup> *SIT*, p. 285.

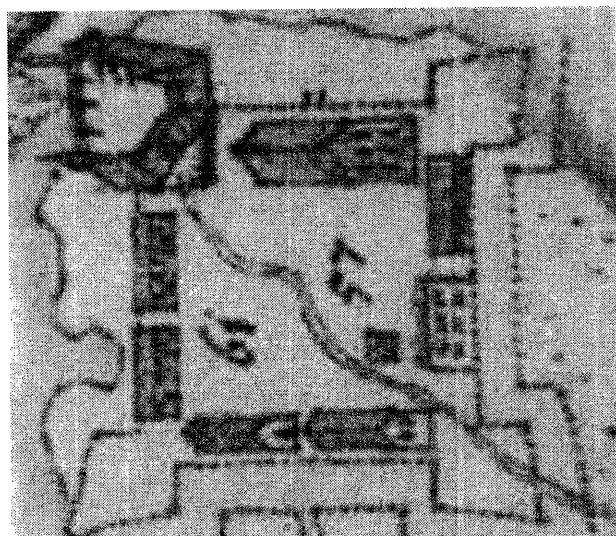
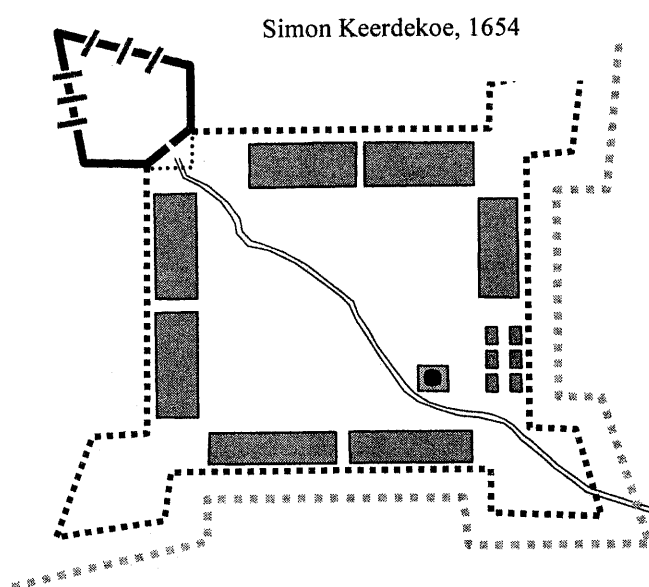
<sup>12</sup> *SIT*, p. 343

<sup>13</sup> *SIT*, pp. 396-397



## The fortress during the first Dutch period (1642-1661)

It was precisely on "September 11" of 1643, a year after the Dutch seized La Santísima Trinidad, that the VOC ordered the destruction of three of the bastions and the walls between them, leaving intact only the bastion San Antonio el Grande to guard the entrance of Kelang Bay.<sup>14</sup> The Dutch renamed this bastion Noord Holland. The discarded stones of La Santísima Trinidad were used to build fortifications in Tamsui. The new masters lived in this situation for 20 years (1642-1662) because, as they acquired greater control over Taiwan, they no longer saw the need to maintain a fortress that would defend them against external attack. They enjoyed good relations with the English, and had successfully kept the Spaniards in Manila at bay. The Japanese had closed their doors to all foreigners and the Chinese had their own internal problems to solve on account of the Tartar invasion. This is why the map of Simon Keerdecoe, made in 1654, shows the state of the fortress reduced to the main bastion, as well as how it looked during the Spanish period.



During these 20 years (1642-1662) the main architectonical concern of the Dutch was to keep in good use the Tamsui fort and the redoubt Victoria in Kelang. In 1646 governor Caron in Tayouan, after listening the reports from Tamsui, declared that their fortress can be considered finished.<sup>15</sup> Also, by the way he was distributing his soldiers confirmed the hierarchy between the two forts. Tamsui continue is more important than Kelang, and is the place where is stationed an under-merchant with authority over both places. We can understand better the balance of both forts comparing the stable proportion of the soldiers assigned there:

1646	5 February	22 April	18 May	28 May
Tamsui	63	50	48	45
Kelang	48	40		20

<sup>14</sup> *SIT*, p. 463

<sup>15</sup> *VOC 1160, ff 199v-202*

After the rebuilding of the fort in Tamsui, attention was drawn to Kelang, especially in two points. The *corps du garde* and the old house of the former Spanish Governor. We cannot identify if this *corps du garde* correspond to the house built on top North Holland bastion, of it is situated at the entrance of the island (in the former el Cubo), or else. But its roof is always in continuous need of repair, as the frequent demand of tiles tells us. On the other hand, the house of the Spanish governor is described as a very large, and structurally well preserved, although need many small repairs to make a good use of it. For the meantime it was used for storage of provisions, gunpowder and ammunitions. The barracks of the soldiers were in a good condition, although they don't prevent the continuous sicknesses of the soldiers.

### The fortress during the second Dutch period (1664-1668)

This is the moment in which the fortress is better documented, because the post will enjoy a very strategic value and it will be the only one the Dutch had in Taiwan.<sup>16</sup>

In 1662 the VOC tried again a new approach to the Chinese trade appointing Bort as the fleet commander to negotiate with China. Bort made several trips in 1662, 1663 and 1664 establishing posts in Fuzhou and Kelang. On 20 August 1664, the yacht *Niewendamb* appeared in Kelang. All the Chinese there, about 30 persons, quickly boarded their vessels to escape to mainland Formosa. The VOC found some abandoned Chinese straw-and-bamboo huts and some iron tiles, rattan, lamp oil, and coal. On 27 August, the rest of the VOC fleet arrived in Kelang. We have a sea-view-map of Kelang representing the arrival of Bort fleet in 1664. We can consider that the image rendered by Bort artist is fairly similar to the map of Keerdekoek made 10 years earlier.



