

ΜΝΗΜΟΣΥΝΗ

LAMBOUSA'S FISHING HISTORY

Exploring Lambousa's hidden past



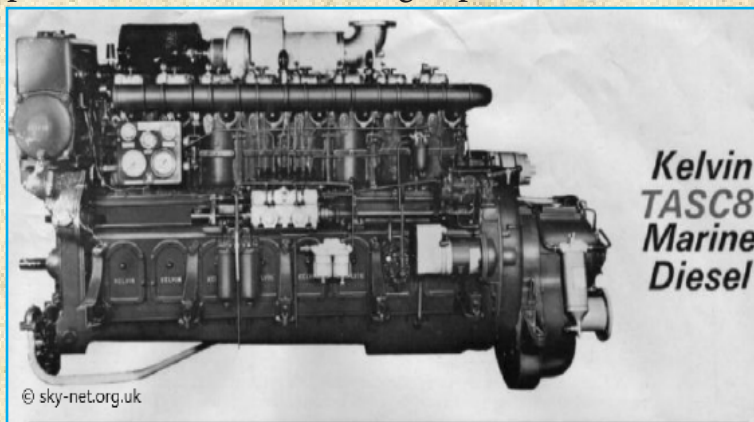
Crafting a Maritime Legacy

The LAMBOUSA fishing boat is considered a unique historical fishing boat of modern Cyprus culture with rich activity in the eastern Mediterranean waters. LAMBOUSA, originally named Omonia, was built at Perama, Piraeus, Greece in 1955 by the shipbuilder Dimitrios Zacharias. It was given the name 'LAMBOUSA' when it arrived and registered at the Famagusta port in 1965. This boat has been a passive witness to many historical events, from its founding in the port of Piraeus to its transfer to Cyprus in 1965, where it proudly adopted the name 'LAMBOUSA' after the birthplace(Lapithos) of its new owner. The LAMBOUSA is a proud symbol of Cyprus rich maritime history and much more than just a remnant from the past now days. Its story is a captivating chronicle of craftsmanship and tradition of the Mediterranean sea. It belonged to the type of liberty, a type with an elliptical shaped stern and the last type of the Greek traditional wooden vessels. It constitutes a marvel of naval architecture at the time, measuring an amazing 25 meters in length and 48 gross tonnage. It could attain speeds of up to 10 knots.



Technical Characteristics

The vessel features a single deck and fly bridge with two masts used only for fishing purposes. Up until 1985, it was propelled with a M.A.N. diesel engine made in Germany in 1955, boasting four cylinders with a diameter of 285mm and a stroke length of 420mm, delivering 250 brake horsepower (BHP) and achieving a speed of 8 knots. However, by the late 1980s, an upgrade was made to

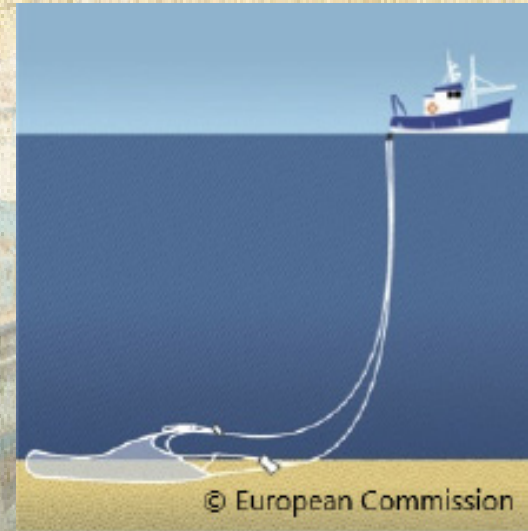


a KELVIN engine manufactured in the UK in 1982, employing diesel internal combustion with eight cylinders, featuring a diameter of 165.1mm and a stroke length of 184.1mm, resulting in a power output of 320 BHP and an increased speed of 10 knots. Additionally, the vessel's specifications include a gross tonnage of 94.23 tons, a register tonnage of 48.00 tons, and an engine room length measuring 6.28 meters.



