

# The Gnalić Project



Thursday, May 14, 2015 - 12:00 to 12:30



The Gnalić ship was a large cargo ship built in Venice for the merchants Benedetto da Lezze, Piero Basadonna and Lazzaro Mocenigo (Bondioli and Nicolardi 2012, Radic-Rossi et al. 2013).





It was launched in 1569 and rated at 1,000 *botti*, a capacity equivalent to around 629 t, which corresponds to a length overall close to 40 m.





Early in 1570, the Gnalić ship transported troops to Cyprus (which fell to the Ottomans in July).



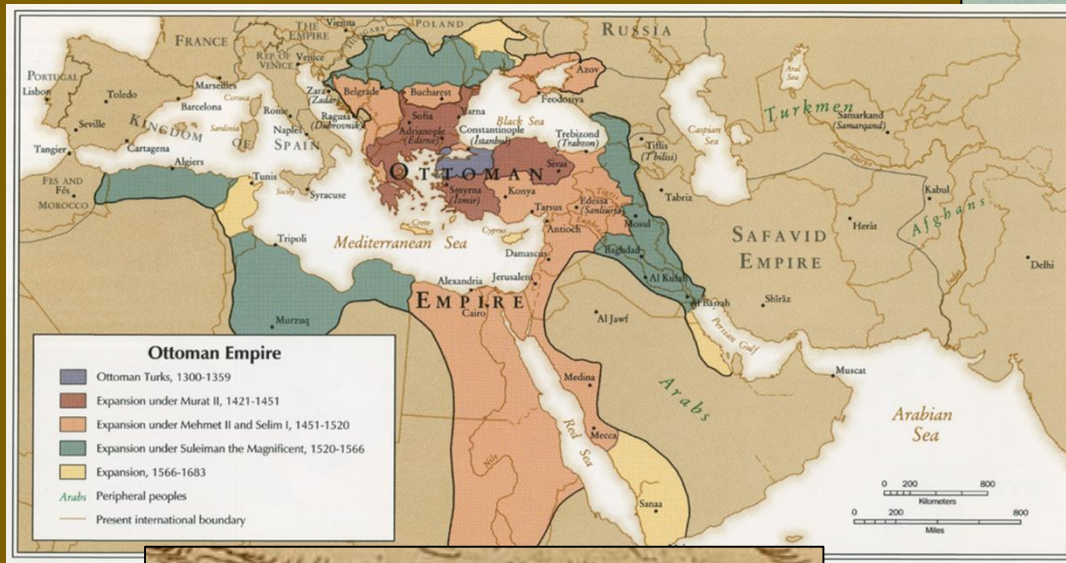
© The Hebrew University of Jerusalem & The Jewish National & University Library

War of Cyprus (1570-1573): in spite of losing the Battle of Lepanto (Oct 7 1571), Sultan Selim II won Cyprus, a large ransom, and a part of Dalmatia.





In 1571 the Gnalić ship fell into Ottoman hands, captured by Uluç Ali.



Sultan Selim II (1566-1574), son of Suleiman the Magnificent, expanded the Ottoman Empire and won the War of Cyprus (1570-1573).



Giovanni Dionigi Galeni was born in Calabria, southern Italy in 1519, and in 1536 was captured by one of Barbarossa Hayreddin Pasha's captains and engaged in the galleys as a slave.





In 1541 he converted to Islam and became a corsair. His skills and leadership capacity eventually made him Bey of Algiers and later Grand Admiral in the Ottoman fleet, with the name Uluç Ali Reis. He died in 1587.





In late July 1571 Uluç Ali encountered a large armed merchantman near Corfu: it was the *Moceniga, Leze, & Basadonna*, captained by Giovanni Tomaso Costanzo (1554-1581), a Venetian *condottiere* (captain of a mercenary army) 16 years old, descendent from a famous 14<sup>th</sup> century *condottiere* named Iacomo Spadainfaccia Costanzo, and from Francesco Donato, who was Doge of Venice from 1545 to 1553.





Uluç Ali captured the ship and imprisoned Giovanni Tomaso Costanzo.

He was circumcised, but refused to convert to Islam and was imprisoned in the Black Sea during four years.



Giovanni Costanzo was held prisoner until 1574, when he was exchanged against Ottoman prisoners and given a captaincy of a fortress at Corfu.



He eventually asked to fight the Protestants in Belgium, with Alexander Farnese. He died in battle, on September 21 1581. He died in Valenciennes, 36Km from Tournai, at the age of 26.



Sebastiaan Vrancx (1573-1647) Plundering of the village of Wommelgem in 1589.

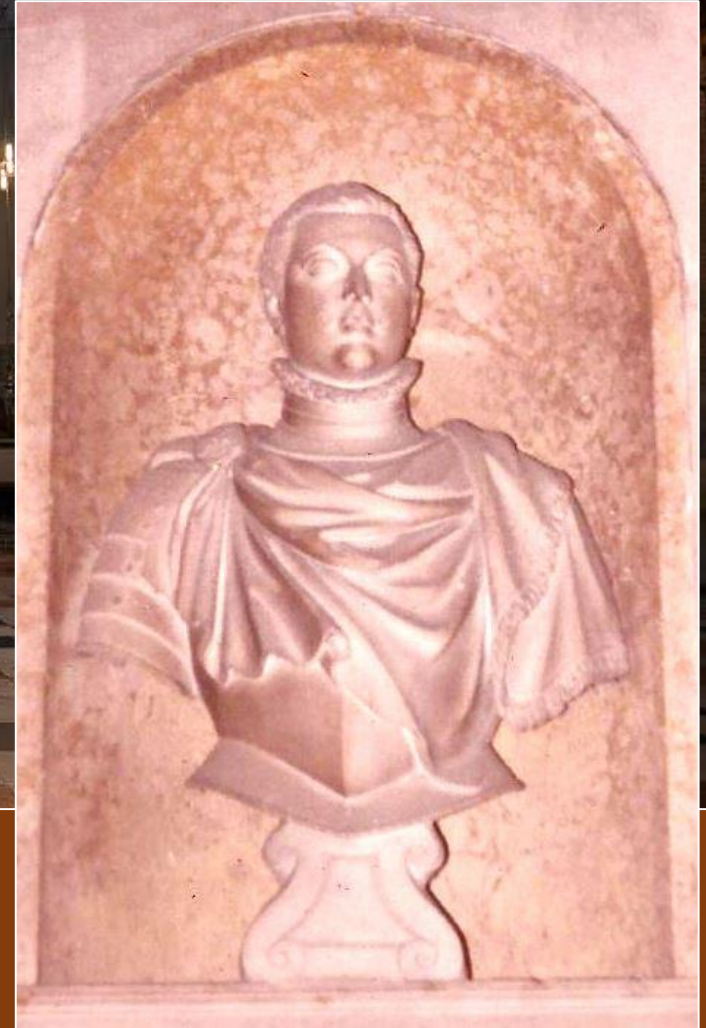


Was buried in the basilica pontificia di Sant'Antonio  
(de Lisboa) in Padova.

Coat of Arms of the Costanzo family







Torquato Tasso (1544-1595), the author of *La Gerusalemme liberata* (1580) wrote an elegy to  
Giobanni Tomaso Costanzo.



Two months later, on October 7, Uluç Ali joined the Ottoman forces in the Battle of Lepanto.





We have no information about the life of the *Moceniga*, *Leze*, & *Basadonna* from 1571 to 1581.







We have not yet made a proper iconographic study of the late 16<sup>th</sup> century Italian merchant ships...





The  
iconography  
is abundant  
and often  
very good.



In 1581, the old Ottoman merchant ship, the former *Moceniga*, *Leze*, & *Basadonna* was sold in Constantinople to an Italian merchant named Odoardo da Gagliano.

