State of the excavation works of the 15th century shipwreck in Urbieta (Gernika, Spain)

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Summary

During the works run by the Town Hall and the Coastal Demarcation Board for repairing and canalising the estuary of Gernika, remains of a clinker built vessel were found in late July 1998. The shipwreck is 10 to 12 metres long, dating 1460, according to C14 analysis.

Geographical situation

The Basque Country is located in the eastern part of the Cantabrian Sea. Two of its provinces are by this sea. These are Gipuzkoa and Biscay, whose name is related to the gulf formed by Aquitania and Euskalherria (the Basque Country). It is in Biscay where the find was discovered. UNESCO designated the estuary of the mouth of the river Oka and its hydrographical tributaries as a nature reserve in 1984. The estuary is protected against the NW winds by the Machichaco cape, its mouth is partially closed by a sand bar (the Mundaka bar), and it finds shelter from the Izaro isle, where monks used to live in the past. The Ogoño rock is in the eastern part. The town of Gernika developed exactly where the tidal effects cease, 6 kilometres further inland, in the key centre of Biscay in certain relevant historical moments of the province. We must also take into account its location: it is based right on the junction formed by highways from the towns of Bermeo to Durango and from Bilbao to Lekeitio, and it is also the place where this natural source of water, the river, flows, probably a safer way than some paths, sometimes impassable.

Near the former confluence of the river Oka and its tributary, the Golako, in the place known as Urbieta (Basque word meaning: ‘between two waters’), 4 metres deep, a shipwreck was found sunk in the mud of the river. The river, near Gernika, nowadays looks highly altered. In the late 19th century, a solution to the problem of frequent floods in the area, which was converted from marshland into farming land, was to excavate a canal, interrupting the meanders, and altering the course of the river. Other works, such as the construction of the railway also affected the course of the river, reducing the meanders, which were sealed with filling materials.

Historical report

Shipping on the estuary has been confirmed in the Mundaka port since Roman times, and there are also documents, which describe the commercial routes of ships transporting ore between Mundaka and Gernika. Besides, it has been confirmed that the towns of Ajangiz and Arrazua, located by Gernika, did have, once, a port. In the Gernika villa, the area next to the find is known as the Portuzarra isle (Portuzarra is a Basque word meaning ‘old port’), and it is believed to have held a loading bay for ore, discovered during the archaeological works supervising the civil engineering works. A shipyard has been said to exist nearby. This shipyard was possibly related to the fact that there are lots of timber logs with shapes similar to floor timbers.
and tutlocks. The old age of the port is obvious, according to the document of privileges expelled by Count Don Tello, Lord of Biscay, in Orduña, on April, 28th, 1366: “Sepan quantos esta Carta de previllejio vieren como yo don Tello Conde de Vizcaya, é de Castañeda, é Señor de Aguilar, é Alférez mayor del Rey don Henrique con placer de todos los Vizcaínos fago en Guernica de parte de Luno población, é Villa que le dicen el puerto de Guernica...”

S. Aguirre Gandarias, in his study about Medieval Gernika, analyses in depth this and other documents dating between 1366 and 1526, and, as far as the foundation document of the town is concerned, he states that they used to proceed in favour of “...las embarcaciones y mercancías que realizaban el tráfico entre la villa y la barra de Mundaka” as well as the fact that “...entre las franquezas enumeradas conviene destacar las relativas al recuaje y anclaje para las mercancías que por tierra o a través del agua entrasen o saliesen de la villa”.

Gernika inhabitants have been concerned about the port natural limitations for a long time. It was their common interest to make the little wharf, which was at the end of the present of the sea up the river into a great port. This could turn Gernika into the main town of the province of Biscay. It is interesting the fact that both the documents and archaeological data available are coming the same way for the moment. In the last years of the 17th century, Gernika was still the main trade and commerce point in the region of Busturia. “Todavía llegan a la orilla de San Juan Ibarra, pequeño puerto fluvial en la margen izquierda del río Oca, los pataches venaqueros cargados con mineral de hierro para las ferrerías de la región; sigue siendo su puertecillo punto de entrada del pescado fresco que desde Bermeo, Mundaka e Ibarangelua se remite hacia el interio de Vizcaya”.