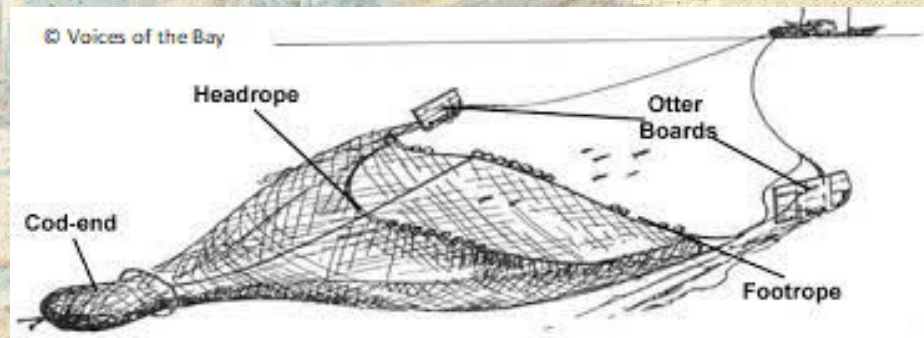
Techniques in LAMBOUSA's fishing

According to the fishing techniques that defined the LAMBOUSA's legacy, the vessel engaged a specialised method known for its efficiency and precision: the bottom trawling. The central tool in this method was a robust net, designed to sink into the ocean floor, aided by doors—substantial wooden structures sheathed in iron, measuring approximately 90 cm in height and 1.5 meters in length. As the net descended into the depths, its rear remained sealed while the lateral sections, right and left, opened expansively, pulled apart by sturdy ropes. These doors, set about 100 meters apart, played a crucial role in the operation. They ensured the net remained open while it trawled the seabed, capturing an abundance of marine life. To maintain its position along the ocean floor, the net was weighted down, while thick corks along its upper edge kept it sufficiently buoyant, maintaining a height of about 1.5 meters.



Navigating this complex apparatus required a captain of exceptional skill and intimate knowledge of the sea's depth topography, avoiding underwater hazards like rocks and reefs. The captain would meticulously gauge the depth using a trigger attached to a thin rope, a technique that required patience and precision to ensure the safety and effectiveness of the trawl. The net, capable of hoisting up to four tons of catch, was retracted with a winch, drawing it to the side of the vessel. As the bounty of the sea emerged, spilling onto the deck, the crew sprang into action. They meticulously cleaned and washed the fish, while any unwanted catch was returned to the ocean with shovels, maintaining a respectful balance with the marine environment.

On board the LAMBOUSA, depths of up to 90 meters became their fishing grounds, a testament to the vessel's capability and the crew's mastery of this time-honored fishing technique.



Ownership and Crew

The legacy of the LAMBOUSA spans multiple captains, each contributing to its rich maritime history with unique nicknames such as “Ashikkalis” (Costas Christodoulou), “Papoutsas” (Nicolas Petrou), “Vakis” (Andreas Petrou), “Nonis” (Antonis Petrou) and Adamos Koshakis. These seasoned seafarers, at the helm of the first LAMBOUSA, played integral roles in its early voyages, showcasing their skill and dedication to the maritime activity. Notably, Savvas Damianou assumed the captaincy for an impressive 36 years, guiding LAMBOUSA through various nautical challenges and establishing a longstanding presence on the open seas.

Operating with a crew of a maximum of seven sailors, the LAMBOUSA was a testament to the camaraderie and teamwork essential for successful maritime endeavors. The dedication of the captains and crew ensured the smooth operation of the vessel, navigating through the unpredictable waters with resilience and expertise.

Examining the ownership of the first LAMBOUSA sheds light on the collaborative efforts that sustained its existence. Kyriakos Neokleous, Stavrakis, and possibly a few other co-owners formed the initial group of stakeholders. This collaborative ownership model reflects the shared responsibilities and commitments of those invested in the success of the vessel.





In the case of the second LAMBOUSA, ownership extended to individuals such as Kyriakos Neokleous, Stavrakis, Petros Papapetrou (who held a share derived from the trawl), and Nikolaos Papoutsas (later acquiring his own trawler, the “Agios Stylianos”). This intricate network of owners underscores the economic and cooperative dynamics that sustained fishing operations of the LAMBOUSA.

The narrative of the LAMBOUSA, with its array of captains, crew members, and owners, exemplifies the resilience and adaptability required for success in the challenging and unpredictable world of maritime pursuits.