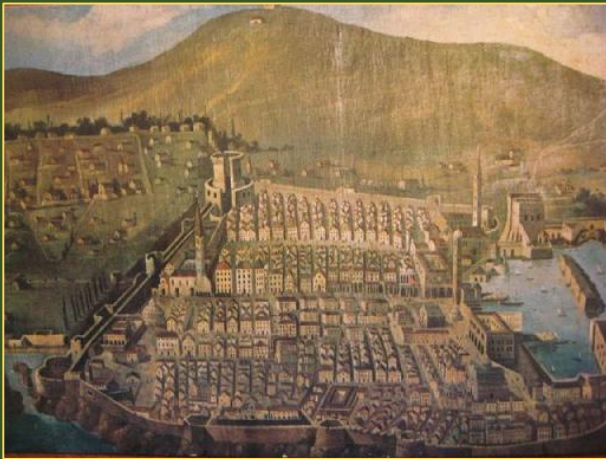




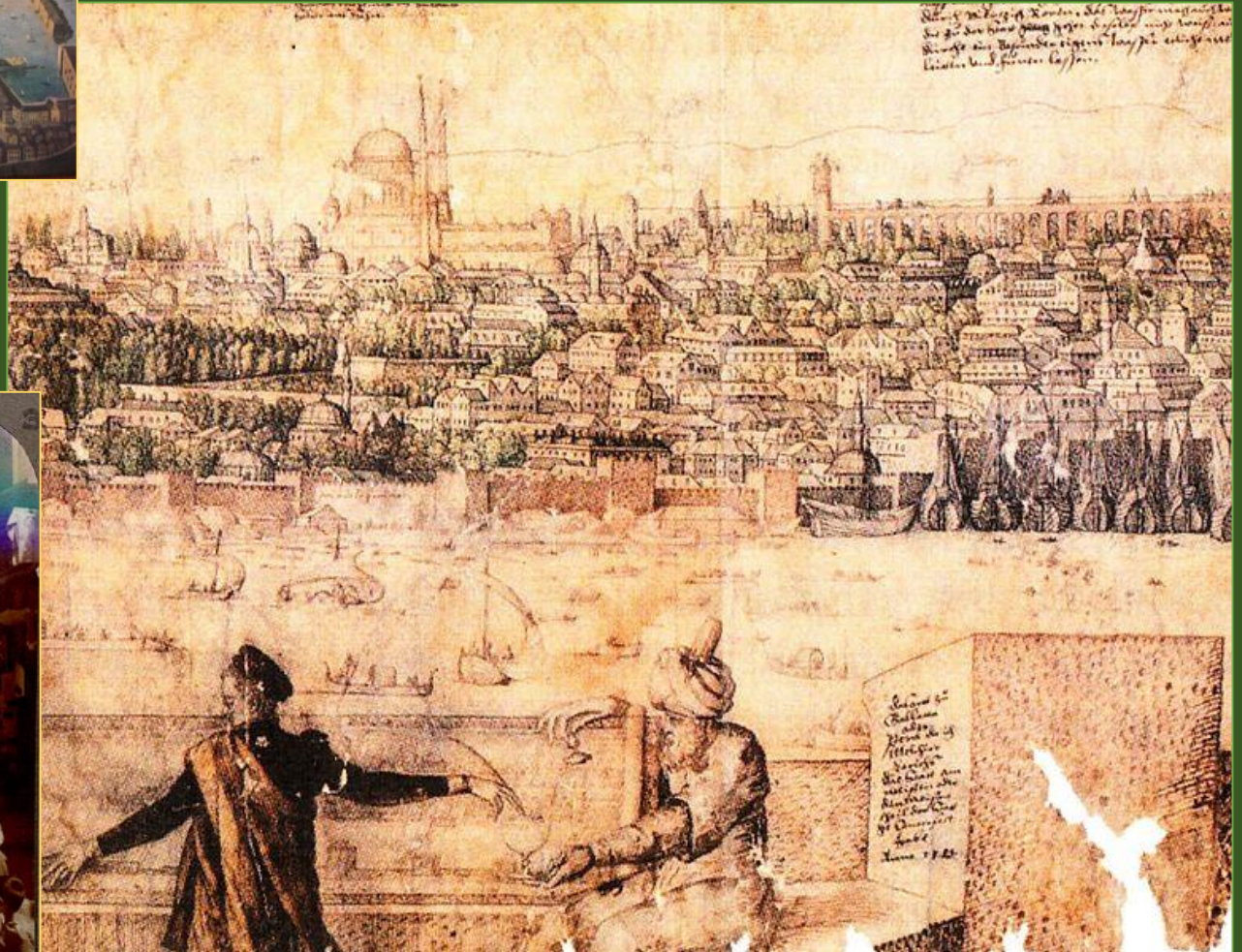
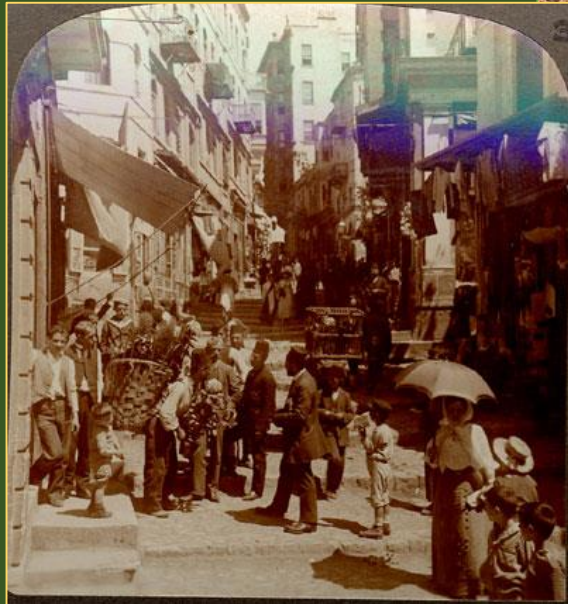
In 16th century Venice ships had religious names but were generally referred to by their nicknames, derived from their owner's names: when it was launched in 1569 the Gnalic ship was known as *Moceniga Lezza & Basadona*, and when it was bought by Odoardo da Gagliano, it became known as the *Gagliana grossa*.







The Gagliano family is believed to have been originally from Ragusa. Sometime during the 16<sup>th</sup> century Antonio da Gagliano settled in Pera, the European merchant section of Constantinople.





His son Benedetto remained in Pera, while his other son Domenico moved to Venice.



Melchior Lorck (c. 1526-a. 1583) – View of Constantinople over the roof tops.



Odoardo, the buyer of the ship, was Benedetto's son and lived in Pera, while his brother Domenico joined his uncle with the same name in Venice. Odoardo probably gave a name to this ship, but we only know it from its nickname: *Gagliana grossa*.