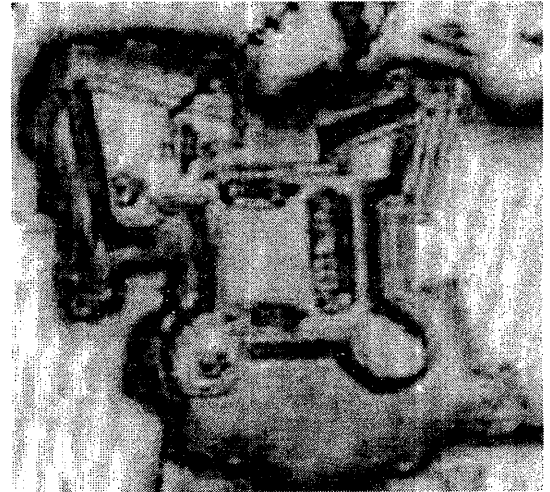
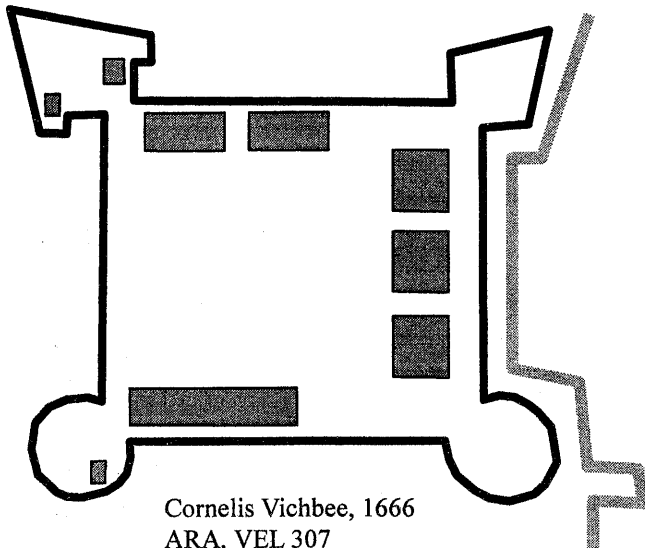
This new factory in Taiwan had to function as a relay station for Chinese sugar, gold, silk, etc. Chinese merchants crossing the Taiwan straits were supposed to furnish these goods in exchange for Japanese silver, and spices from the Indonesian Archipelago or deer meat from Taiwan. The goods were to be stored in warehouses, awaiting the favorable monsoon winds that would take them to far-flung destinations all over Asia. The VOC envisioned a kind of "New Taiwan Factory" to be large-scale enterprise, which was why the company also invested a huge amount on improving the defense facilities in Kelang. But, trade never took off.<sup>17</sup>

Regarding the structure and building of the fortresses, commander Bort started reconstructing the redoubt Victoria. He also reinforced the bastion Noord Holland, and began

<sup>16</sup> Until now the most complete study on this matter is the doctoral dissertation of J. L. P. J. Vogels, *Het Nieuwe Tayouan: De Verenigde Oostindische Compagnie op Kelang (1664-1668)*, Rijksuniversiteit Utrecht, July 1988.

<sup>17</sup> VOC 888, ff. 207-208

working on the reconstruction of the other three bastions of the old fortress La Santísima Trinidad. Of utmost importance was the bastion, also called the Half Moon Bastion, Oosterpunt which was the eastern bastion. It controlled the low land east of the fortress and secured the well in the middle of the fortress' square. The northern bastion, called Zeeburg, protected the fortress from sea attack. The bastion Zuijderpunt, also called the Small Half Moon Bastion, was the southernmost bastion that controlled all shipping within the bay. By the end of 1665, the bastions were up and in operation, except for the bastion Zuijderpunt, which was in a bad condition.



Several defense facilities separated the fortress from the rest of Kelang Island. First, there was a stone bulwark between the bastion Oosterpunt and the inner bay beach of Kelang Island. This bulwark contained a gate that was the only passage between the fort and the eastern flat land. Near the bulwark was a *raveline* guarded by two pieces of artillery. From the *raveline*, a wall stretched to the sea so that nobody could pass through. Furthermore, a dry deep ditch dating from the Spanish era stretched from the bastion Zeeburg and beyond the bastion Oosterpunt, forming a barrier between the fortress and the flat land. This ditch could be filled with seawater and turn the fortress into an artificial island, completely isolated from Kelang Island. Inside the fortress, living quarters for the soldiers were built, along with a gunpowder house, a magazine, houses for the officers and married couples, a smithy, warehouses, and a house for the commanding officer. The Dutch renamed it fortress Noord Holland.<sup>18</sup> It seemed that by the end of 1665, La Santísima Trinidad had regained its old glory and ready to embrace an attack from Zheng's forces, that, in fact, happened in May 1666.