Navigating the Seas

With the 'second' LAMBOUSA, the fishing endeavors of the crew expanded into international waters, including destinations such as Malta, Libya, Egypt, and Lebanon. This broadened maritime outreach was strategically timed, occurring primarily from June to September, a period selected due to the closure of Cypriot waters for fish reproduction. The crew showcased remarkable adaptability and resourcefulness as they navigated across geopolitical boundaries, ensuring ample catches during the optimal fishing season. Alongside these international exploits, LAMBOUSA maintained a significant presence in Cypriot seas and ports, utilizing strategic locations such as the Ormidia fishing harbor, Larnaca harbor, Zygi, Kerynia harbor, the old Port in Limassol, Paphos harbor, and Famagusta harbor (prior to the war). These ports served as crucial hubs for logistical support and refueling, emphasizing LAMBOUSA's comprehensive approach to fishing operations. This strategic expansion into international waters not only highlighted the crew's commitment to the trade but also demonstrated their ability to adapt the global fishing patterns, ensuring a continuous supply of fresh catches to meet market demands.



Stories from LAMBOUSA's Chronicles

In the summer of 1963, the crew ventured into Turkish waters for fishing. Their presence did not go unnoticed, catching the attention of the Turkish port authorities who dispatched an aged tugboat. Kyriakos Kastenis, a Varosi resident, assumed the role of captain during this daring escapade. When approached by the Turkish authorities, they were instructed to retrieve their nets and bring the boat into port.



Faced with a precarious situation, Captain Kastenis swiftly formulated a strategic response. He ordered his sailors to seek refuge in the hold, leaving only two crew members stationed by the cables. With the engine roaring at its maximum capacity, Kastenis waited until it reached its limit, then commanded his sailors to sever the cables.





The result was a dramatic escape as the boat swiftly distanced itself approximately 100 meters from the pursuing Turkish vessel. In the chaos that ensued, the two sailors adeptly plunged into the hold, evading the gunfire unleashed by the Turks. Unfortunately, one of the sailors suffered a leg injury from a bullet. Undeterred, Captain Kastenis skillfully navigated the boat back to the safety of Cypriot waters, ensuring the crew's survival in the face of adversity. This incident stands as a testament to the resourcefulness and courage

displayed by the captain and his crew in the pursuit of their livelihood amidst challenging circumstances.



Turkish Invasion of Cyprus (1974) and aftermath

Before 1974, the LAMBOUSA engaged in widespread fishing activities across the entirety of Cyprus, establishing a robust presence in the island's maritime landscape. However, in 1974, during the war, the vessel searched refuge in the Ormidia fishing harbor to ensure its safety amid the tumultuous times. Post-war, Limassol and Larnaca emerged as the primary harbors, taking on significant roles in the revived fishing industry. The seas of the free areas, constituting one-third of the entire island, became crucial fishing grounds. Unfortunately, the fish population in these areas saw a significant decline due to government decisions.



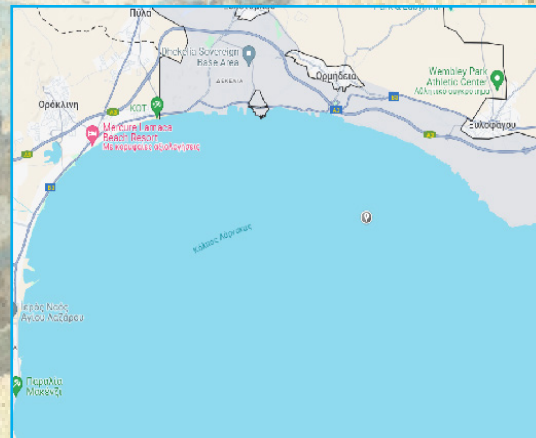
After the war, the government reactivated fishing and issued licenses to 98 fishermen, leading to overfishing. In 1992, following the 'Gulf War' and the subsequent oil spills from petroleum sources, numerous dolphins sought refuge in the Mediterranean through the Suez Canal, becoming unwitting targets for fishermen aiming at the fish they fed on. This influx of dolphins resulted in a substantial threat to the marine ecosystem.