Venice, 1580



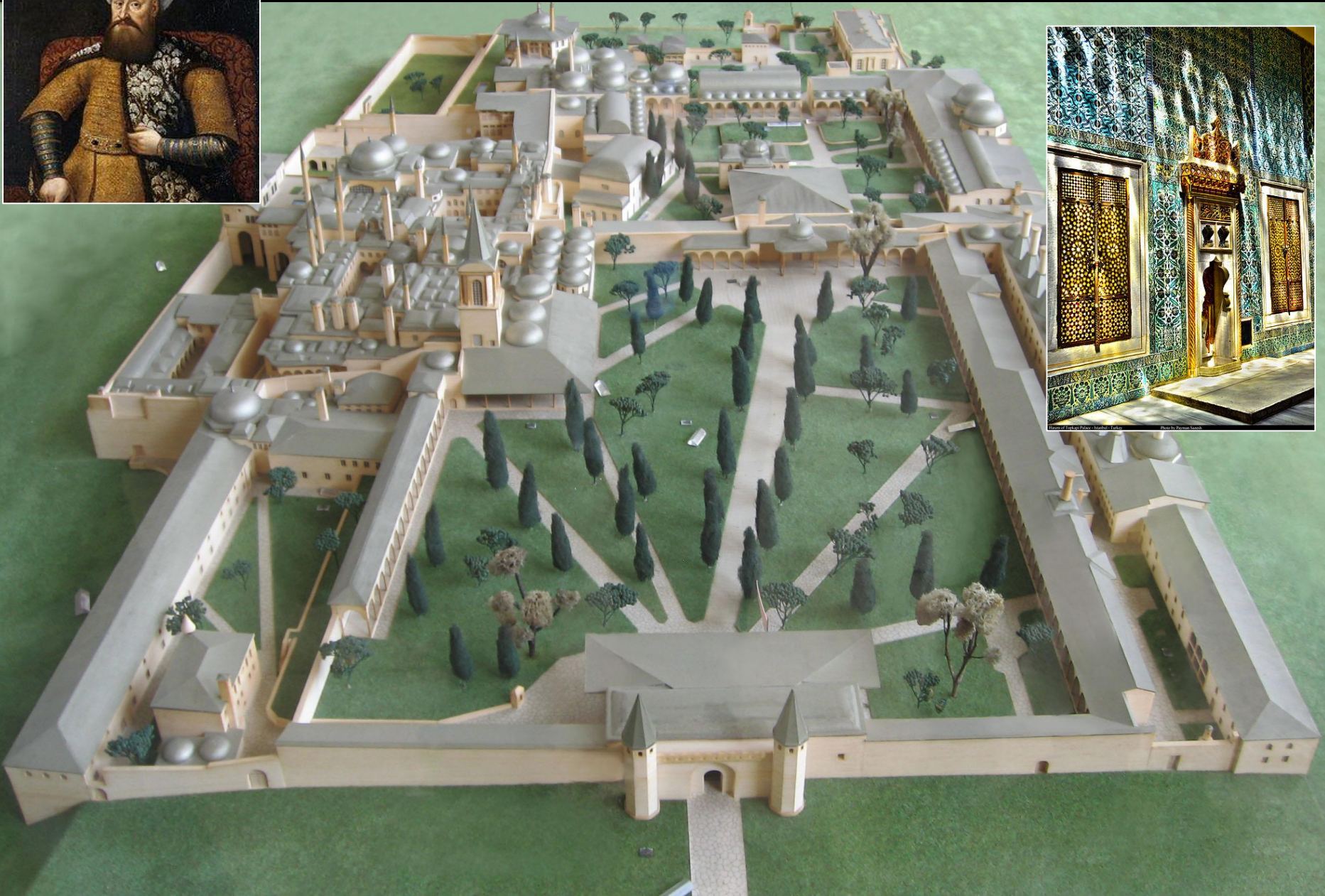
Italian costumes, c. 1580



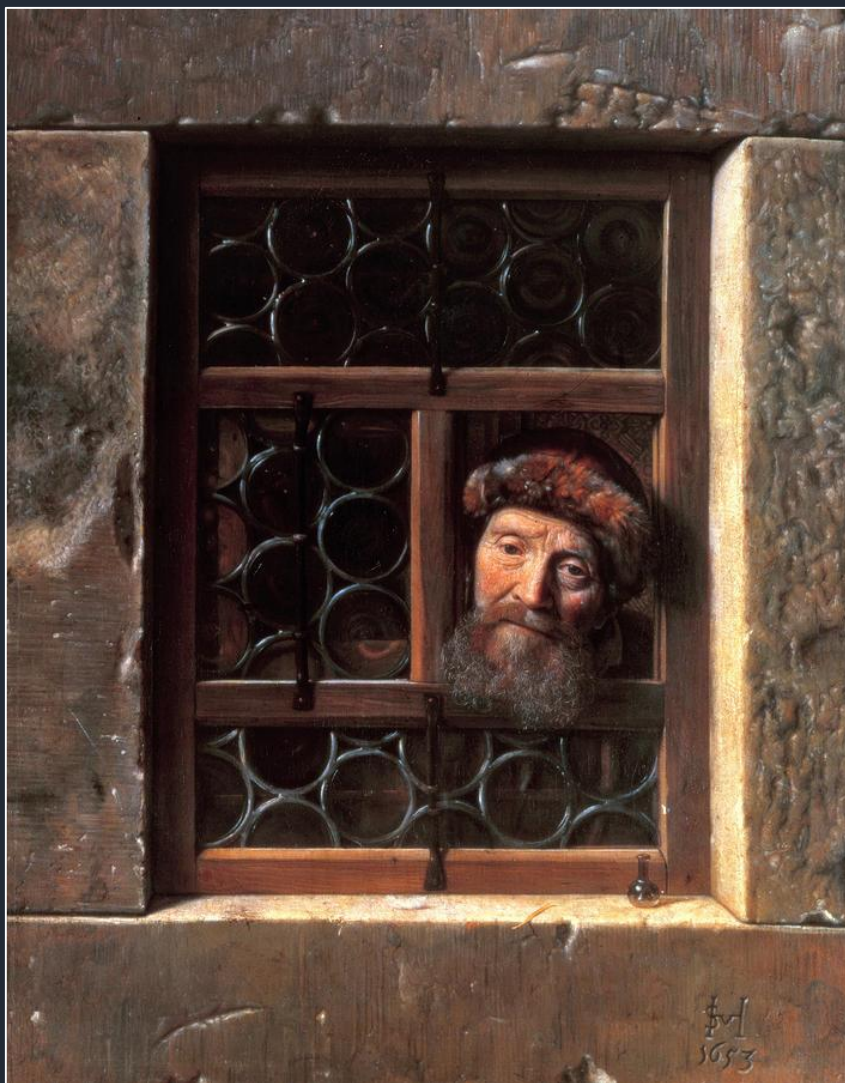




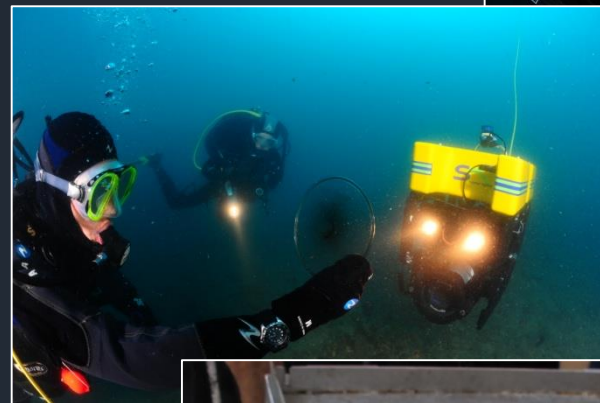
Following a fire in the Topkapi Palace, early in 1583 Sultan Murad III (1574-1595), the powerful Ottoman ruler, son of Selim II, ordered a consignment of 5,000 round window panes from Venice, to rebuild a part of the harem quarters, damaged by the fire.







*Man at a Window*, 1653  
Samuel van Hoogstraten, 1627-1678





The merchantman *Gagliana grossa* was selected by the Venetian senate to carry the cargo between Venice and Constantinople.

As it was the practice, a number of other merchandises were loaded on this large ship during the months of August through October.

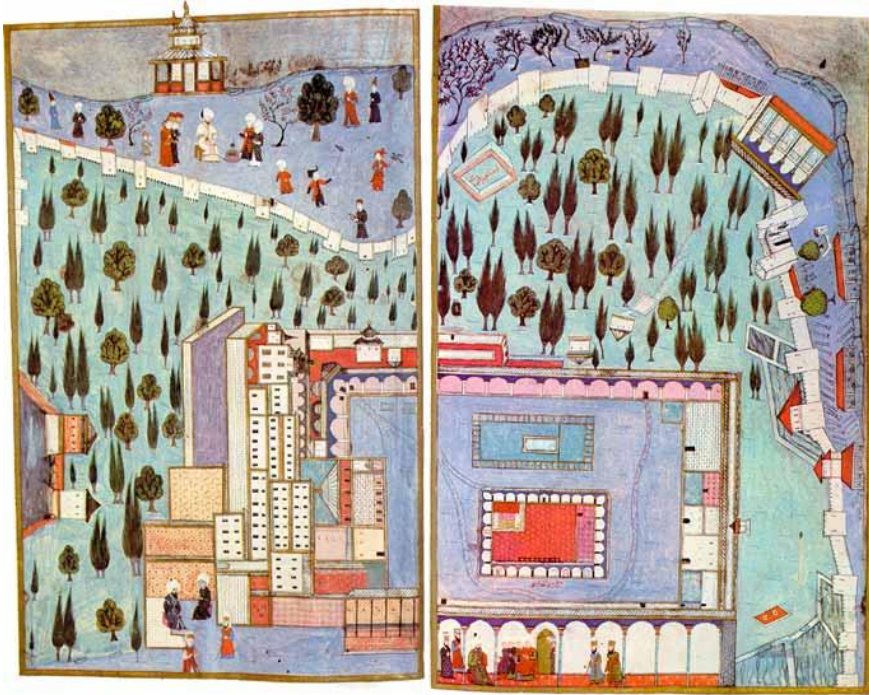






Historians Mauro Bondioli and Mariangela Nicolardi found an international group of merchants involved in this trip, such as a Portuguese named Zorzi Lopes Vas, three Greeks, named Nicolò Studognoti, Dimitri Colauro and Antonio Platipodi, and five Italians: Giovanni di Battista, Giovanni and Stefano di Silvestri, Tranquillo Coletti and Battista della Bella.





A Flemish merchant of named Wilhelm Helman, loaded two valuable packages on the ship: a small iron chest containing jewels and a sealed linen roll.

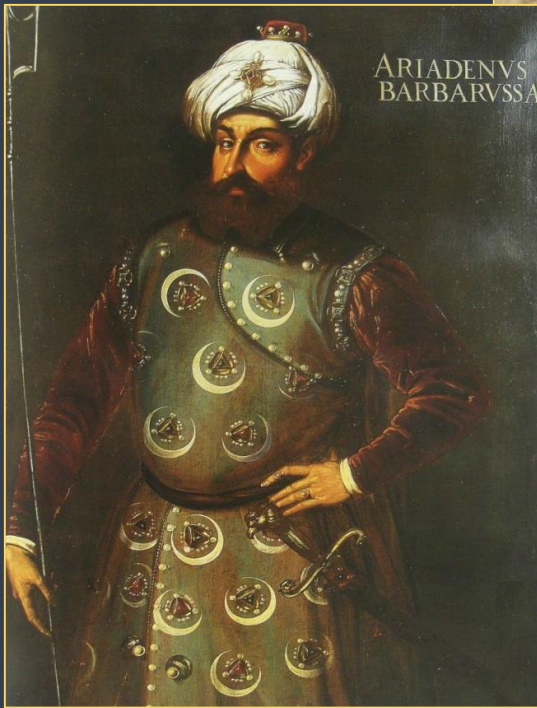
A group of Venetian noblemen sent three bales of the finest silk to the sultan's mother, Nūr Bānū, co-ruler of the Ottoman Empire during the last nine years of her life (1574-1583).







Barbarossa fleet in Tolon, 1543



Barbarossa Hayreddin Pasha (1478-1546)





Loaded and carrying all the permits necessary for the voyage, *Gagliana grossa* left Venice for Constantinople in the last days of October 1583, a few weeks before the winter ban on sailing, which according to Venetian law started November 15 and ended on January 20.



The ship's captain was Alvise Finardo and the clerk Šimun Fazanić.





A few weeks later news of its loss reached Venice. It sunk near the little Islet of Gnalić, not far from Zara Vecchia, today Biograd na Moru.



Gnalić is a small rocky islet situated at the entrance of the Pašman channel, on the Dalmatian coast, about around 17 nautical miles to the south of Zadar, in Croatia.





A party of salvagers was sent in December, under the direction of a certain Manolo 'Fregata' originally from Crete. By January he had retrieved the two volumes with jewels sent by Willem Helman to Constantinople, and on January 7 the senate approved the deployment of a galley or a *fusta* to protect the goods, probably piled up on the island.

Zara Vecchia  
Biograd na Moru



Gnalić





Willem Helman's packages were brought to Venice and opened before a notary. They contained pearls, diamonds, and emeralds, both mounted and uncut, and appraised at 7,243 ducats, well above the 3,600 ducats for which they were insured.