Upon arrival in Kelang, VOC intelligence reported that only a handful of Koxinga's soldiers were stationed in Tamsui.<sup>19</sup> On 4 February 1666 elders of several aboriginal villages (Kimaauri, St Jago, Ritsoeck, Kipanas...) went to Kelang with news of recent troop deployments in Tamsui. According to the elders' information, 500 soldiers had reached Tamsui from Anping by land. They added that about 700 or 800 of Zheng's troops were already stationed in Tamsui, and that 30 junks with more troop reinforcements were expected to arrive two months later. It was rumored that these soldiers had come to attack Kelang and

<sup>18</sup> VOC 1253, ff. 1294v-2202; VOC 1257, ff. 1297-1299

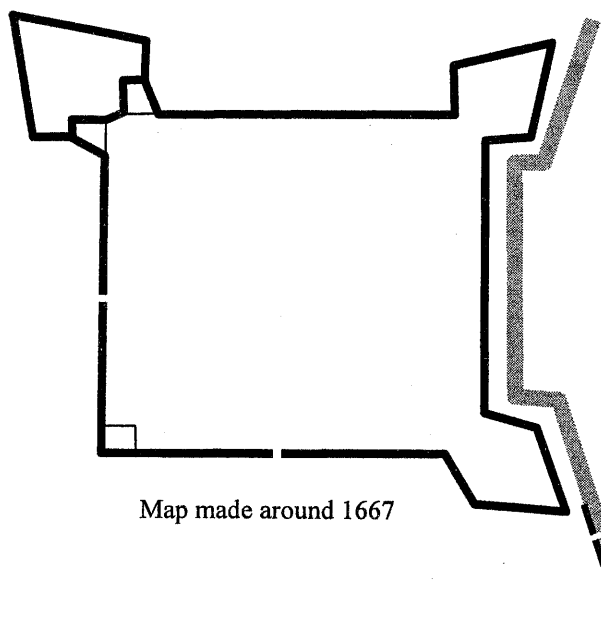
<sup>19</sup> VOC 1257, f. 2196v



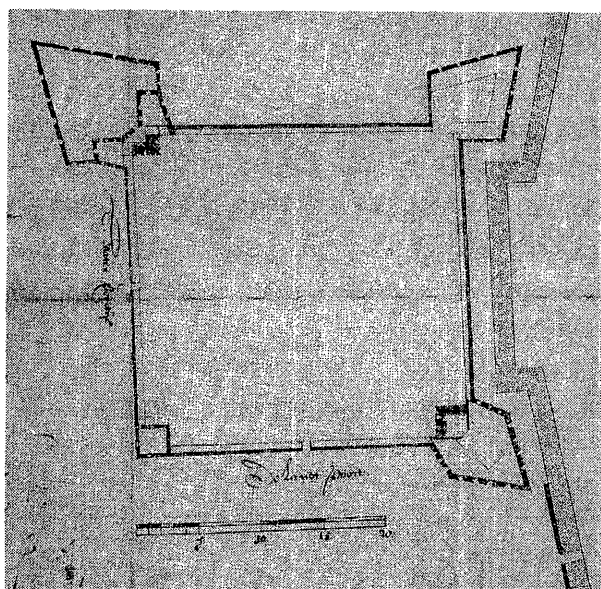
pillage the aboriginal villages.<sup>20</sup> To deal with this threat, the VOC started to build extra fortifications. On 21 February 1666, the Council of Kelang resolved to start constructing a small redoubt on the foundations of the former Spanish fortress El Cubo.<sup>21</sup> The small redoubt was called Nobelenburg, however, Cornelis Vichbee's map mistakenly referred to it as 'Eltenburg'. This redoubt was supposed to prevent anyone from entering the bay through the northeastern channel. As an invasion of Zheng's troops became more and more evident, the Kelang Council resolved on 17 April 1666 to further reinforce its defenses. Orders were issued to finish Nobelenburg as soon as possible, as well as to further raise the walls of Noord Holland, to build extra walls, and to make gabions. Most of the straw roofs of the buildings in the fortress were removed to diminish the risk of being set on fire.

The Zheng army landed on 11 May 1666 and launched a relentless attack on the fortifications for several days. An estimated 6,000 Zheng soldiers partook in the operation, engaging the 300 VOC defenders. After a siege of nine days, the Zheng army, having about 1,000 wounded or dead (according to a Dutch account), withdrew to Tamsui.<sup>22</sup> The reconstructed fortress had passed its first serious test.

Redoubt Victoria was reinforced after the Zheng attack. The ruins of the former Spanish cloister were leveled to prevent the enemy from using it as a battery facility against the fortress. The bastion Oosterpunt (Half Moon Bastion or Bultenberg bastion) proved to be a weak spot in the entire defense system because it was built on sand and had no solid foundation. The walls of the bastion fell beneath the enemy's artillery and even threatened to collapse when the Dutch fired their own cannons. Bastion Oosterpunt had to be replaced with a new one (with a cellar) on the foundations of the former Spanish bastion.



Map made around 1667



Stones from the said Spanish cloister were used as building material. Construction began on 13 December 1666 and the bastion was finished on 15 January 1667. Inside the fortress, a

<sup>20</sup> VOC 1257, f. 1307

<sup>21</sup> VOC 1257, f. 1028

<sup>22</sup> VOC 1258, ff. 1659-1662. See also Vogels, *Op. cit.*, p. 23-36, 43-44.



new smithy and a shop that also functioned as a dormitory were added. The cellar under bastion Noord-Holland was also expanded. Outside the fortress, a new hospital, a carpenter's shed, and a pigsty were built. But, unexpectedly, on October 1668, the VOC garrison abandoned Kelang after blowing up the buildings leaving a place in ruins.<sup>23</sup>

### The failed preservation of the ruins of the fortress (1924-1937)

We know too little on the fortress for the long period of 1700 to 1925, although it appears pictured in Chinese books in an idealistic way. One of the modern attempts to make an inventory of Taiwan's historical relics earmarked for preservation took place in 1924. At that time, the Japanese colonial government issued to some local governments a list of buildings that were targeted for preservation in their respective districts. This was accompanied by orders to look into their status of conservation. The response was scant and unsatisfying, which was why in 1927 the Central Colonial Government issued the orders again, urging the local authorities to wrap up the investigation.