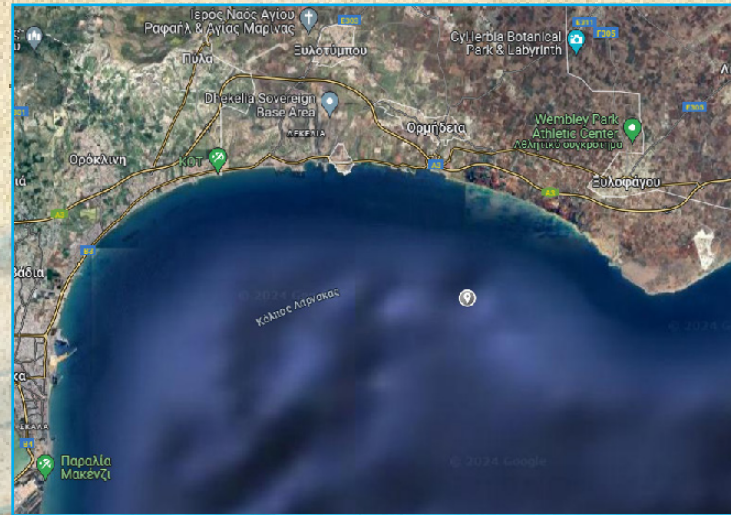
The Sinking of 'First' LAMBOUSA

Another trawler named LAMBOUSA predated the known boat up until 1965 were it reached its fate at the bottom of the sea. On the evening of March 9, 1965, at 18:00, the 'first' LAMBOUSA embarked on a fishing expedition from Ormidia bay. As the night unfolded around 23:00 to 23:30 near Cape Pyla, in the Kokkina locality about 3 km off shore, the trawler encountered a perilous situation. Captain Costas "Ashikkalis" Christodoulou, at the helm, detected a sudden and alarming leak.

Promptly recognizing the gravity of the situation, Captain Christodoulou rallied his crew, and together they initiated efforts to counter the influx of seawater. Armed with an auxiliary pump and buckets, the crew worked tirelessly to stem the leak. Unfortunately, their attempts were hindered as the volume of seawater proved overwhelming, rendering the auxiliary.



In a decisive move to ensure the safety of his crew, Captain Christodoulou made the difficult decision to abandon the stricken trawler. Urgently, the crew evacuated onto a rowing boat, leaving the LAMBOUSA behind. Tragically, the fishing trawler succumbed to the relentless ingress of water and ultimately foundered. The circumstances under which the LAMBOUSA sank remain unknown. Following the sinking, the owner used insurance funds to purchase the new LAMBOUSA, originally named Omonoia, the one we have today.



Other Cyprus' Traditional Boats

Other traditional trawlers that existed in Cyprus were 'AGIOS STYLIANOS' and 'EFTHIVOULOS', owned by Georgios Loukas and two or three others. Another was '[AGIOS SPYRIDONAS](#)', built in 1950, withdrawn together with LAMBOUSA in 2004, documented by digital and conventional methods and later destroyed under controlled procedures by the [Maritime Archaeological Research Laboratory](#) at the University of Cyprus in 2019.



The Withdrawal and the Problem of Overfishing

The vessel “LAMBOUSA” was decommissioned in 2004 as part of a European initiative to combat overfishing, a severe problem characterized by fishing practices that exceed sustainable limits, leading to ecological imbalance, economic instability in fishing communities, and the endangerment of key species. Overfishing disrupts marine biodiversity and food chains, pushing species like the Mediterranean bluefin tuna and various sharks to near extinction. Efforts to reverse these effects include establishing Fisheries Restricted Areas and implementing management plans for vulnerable stocks.



These measures are essential for the recovery of depleted stocks and ensuring the sustainability of marine ecosystems.



Useful References about Overfishing



[Sustainable Fisheries Initiative \[ARTICLE\]](#)



Our Fish [Mediterranean Overfishing Crisis \[ARTICLE\]](#)



[Fishing boats destruction \[ARTICLE\]](#)



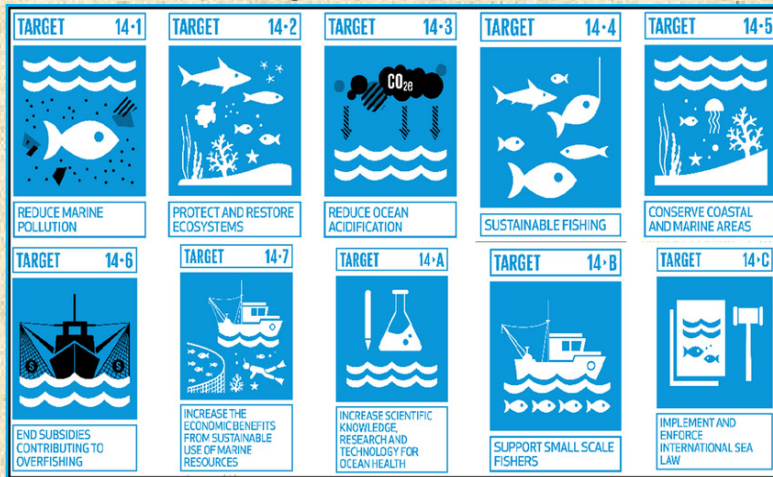
[Overfishing: How Long Until We Run Out of Fish \[VIDEO\]](#)