The existence of blacksmiths is essential when planning the activity in the port and the shipping on the river. This would lead to the creation of a renteria (custom office) in Gernika in order to regulate the mineral coming in by means of checking the weights and scales and the storing of iron already made, which was to be exported. Due to this, its location remains near the docks.

Thus, we can confirm that Gernika was an important commercial centre, which added dynamism to commercial operations in the whole region. This was complemented with the little port, together with the renteria. The outcome commerce was either by land or by ship on the river using shallow draft vessels to the ports of Mundaka and Bermeo. The crucial role played by the port of Gernika and the renteria in the economy of the province is also suggested by the fact that the residence of the Collector of the Treasury of Biscay in the 15th century was in this town.

This is not all that we know about the activities in the port, though. We will not go further with the data collected from the town inhabitants. We will only mention that while works in the old part of Gernika were taking place, remains of a wooden ship were found. The vessel was possibly a ‘barge’, which was destroyed. Also enormous iron rings that served to moor the ship were found in other works taking place near Gernika rail station and the main square in the town.

The Town Hall

The works of repairing and canalisation of the river of Gernika were planned together with an archaeological monitoring process encouraged by the Gernika Town Hall, although the area had never been considered by the Basque Government of archaeological importance. The Town Hall representatives took interest in the zone due to the facts that the former bed of the river was to be removed in the area known as Portuzarra and the lack of real signs of evidence in the port. The interest materialised as a project designed by Luis Valdés, in which the archaeological team Gastiburu S.L, hired by the construction company Moyua S.A., which provides collaboration in all aspects of the project.
The find*

From October 1997, during the monitoring of the civil works, the archaeological team had noticed heritage-related interesting details. These finds were the following:

- Roman pottery fragment (terra Nigra, 2nd century BC);
- Timber logs, possibly in connection with naval construction;
- A small construction made of timber logs dating 640 AD according to ^14C analysis;
- Iron storing places, near the renteria of the port.

However, the most important find was not to be discovered until the ninth month of the monitoring of the civil works.

July, 25th, 12.30 p.m. the archaeologist Argi Díaz, from Gastiburu S.L. realised that the caterpillar which was being used to put a breakwater on the left bank of the river took out a few pieces of wood from the mud in the river bed, which suggested the presence of a ship. After a first examination of the find by L. Valdés, both the directors of the works of the Town Hall and the construction company were contacted. Due to the great singularity and age of the shipwreck, a decision was taken and the works were stopped preventively until the Regional Council of Biscay representatives evaluated the find. Works officially stopped four days later. Then, the Heritage representatives from the Regional Council began dealing with necessary procedures to start the excavation works, the corresponding budget studied. The Town Hall also participates in the project, providing also a budget. Other institutions, which participate in the works, are the Coastal Demarcation Body and the construction company.

Methodology of the excavation

The find was discovered in a river, partially controlled with a damn, which serves to isolate it from the effects of the tides. The design of the excava-tion of the shipwreck made it necessary another dam, further up in the course of the river to dry up the place where the actual works are to be carried out. Due to the position of the remains, which are partially under the breakwater, and the narrowness of the river bed (4 m wide), we needed to prepare a wide extension of ground to work in. This was done with special machines provided by Moyúa S.A.: four wells were to be used to collect filtered waters. We also had two engines for pumping out the water.

The actual place of work was turned into a semi-dry area. The first task was to dispose, oriented, a grid over a micro-topography (10 cm) of the whole area between the dams. Now the excavation will carry on following the usual techniques, recording the finds, which will be later on analysed, using computing programs, such as CAD. The site is covered and a source of water is used so the finds remain permanently wet. Then a sieve is disposed for collecting samples and recovering smaller objects.

Description of the find

The Urbieta shipwreck is a small clinker vessel. Her remains are spread in an area of around 12 x 5 metres. Her stern keeps a direction of 10° E, which places the vessel in the same direction as the river current and aground in its left bank. This position made the vessel be broken in such a way that what remains today is her port side spread along the riverbed on an almost
FIG. 1 – General view of the shipwreck during its excavation.

FIG. 2 – Detail of the hull’s inner part.
horizontal situation. Thus, the keel and parallel to it all the planks up to the port side gunwale are disposed completely horizontal. In zone near the sternpost a part of the starboard side of the hull is in the inner part of the vessel that belongs to her port side; therefore, this part of the hull shows her outer side whereas the rest of the hull is her inner side.