Things moved so slowly that the colonial government gave another push to the implementation of the same orders. First, on 21 September 1930, the Japanese issued the Monuments Conservation Law, designating some categories of items worthy of preservation, like historical sites or natural spots.<sup>24</sup> Second, they established on the same year an Investigation Committee that took charge of gathering information and which produced a new list of historical monuments, including, for the first time, the Noord Holland Fortress. As a consequence, two members of the Committee, Osaki Hidezane<sup>25</sup> and Ite Kaoru, visited all the remaining ruins of Hoping Tao (at that time, Se Liao Tao). Their extensive report of 1931 included Noord Holland.<sup>26</sup>

Scholars began to get involved in the matter. In November 1931, Prof. Murakami Naojirō of Taihoku University published a long article on the history of the fortress,<sup>27</sup> based in Dutch sources. At the end of the article he mentioned that the southwestern bastion was still standing. Soon later, in July 1932, the Bureau for Internal Affairs of the colonial Government published a cyclostyle pamphlet entitled *Report on Designated Historical Sites*.<sup>28</sup> In Chapter 2 of this work, Prof. Murakami Naojirō repeated his former ideas, mentioning that even Zheng Jing attempted a reconstruction in 1673 and installed there a garrison of soldiers. Murakami concluded, "Because this construction dates back to the San Salvador castle's times, it is worth to be preserved for ever". He ended the article quoting briefly from Osaki and Ite's 1931 report. The Committee soon concluded its work and the colonial government issued the final list of historical sites on 26 November 1933, it included Noord Holland.

<sup>23</sup> Vogels, J.P.L.J., pp. 44-46.

<sup>24</sup> It is worth mentioning that this law granted the Governor General the right not only to designate but also—given a special condition—to revoke the designation of monuments.

<sup>25</sup> Osaki was a collector and vendor of local antiquities and aboriginal artifacts. He sold several pieces to the Ethnological Museum of Taihoku Imperial University.

<sup>26</sup> Oddly enough, in 1931, when the local authorities finally presented their list of historical monuments to the colonial government, the government of Jilong made no mention of the Noord Holland Castle.

<sup>27</sup> Murakami Naojirō 《基隆的紅毛城》，台灣時報，Nov. 1931.

<sup>28</sup> 史蹟名勝指定物件説明書(油印) 內務局，昭和7年5月(May, 1932).

We can see the other side of the problem is the development of Jilong Harbor following the research of Lu Yueh-E. In her masters dissertation<sup>29</sup> she mentions that the third phase of the development of Jilong harbor took place from 1929 to 1934. The new expansion happened because of the increasing scale of trade and fishery. She Liao Tao was remodeled to accommodate in its southern side the fishing port that was previously located in the inner harbor; this inner harbor was no longer used for simultaneous business and fishing activities. In addition, the Japanese government began to “feather-bed” the fisheries industry by providing equipment and social benefits. At that time, the ruins of the fortress were not threatened by the new reforms and the development of the harbor; in fact, the new legislation expressly provided for the protection of this historical spot.

This trend of coming up with protective measures peaked in 1935 when a second official list of historical sites appeared, with a new addition from the She Liao Tao vicinity: Fort Eltenburgh (el Cubo), located on the south-east side<sup>30</sup>. A year later, in July 1936, the Bureau for Internal Affairs formulated a second edition of the list, complete with historical explanations.<sup>31</sup> In fact, “conservationist fever” seemed to spread throughout the island. For example, Xinzhu County and Taidong County declared historical sites for preservation on 13 March 1936 (Gaoxiong County followed suit on 8 June 1940).

Early in July 1936, the Jilong government invited members of the Institute of Ethnology of Taihoku University to conduct an excavation of the castle. Just a month before this happened, the Office for the Research of Taiwan Historical Materials was formed as a section under the Institute of Ethnology.<sup>32</sup> As a response to the initiative of the Jilong government, some members of the newly established office visited the Jilong fort on 12 July 1936 and devoted two hours to field research.<sup>33</sup> The Institute postponed the excavation because it was working on another project in Taizhong.

Finally, at the beginning of October 1936, the Office started to prepare for the diggings. A chronological account of the project is recorded in the journal of the Institute. Days 9, 12 and 15 of the preparatory phase were presided by Prof. Utsurikawa Nenoze and probably by Prof. Murakami Naojirō himself. Actual fieldwork started on day 19, under Professors Iwao Seiichi, Miyamoto Nobuto, Matsumoto Masanaga, and Nakamura Takashi. The team hired the services of famous Japanese photographer Kobayagawa Tokushirou, who produced a comprehensive hundred-photo collection of the excavation. This may be the same one preserved in the Museum of Anthropology of National Taiwan University. The excavation team took some measures of the castle’s remaining walls and they photographed any interesting thing, like some parts of bastion San Antonio el Grande. But their main job was to clean the northeastern bastion, and to unearth its inner cellar, and outer cellar. Their scholarly report on the job using the measurements taken from the castle and all their findings remains unedited until now. The only known report of the entire project was a brief account that was published a few months later in the miscellaneous section of the journal of the Institute.<sup>34</sup>

<sup>29</sup> Lu Yueh-E, *The development of the port-city of Jilong during the Japanese governance of Taiwan*, Master thesis in the Department of Architecture at Chung Yuan University, 2001. I wish to thank Ms. Lu for her information on the construction of Jilong Harbor, especially for providing many details and insights related to the implementation of the Monuments Conservation Law.