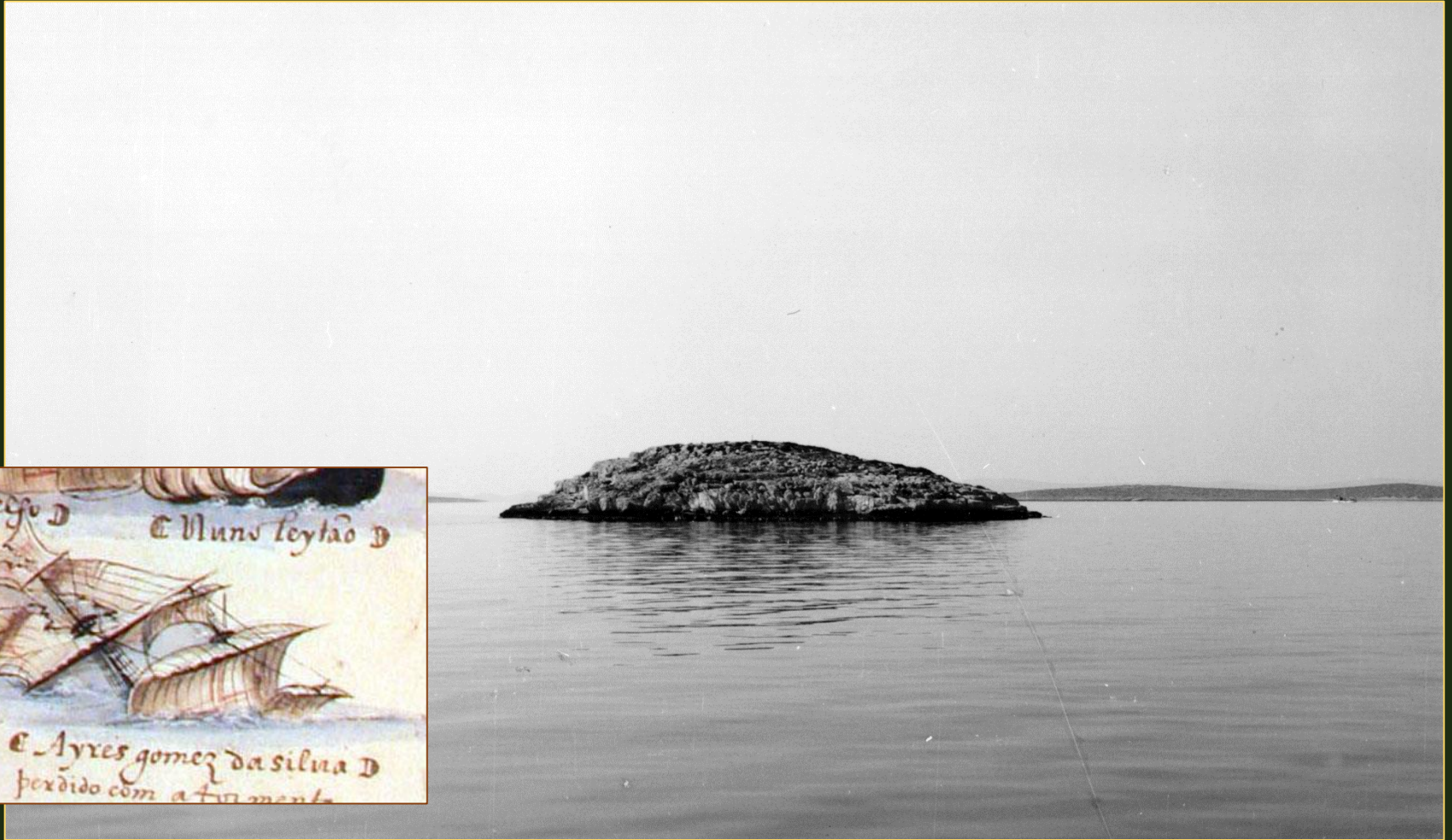
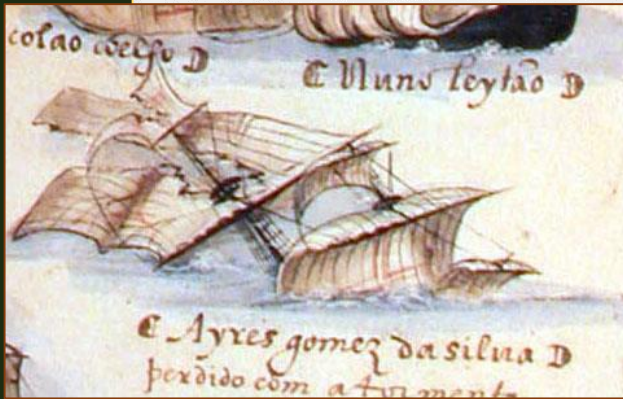


The Santa Maria Formosa Church in Venice, where the brothers Anton (d. 1582) and Willem (d. 1593) Helman (Hellemans) are buried.





It is probable that the masts stood out of the water after the shipwreck and the event must have been remembered for a few generations, and then forgotten.







It seems to have been discovered by sport divers in the early 1960s, lying at a depth of between 25 to 32 meters.



The site was reported to the authorities by sponge divers in 1967 and was the object of several archaeological interventions since then. The earliest work was carried out by the Organization for the Preservation of Cultural Monuments and the National Museum of Zadar, with the help of divers from the Navy and a local diving club, under the direction of Ksenija Radulić and Sofija and Ivo Petricioli, in the late 1960s and early 1970s.



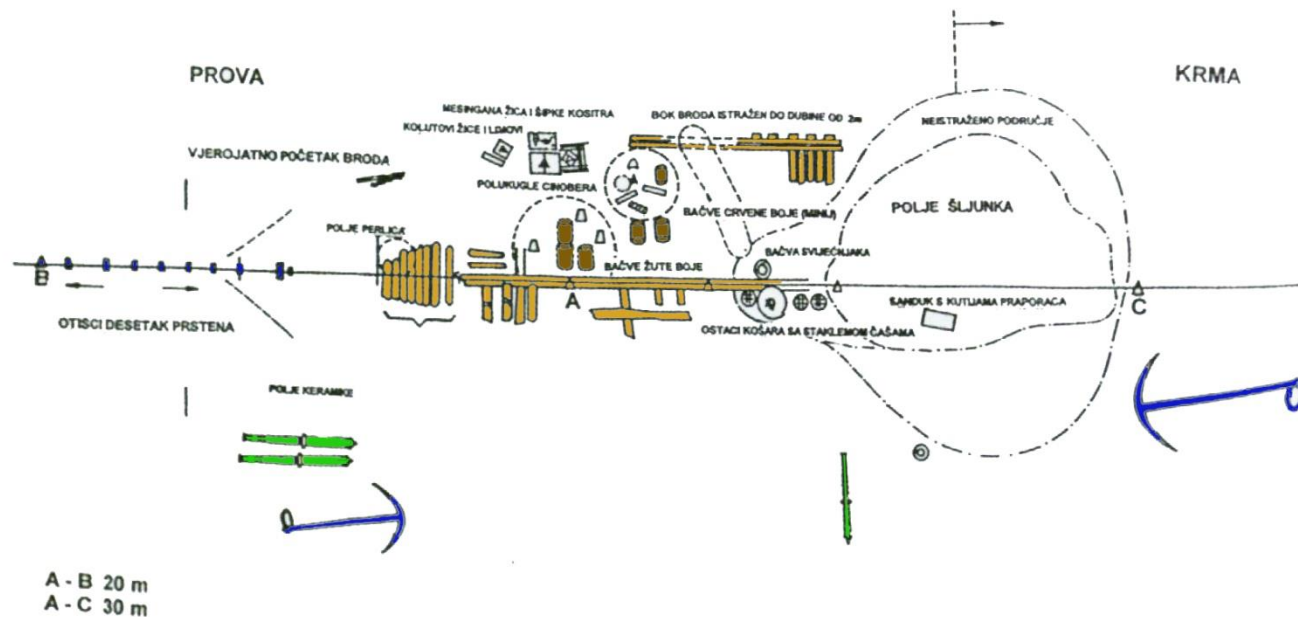


The site was mapped in 1972 and 1973, and part of its cargo, in particular a large quantity of drinking glasses, was found spread over a large area located to the SW of the shipwreck site (Radulić 1970; Brusić 2006).



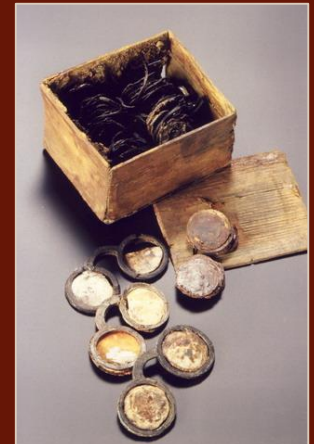


In 1996 another archaeological campaign was carried out under the direction of Dr. Zdenko Brusić (1996), entailing the excavation of new trenches to assess the extension of the hull remains, which were found to be significant and preserved to a depth of 1.5 m below the sediment.