UN Sustainable Development Goals (SDGs)

The SDG 14 of [United Nations Sustainable Development Goals \(SDGs\)](#) focuses on conserving and [sustainably using oceans](#), measured by 10 interrelated targets. SDG 14 focuses on reducing marine pollution, protecting ecosystems, and promoting sustainable

fishing practices as emphasized by [Our World in Data](#). These efforts are crucial for maintaining ocean health and supporting economic growth through sustainable marine practices.



Video Page

[Overfishing \[VIDEO\]](#)



Limassol's Contribution to LAMBOUSA



Limassol's Municipality has been instrumental in preserving the LAMBOUSA fishing vessel, a crucial element of Cyprus's maritime legacy and the last big traditional fishing boat in the island. LAMBOUSA, a representative example of Greek shipbuilding tradition and an important part of Cyprus cultural heritage, was retired and entrusted to Limassol in 2005. This occurred after the boat's active service ended in 2004, following the government's decision under a European program to withdraw several vessels to protect marine life. Its rescue is a very important milestone in the field of digital cultural heritage, especially because, according to the [Regulation \(EU\) No 508/2014](#) – the European Maritime and Fisheries Fund, certain fishing boats should now be destroyed. After serving the seas for five decades, LAMBOUSA underwent periodical maintenance procedures under the city's care until 2023. Then, a full restoration was undertaken, including the replacement of most of the timbers and the extensive repair of the engine and the fishing equipment. The restoration was meticulously carried out to reconstruct the vessel in the same way it was originally built in 1955. This restoration was funded by the [European operational program 'Sea'](#) for the period 2014-2020.