<sup>30</sup> Another list came up in 1941.

<sup>31</sup> 史蹟調查報告(第二輯), 1936.

<sup>32</sup> *Nanpō Dōzōku*, Vol. II, No. 1, May 1937, p. 173.

<sup>33</sup> *Nanpō Dōzōku*, Vol. IV, No. 2, August 1936, p. 120.

<sup>34</sup> *Nanpō Dōzōku*, Vol. II, No. 1, May 1937, p. 174.

On the other hand, Lu Yueh-E's dissertation explains that the period 1935-1943 saw the need for a new expansion of the harbor. According to her, these years comprised the fourth phase of the Jilong Harbor construction. One of these efforts focused She Liao Tao, where the Jilong Harbor Bureau, an office under the Japanese Colonial Government, started to build shipyards next to the fishing port of She Liao Tao. More and more ships were docking at the harbor, thus the demand for new equipment and facilities. The civil engineers were trying to make a harbor large enough to meet the needs of the colony and probably to gear up for the strategic requirements of the impending War. The fort was subject to a real threat. In fact, all the ruins were demolished; the terrain leveled and, in 1937, construction began on the first dry dock that overlapped half part of the old fortress.<sup>35</sup>

As we have mentioned before the team of the Taihoku University made a very good collection of pictures reporting the status of the fortress in late 1936 and early 1937 that have been preserved in the Department of Anthropology of National Taiwan University. With the kind assistance of the staff of the Department I published recently (*Spaniards in Taiwan*, 2002) some of the most representative pictures of this collection. The absence of the diary of excavations made very difficult to understand the pictures in a comprehensive way, until I discovered that most of them "encajan como un guante a la mano" with the bastion Oosterpunt (San Sebastian bastion), giving us a clear picture of the state of conservation of this part of the fortress, particularly its inner cellar (fig. 1), and the nearby foundations (fig. 2). Also these pictures indirectly render us a view of bastion San Antonio (fig. 3-4) and the life in She Liao Island, its wooden houses, the existence of a small factory to produce probably bricks, a house of leisure, etc.



Fig. 1: Inner cellar of bastion San Sebastian

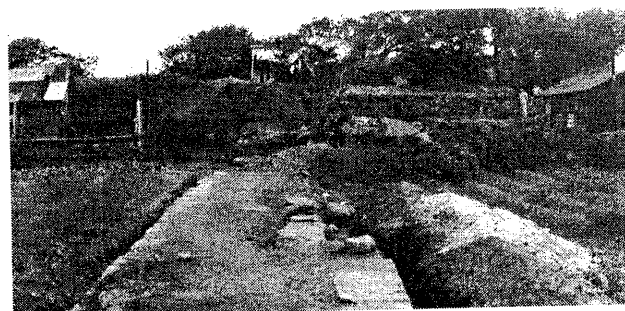


Fig. 2: Foundation of the wall near bastion San Sebastian

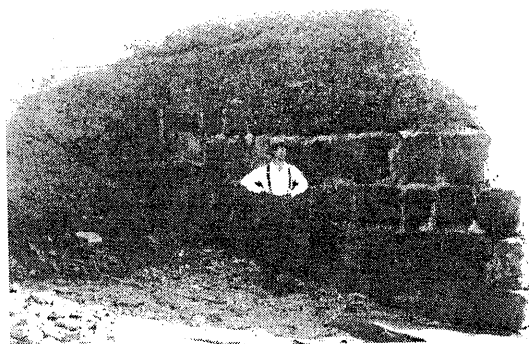


Fig. 3: Profesor Miyamoto in bastion San Antonio

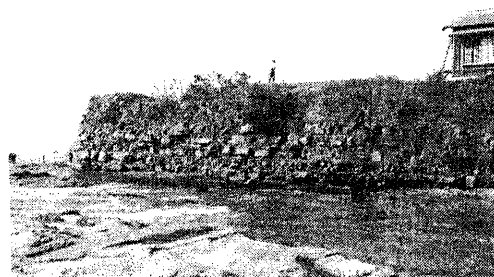


Fig. 4: Remaining of bastion San Antonio.

<sup>35</sup> According to "Taiwan's Harbors," (1938), the dry dock for 20,000 tons of ship started construction in 1937. The Japanese government scheduled its completion in 1939. However, according to posterior data published in 1957 by the Jilong government, construction was completed in 1941. This source also mentions that the second dry dock for 10,000 tons of ship was scheduled for construction from 1942 to 1945. It was not completely finished owing to the onset of the War (From Lu Yueh-E).

## The present situation

As far as I know, after the destruction of the castle few scholars have taken into consideration the possible remaining of the fortress. Only local people still have in mind the former existence of the castle, even some very old men still remember it. During the industrial development years of Taiwan the shipyards of Jilong have played an important role in the harbor and in the international trade of the island, but now the businesses of the shipyard are totally in decline, its activity is much more limited and the whole situation make easy to think again in the existence of the Kelang fortress.