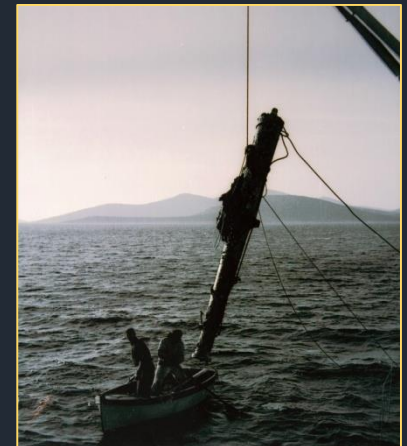
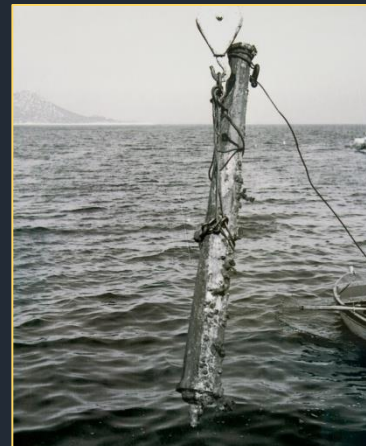
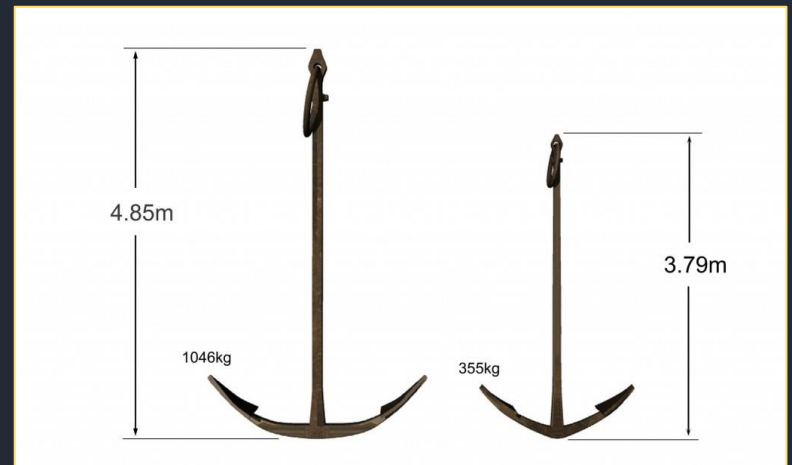


A large collection of artifacts was recovered from the Gnalić site over the years, and although some of the artifacts have been salvaged by sport divers, a large collection remains, its interest tied to the amazing story of this ship (Mileusnić 2004, Lazar and Willmott 2006b, Radic-Rossi et al., 2013).



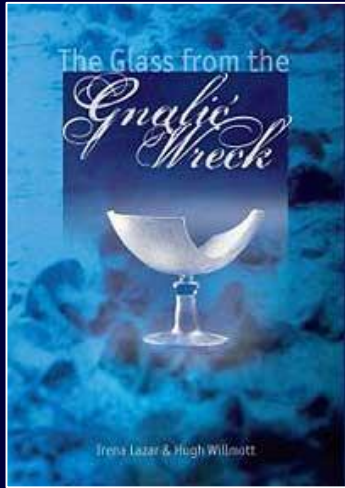


Two anchors and eight bronze guns were retrieved, together with a rich assortment of glass vessels, mirrors, window panes, brass chandeliers, silk, cotton shirts, hats, shaving razors, pins, needles, candle snuffers, brass bells, spectacles, and raw materials, such as cinnabar, lead carbonate, mercury, antimony, sulfur, brass wire, and brass sheet. In 1970 a museum was established in Biograd na moru to conserve, store, curate, and exhibit the Gnalčić shipwreck material.





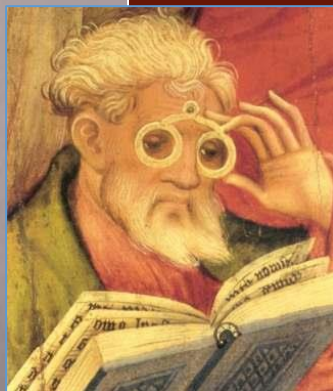
The glass collection was studied by Sofija Petricoli (1970b and 1973), Robert Brill (1973), and Irena Lazar and Hugh Willmott (2006a and 2006b).







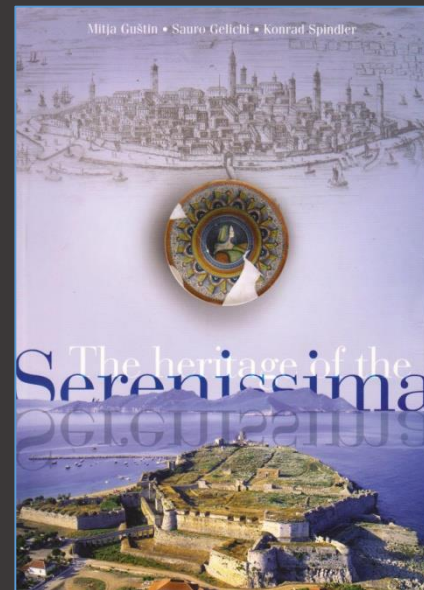
Its importance is unique, as it constitutes a coherent sample of late 16<sup>th</sup> century Venetian export production. It encompasses a wide variety of forms and a large range of qualities, some of which have parallels in contemporary land excavations in the region (Pešić 2006).







Preliminary studies on some classes of artifacts were published in 2006 by Mitja Guštin, Sauro Gelichi, and Konrad Spindler. The guns, initially studied by Ivo Petricioli (1970) were later studied by Marco Morin (2003 and 2006) and consist of eight pieces of which three seem to be French, three breech loaders are possibly Italian, and two sakers were undoubtedly made in Venice by Giovanni II (Zuan) Alberghetti in 1582.







The ceramics were studied by Zrinca Mileusnić and found to be typical of the late 16<sup>th</sup> century, probably produced in Venice (Mileusnić 2006).





The textiles, including a 54 m long and 62 cm wide roll of damask cloth, were studied by Doretta Poli (2006).







A collection of little hawk bells was studied by Michael Schick (2006).





The brass chandeliers, sconces, and candlesticks were studied by Harald Stadler (2006).



At the time of the shipwreck a similar chandelier was hanging from the ceiling of Emperor Felipe II's office.



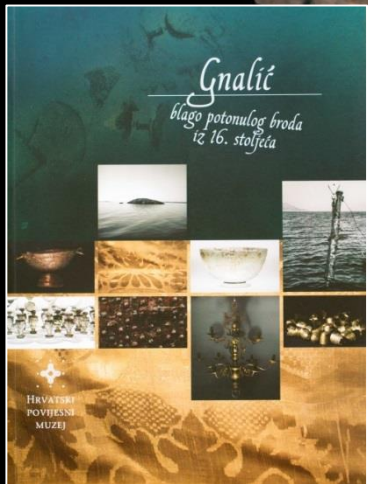
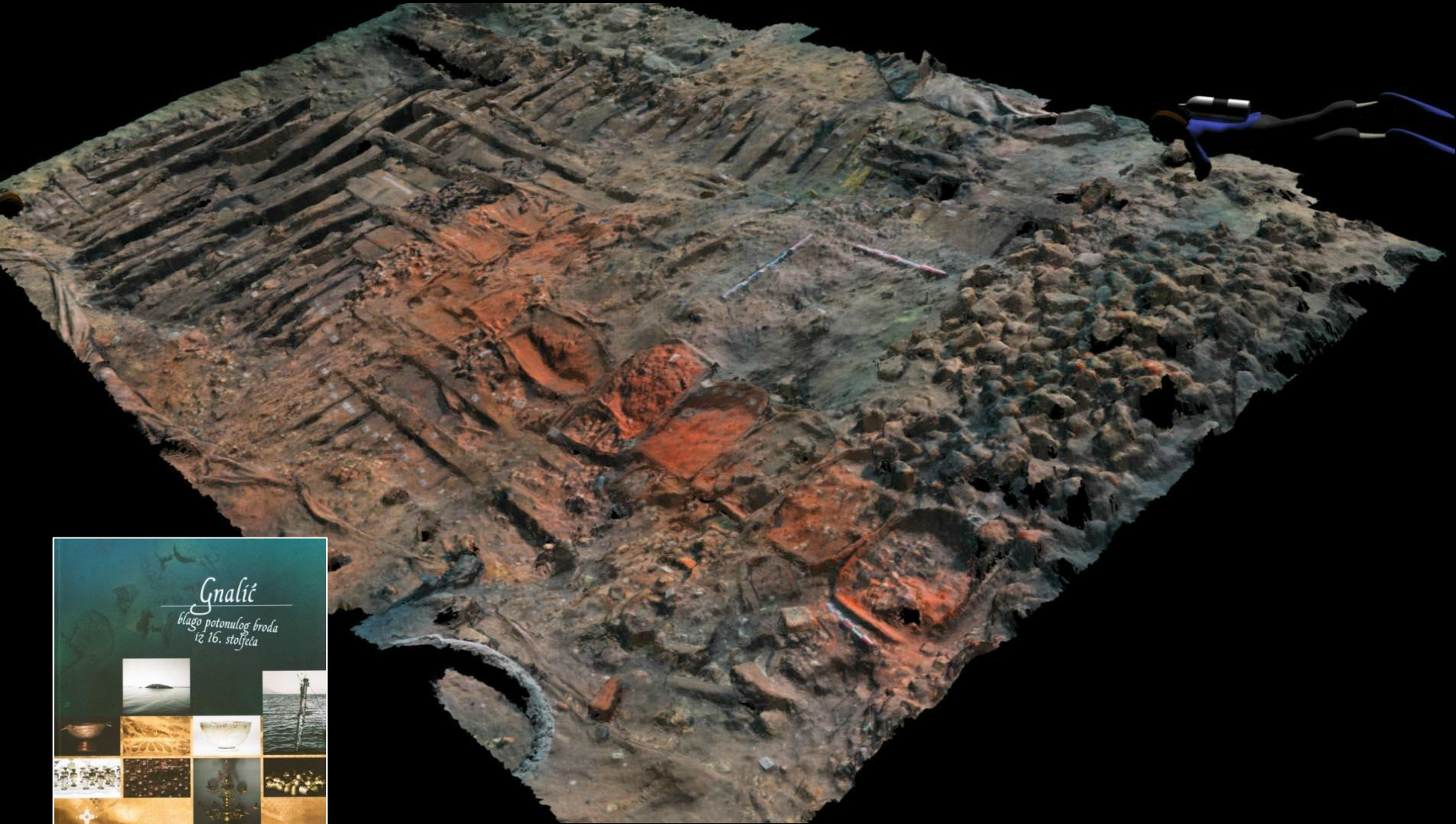