Her structure is made of floor timbers and tutlocks. The tutlock is joined to the above side of the floor timber by one or two wooden pegs. Although the dimensions of the sections of the tutlocks are 12-13 cm x 6-7 cm, a few are smaller (6 x 3 cm). There is a great difference among the frames; whereas the tutlocks are very well done forming 4 parallelepiped-shaped faces, the floor timbers are rougher and only their lower side is prepared to be placed with the planks. The space between the axes of the frames is 50 cm. The planks and the frames are made of oak. The dimensions of the planks are 15 cm wide and 2 cm thick and are joined to the frames by wooden pegs. The overlapping area of the planks is of 3 cm, and they are joined by square-section riveted nails. The washer is squared too and presents a certain rhombus-like shape. The washers were created by a strip steel, of around 2.7 cm wide and 2-3 mm thick which is cut all at once which generally follows an oblique cut producing rhombus-like portions longer than the width of the strip. It is possible that while the washer is still hot it was pierced by hitting, producing a hole, which was filled by the nail that will be twisted, again, by hitting.

The keel is 8 cm wide and 13 high. It is joined to the stem post by a diagonal scarf. The curve of the stem post is very light (3.40 m Radius) suggesting a very high, providing it did not suffer any alterations throughout the years. However, no remains of the sternpost have been found so far. Therefore, we have to wait until the end of the excavation to learn about its features.

Both the inner and the outer part of the vessel are covered by an ochre yellow oleous stuff. We have to wait for an analysis to know more its quality and quantity characteristics.

In the inner and central zone of the hull there are evidence of inner planks tied to the floor timbers.

Except for three holes from a deadeye which do not necessary has to belong to the vessel, there are no remains of the rigging.

There are no remains, which indicate any kind of oars system. Neither the typology of the gunwale.

In general terms, we must insist on the fact that all this report is only a look ahead at the excavation and that within another months time we will reach further conclusions.

The future

The whole of the remains of the vessel had to be recovered, because they may be damaged, otherwise. They have been stored in a provisional store provided by the Gernika Town Hall. The place is a temporary store; the room taken and the situation of danger for the wood out of its environment where it has been preserved, and in spite of the regular checking which must be done, make us think that the situation should not last too long.

On the other hand, the find is of such importance that the data compiled must be available not only for experts but also for the general public as soon as possible. Aiming at this, we are working hard in order to preserve the wood in PEG for future exhibition. The decision that corresponding representatives of the Government must take is about which museum will hold the find.

Finally, the project will be supported by a published report containing explanations in detail of the works concerning the ship that have been carried out since it was found.
Suggestions

The most important aspect, we must insist, about the vessel of Urbieta, in Gernika, is not the find of the only ship of these characteristics in Spain, but the circumstances that have made this possible.

This turns particularly relevant if we take into account that the estuary area of the river of Gernika-Mundaka in general, and especially the place where the shipwreck is located is not, from the archaeological point of view, protected by the law, in spite of being an area of archaeological importance. As far as this point is concerned, we must state that had not the archaeological monitoring taken place on the part of the Town Hall of Gernika, the find would not have been possible. A clear conclusion can be taken from all this: it is absolutely essential that those areas of archaeological interest are protected, and it is a task of the corresponding administrative bodies to design an urgent plan to carry it out. Only a perfectly structured plan which involves global interests about the general cultural heritage will be able to provide answers to what it seems a more and more frequent need in the World. We are referring to a harmonious connection between the different strategies that must be dealing with recovery, protection, investigation, and broadcasting of the cultural heritage of every village.

1 The excavation works are co-directed by Manu Izaguirre (Guipuzcoa Regional Council), Dr. Luis Valdés (Gastiburu S.L.), José Manuel Matés Luque (University of Leeds), and a team formed by Eusebio Alegre Paricio, Amaia Fernández Alonso, Antonio Narváez Sánchez, and Sofía Valdés. Also, the following people have collaborated: Argi Díaz Eguskiza, Izaskun Pujana Zaldegui, (Gastiburu S.L.), Juan Antonio Apraiz, Isabel Arenal, Javier Reina and Roberto Muñoz (IGM Geoambiente), and others who have also participated in some way or another. Lidia Zapata is in charge of whatever concerns to the classification of the woodland species used.