One year ago, and in order to identify the present location of the castle —if something was still remaining—, was to find a relation between the last Dutch map of the castle and the 20<sup>th</sup> Century maps. This was not easy because in 1937 all the common points worth for making a reference disappeared. We can guess quite comfortably the location of the fortress in the Japanese maps before 1937, as we did it in our publication *Spaniards in Taiwan* (fig. 5), because the shape of the coastline was almost the same. The problem was that we missed to consider an important map from 1937 (fig 6), the one that makes the relation between the old and the new situations.

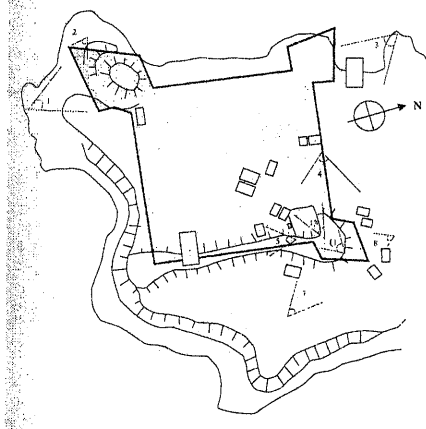


Fig. 5

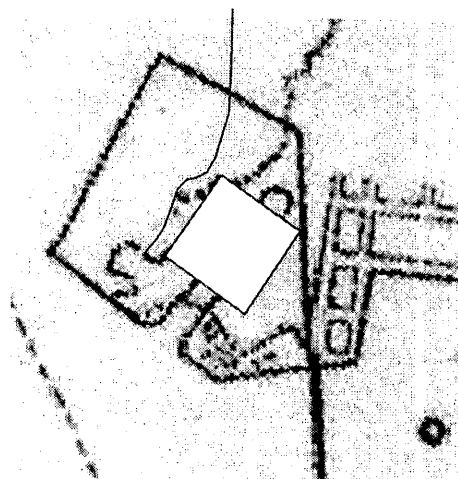


Fig. 6

In any case, we don't think that the figure 6 is a perfect drawing. The line we added may represent better the location of the coastline. In fact, this figure is a small part of a big map representing the whole harbor. Nevertheless, had we paid attention to this map we could put the possible location of the castle a little bit more to the inner land, in order to overlap the dry dock and the fortress.

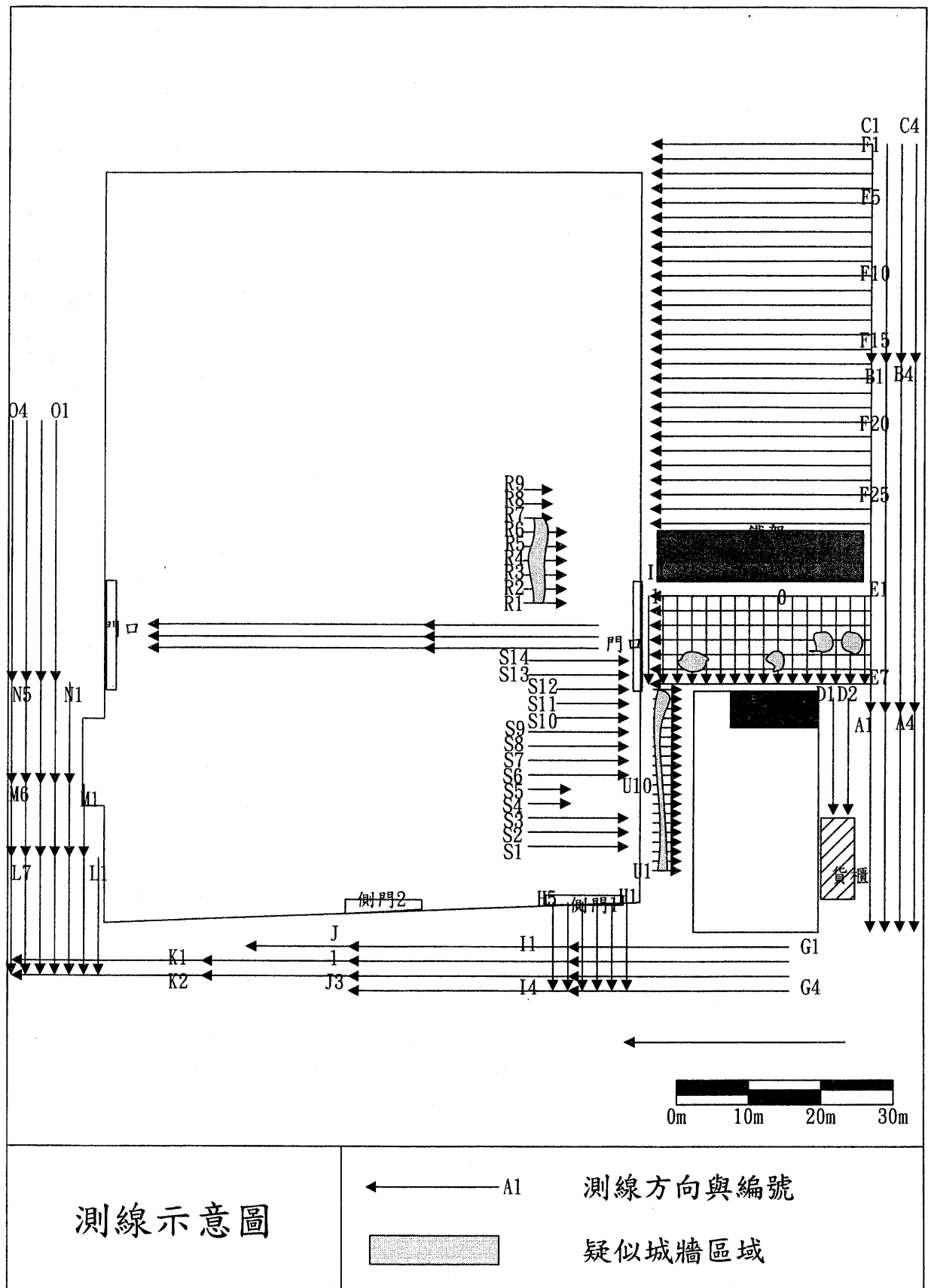
Recently, the Ground Penetrating Radar Technique<sup>36</sup> has been useful for archeological purposes, and in the Dutch fortress of Tayouan has been applied successfully, in identifying the existence of the remaining foundations of the fortress. A team conducted by Prof. Lee, from the Engineering Department of Chengkung University made a recent reconstruction of the foundations of Anping castle. We contacted Prof. Lee to make the same research in Jilong and recently it was conducted under the auspices of the National Bureau of Culture. Although we don't have yet the final results, the present ones —as we can see in the next to figures—