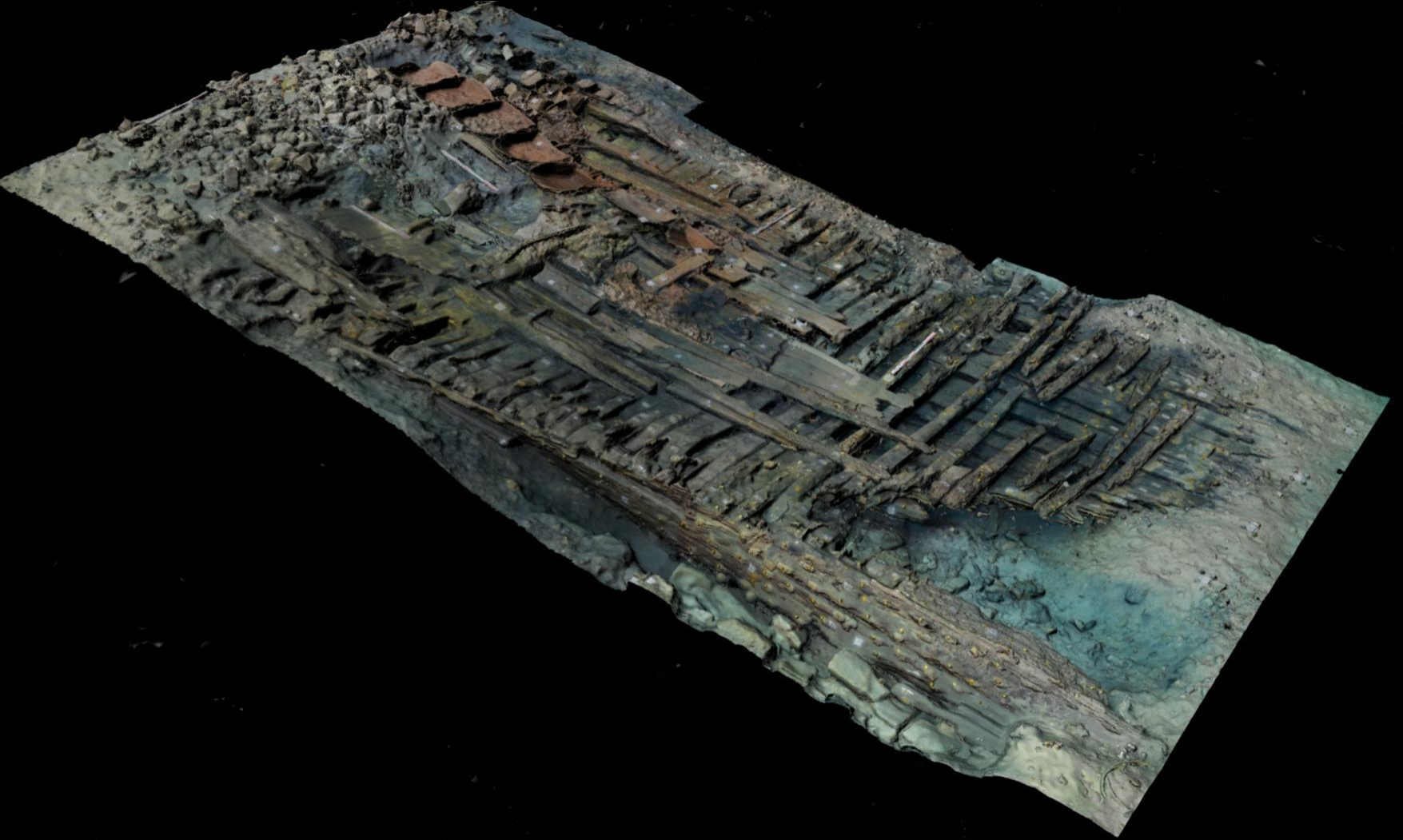
A small collection of lead seals was studied by Christian Terzer (2006).