<sup>36</sup> Ground penetrating radar (GPR) is an electromagnetic geophysical method that involves transmitting radar energy into the subsurface and receiving radar reflections off of subsurface interfaces. The method is analogous to the seismic reflection method. For details see: <http://www.geotechnology.com/gr-info.html>



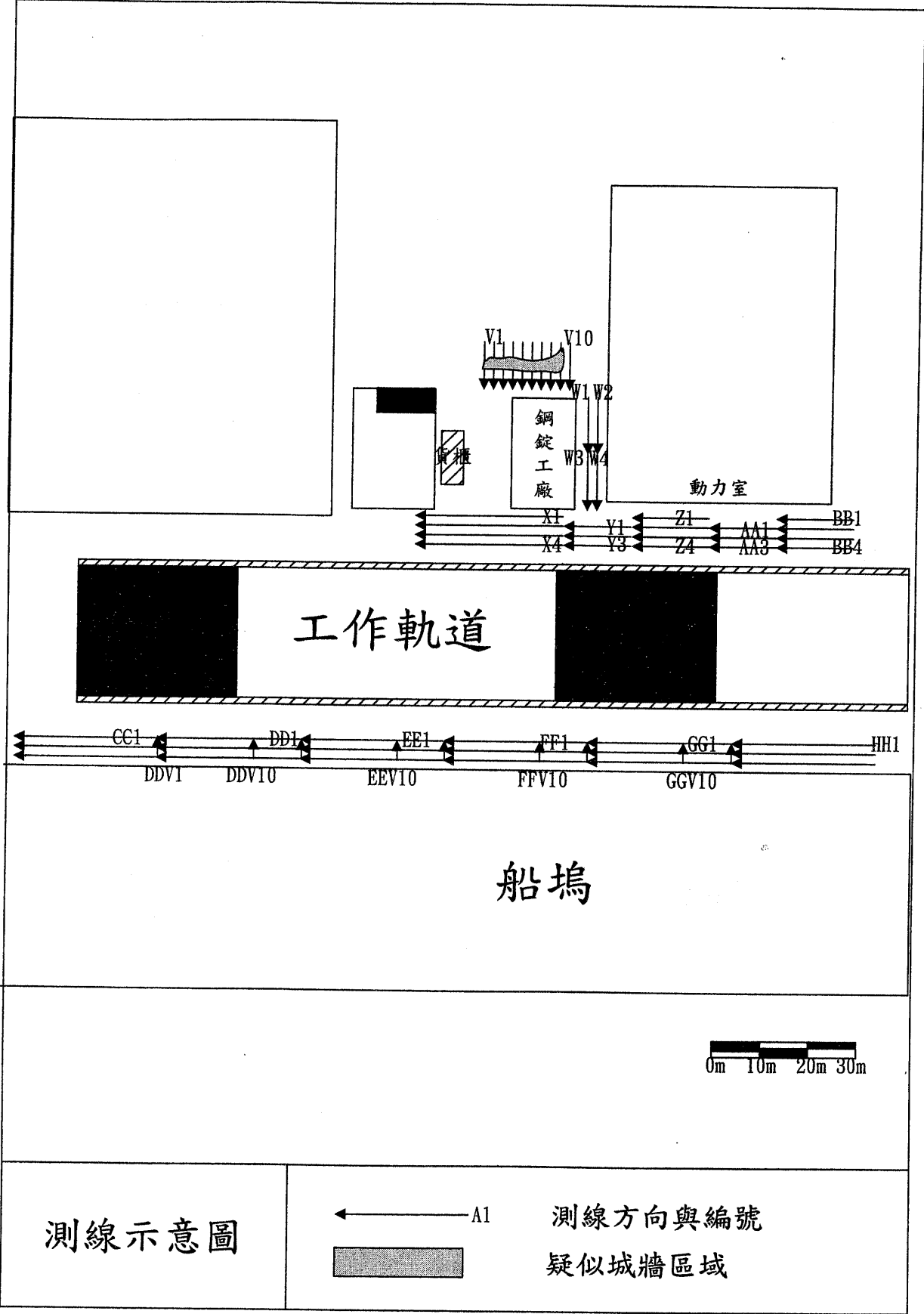
are very promising.

Figure 1: Foundations of the fortress of Kelang after Ground Radar Penetrating Test



Source: Report on Jilong Fortress, Engineering Department of Chengkung University, 2002, p. 14.

Figure 2: Foundations of the fortress of Kelang after Ground Radar Penetrating Test

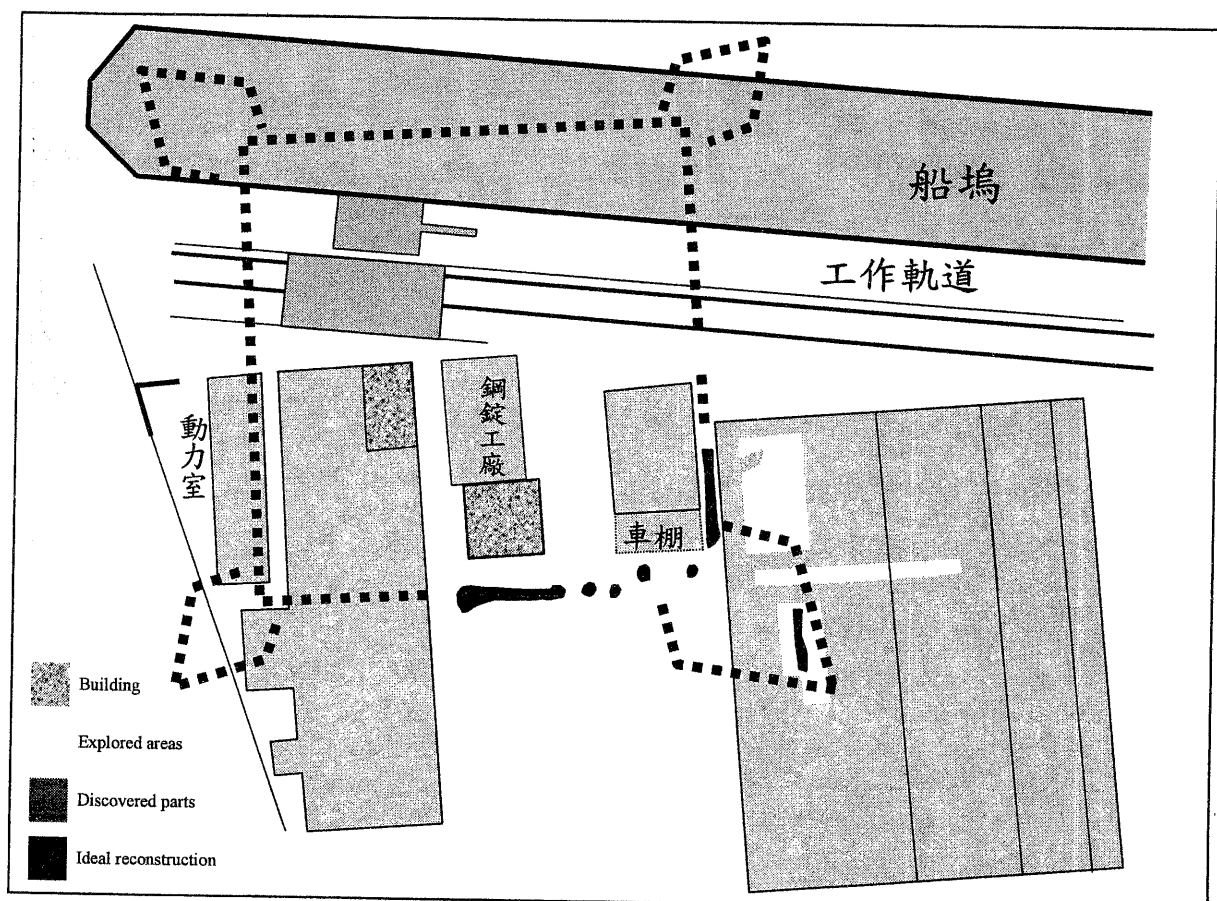


Source: *Report on Jilong Fortress*, Engineering Department of Chengkung University, 2002, p. 14.

The case on Anping fortress and the one in Jilong are quite different, because some remaining of Anping are still visible, and it is easy to foresee the location of the rest of the foundations with the help of old maps. In Jilong everything was destroyed or put underneath. Even before the research we cannot be sure if the foundations still are there or were reutilized to build the shipyard. Only can guess the approximate location of the castle based in old maps and available modern ones. So, how did we obtain these figures?

In November of 2002 we started the exploration with the Ground Penetrating Radar technique. The work was easy to conduct because the area is quite empty, and the shipbuilding Company helped us moving the cars from the area. Nevertheless some areas covered by iron pans, or machines, etc. were impossible to be explored.

After measured the area, we transferred these results to a general map; and assuming that, first, the square angle formed by the irregular lines and points that appear in the map correspond to the angle of the walls near Bastion San Antonio el Grande, or North Holland (something that is it is totally in accordance with the comparisons of the old maps and Japanese ones); and, second, that the size of the fortress is 99 m (as stated by Kees Zadvliet), we come with the following picture as the ideal reconstruction of the location of the fortress:



Of course, things still can be different, if, for example, the discovered part refers to some rocks in the coastline, or any other thing. That's why we still have to see if some part of the opposite wall can be discover by the GPR system. This will give us more security in our reconstruction. Of course, only a final excavation will tell us the reality of the possible remaining foundations. This is our challenge, and we still are working on it.