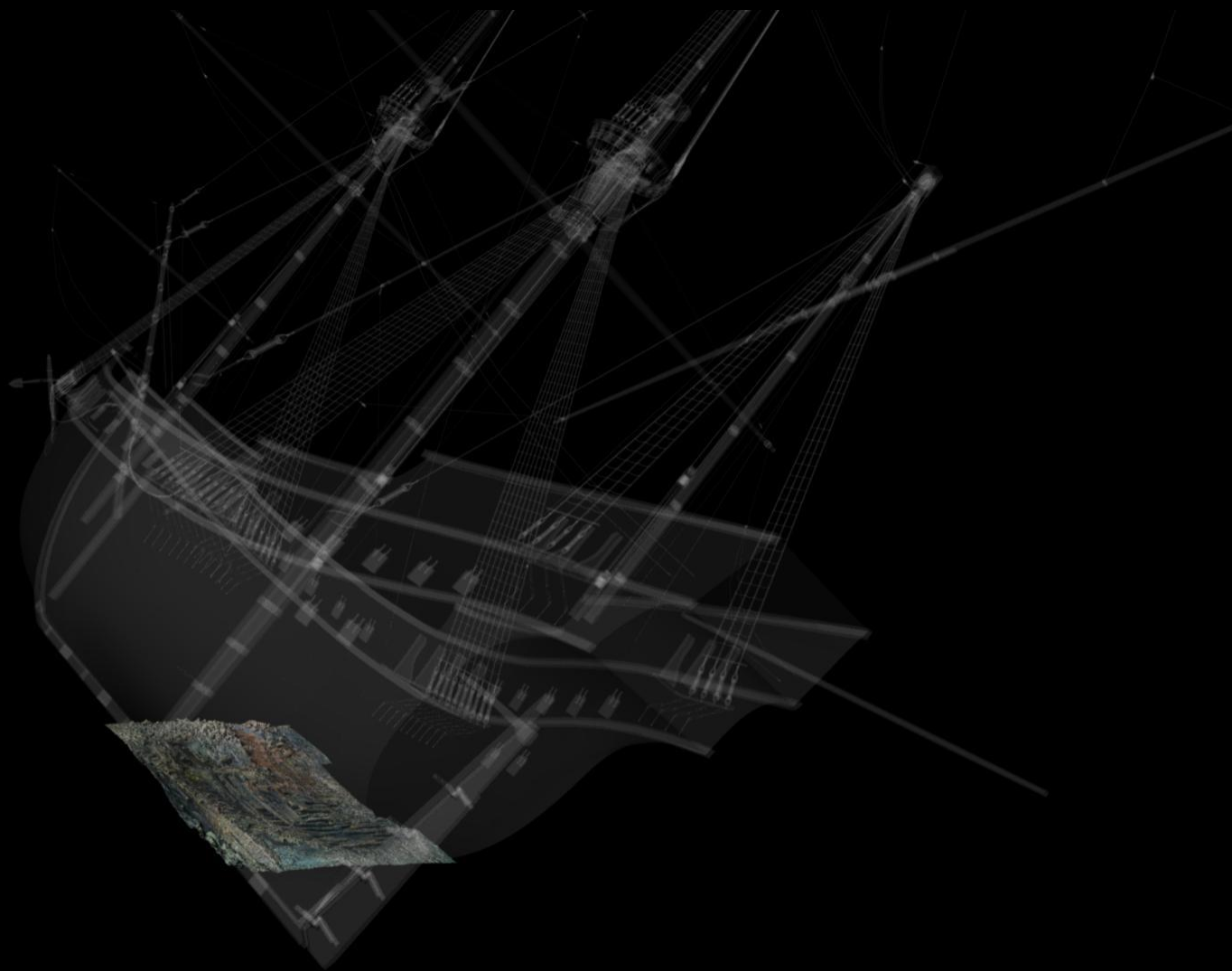
# Mapping the Gnalić Shipwreck





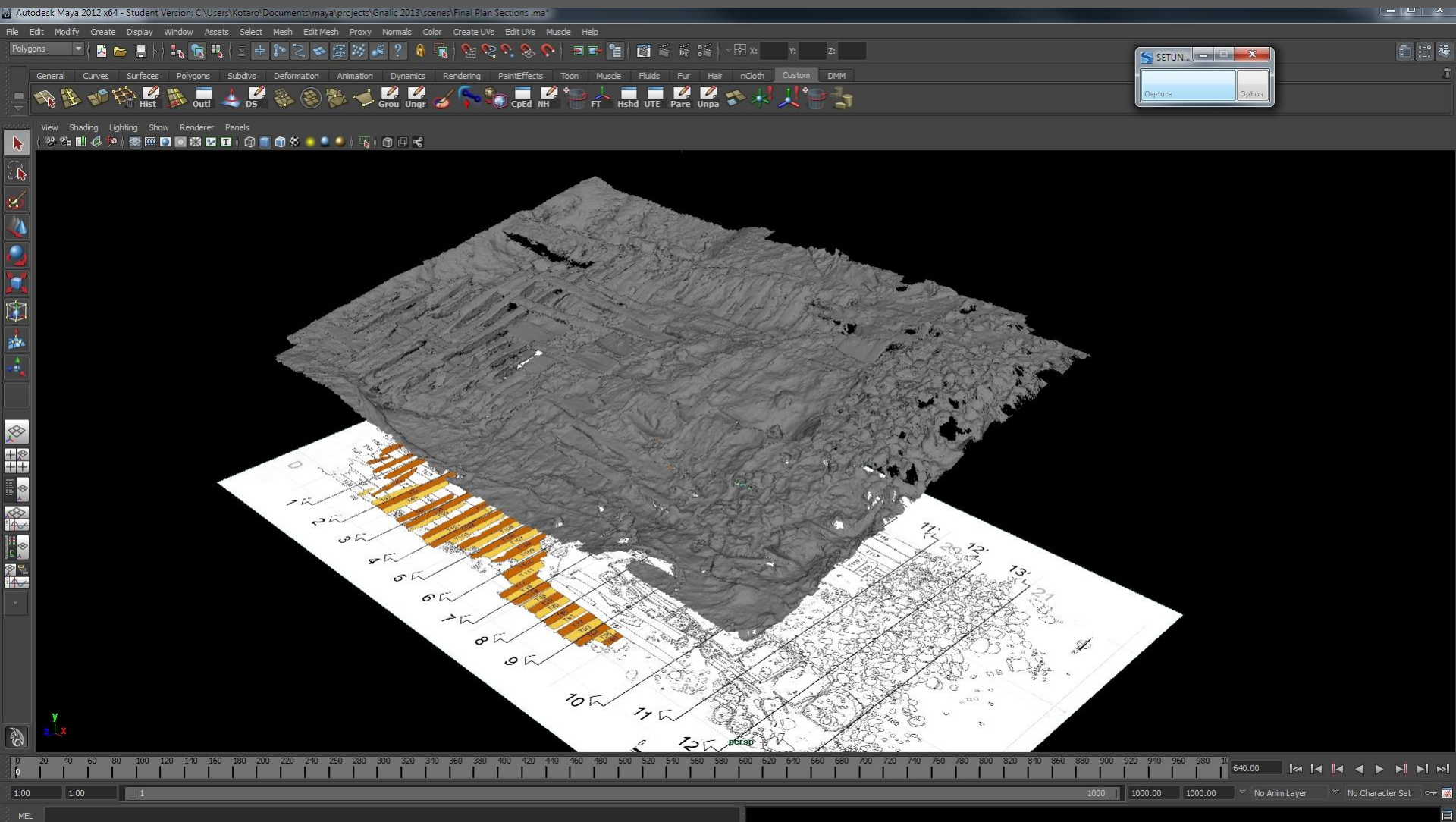




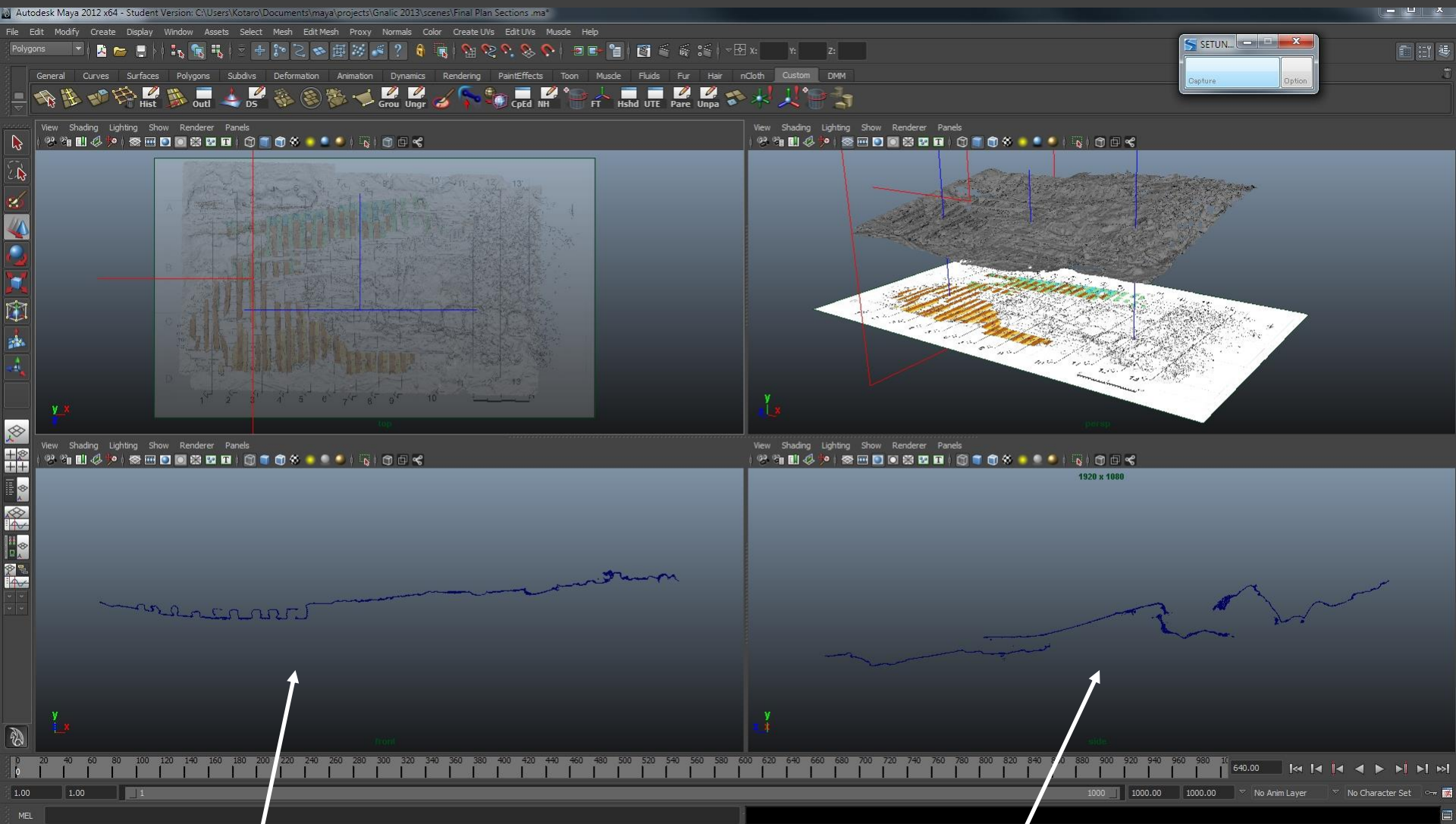




# Sections are then taken.





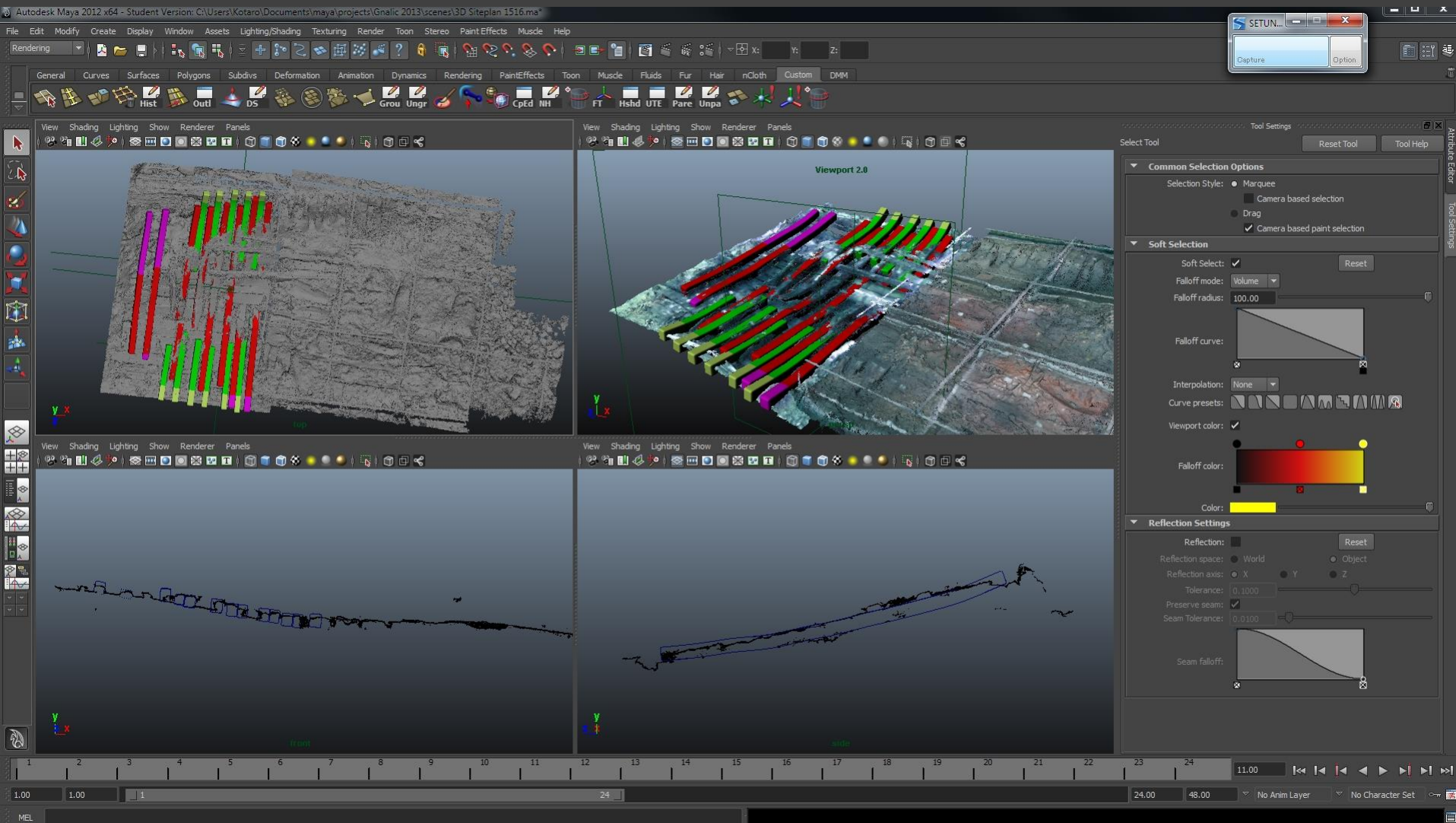


Longitudinal sections

Transversal sections

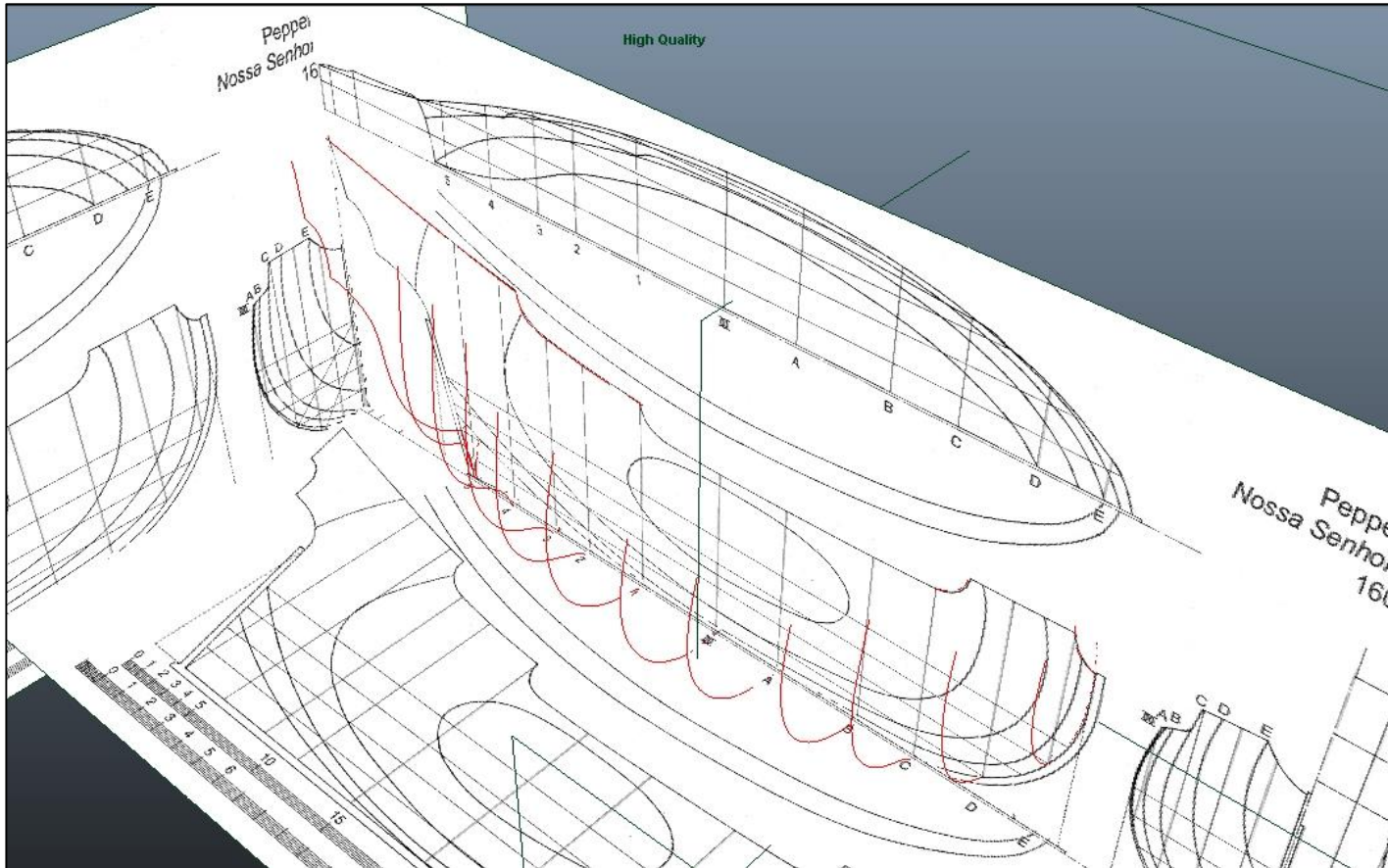


# And we try to reconstruct the hull remains with Autodesk Maya.



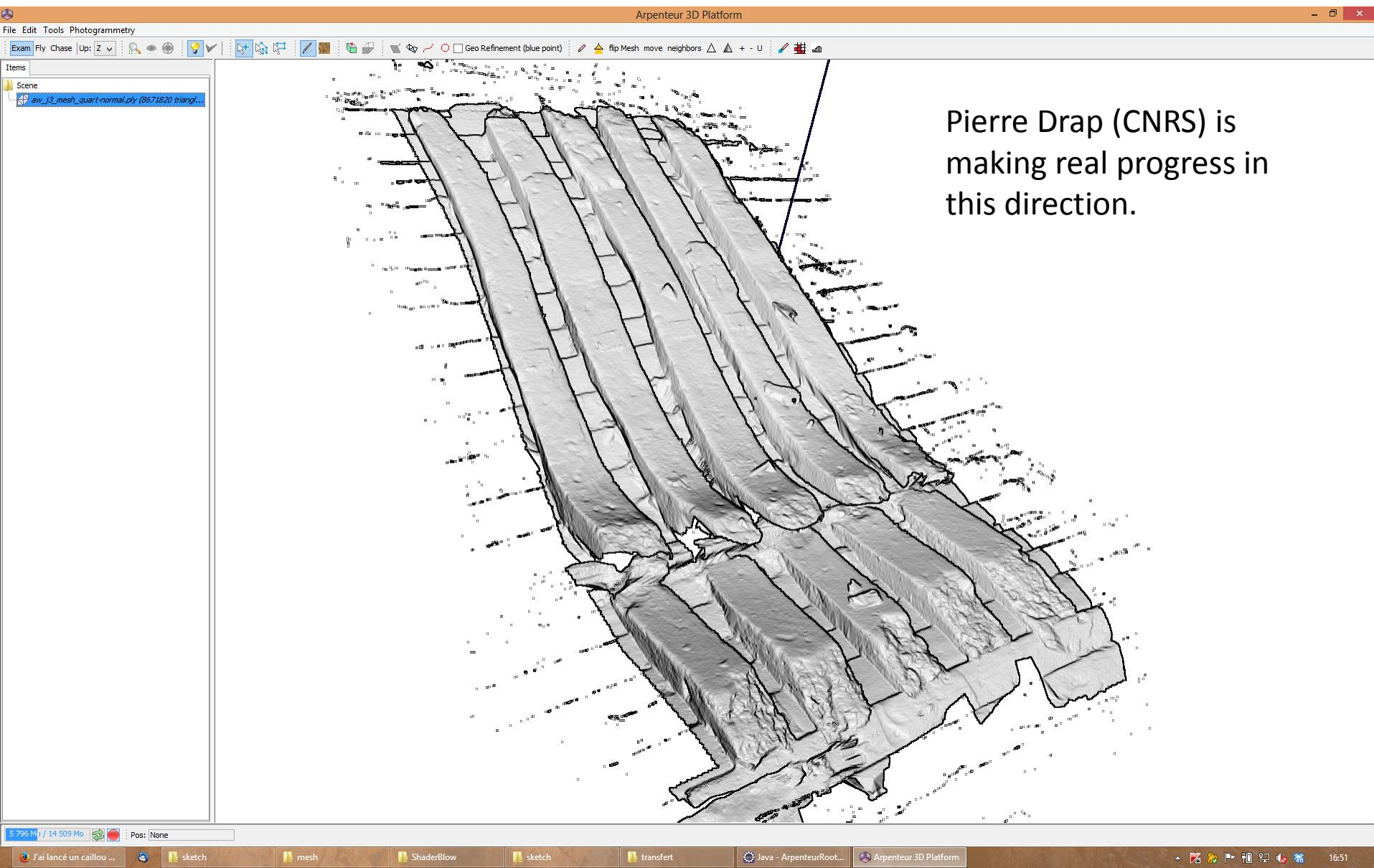


And it is possible to automate the making of 3D models from the traditional orthogonal views.





The future, we believe, is increased automation in the capture and recognition of shape.



Pierre Drap (CNRS) is making real progress in this direction.



Maritime archaeology is only 50 years old and in some places it still lives in a 19<sup>th</sup> century paradigm, where knowledge is not transmitted unless it brings glory to the author.

I hope to see a radical reorganization of the discipline in the next decades, hopefully along the lines of the hard sciences, where publications are abundant, data circulates more freely and research dead-ends are a part of the deal.