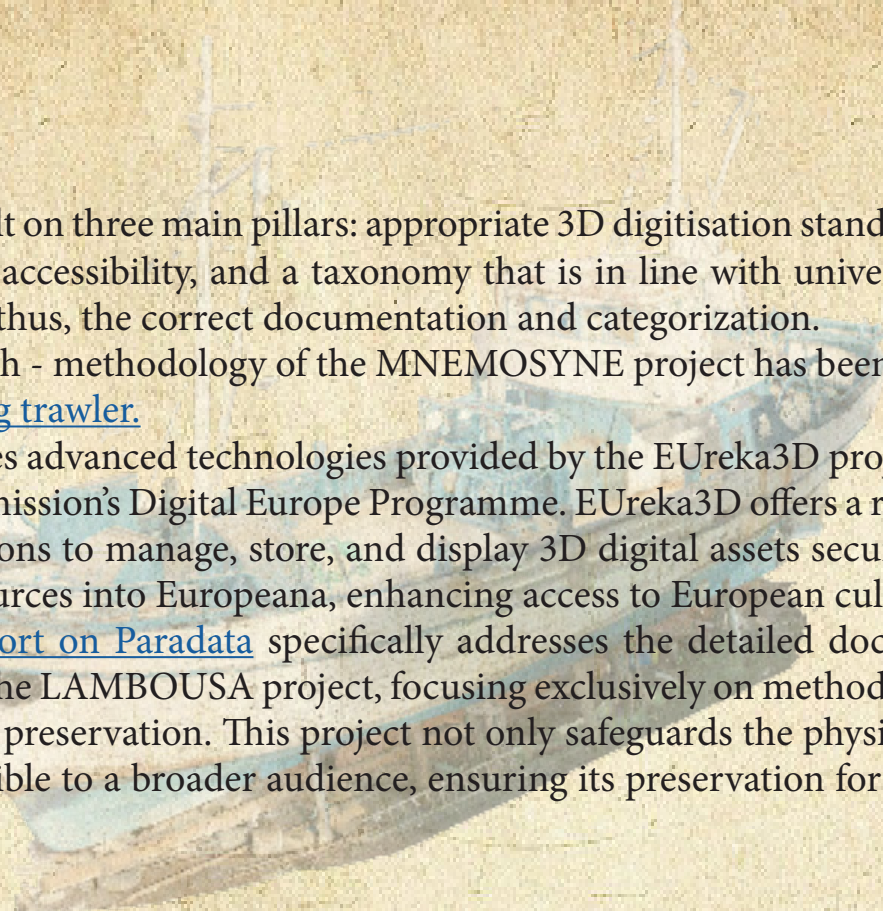
The Digitisation of LAMBOUSA

The UNESCO Chair on Digital Cultural Heritage at Cyprus University of Technology, in collaboration with the Municipality of Limassol, is digitally preserving the LAMBOUSA fishing boat, an integral part of Cyprus' maritime heritage, under the [MNEMOSYNE project](#). The MNEMOSYNE project applies a complete methodology based on the [Study of Quality in 3D digitisation of tangible cultural heritage](#) for the preservation of cultural heritage that includes all the phases from the data acquisition to the



reuse. Major activities are the collection of correct data, the estimation of complexity & quality, its transformation into structured formats for analysis and management of knowledge for easy access and educational application. The project also aims at developing detailed digital models of the artifacts and the ways of their long-term preservation are also given. Moreover, it organizes data for general use, thus, increasing the academic worth of digital assets.





This approach is built on three main pillars: appropriate 3D digitisation standards, user-specific digital content accessibility, and a taxonomy that is in line with universally accepted Getty vocabularies, thus, the correct documentation and categorization.

The holistic approach - methodology of the MNEMOSYNE project has been applied to the [LAMBOUSA fishing trawler](#).

This initiative utilizes advanced technologies provided by the EUreka3D project, funded by the European Commission's Digital Europe Programme. EUreka3D offers a robust platform for cultural institutions to manage, store, and display 3D digital assets securely online, integrating these resources into Europeana, enhancing access to European cultural heritage. The [EUreka3D Report on Paradata](#) specifically addresses the detailed documentation of paradata related to the LAMBOUSA project, focusing exclusively on methods, and processes utilized in digital preservation. This project not only safeguards the physical artifact but also makes it accessible to a broader audience, ensuring its preservation for future generations.

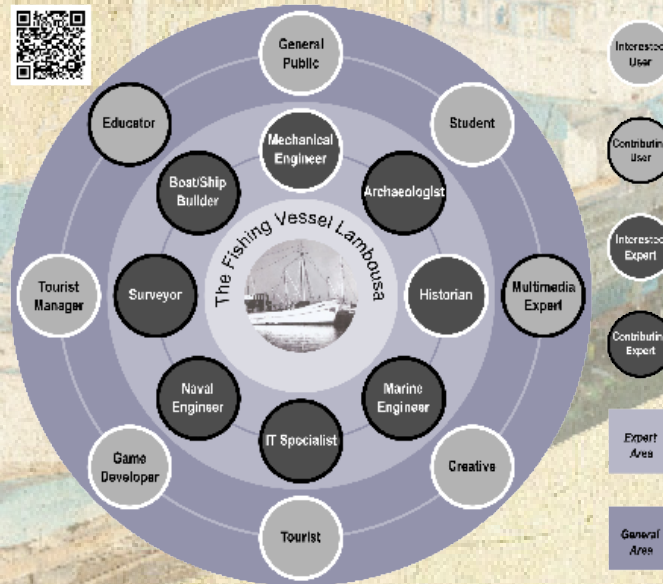


Team of European project Mnemosyne at the Lambousa trawler, Karnagio shipyard, Limassol, March 24th, 2023



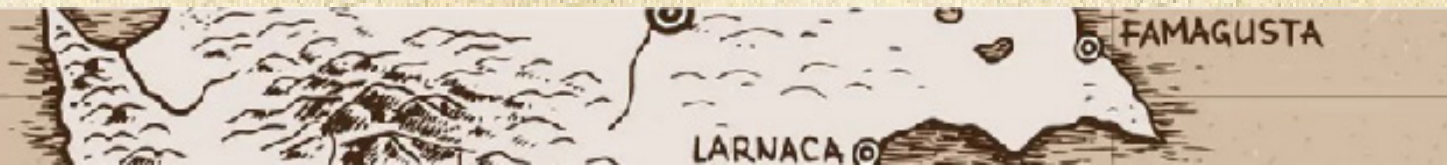
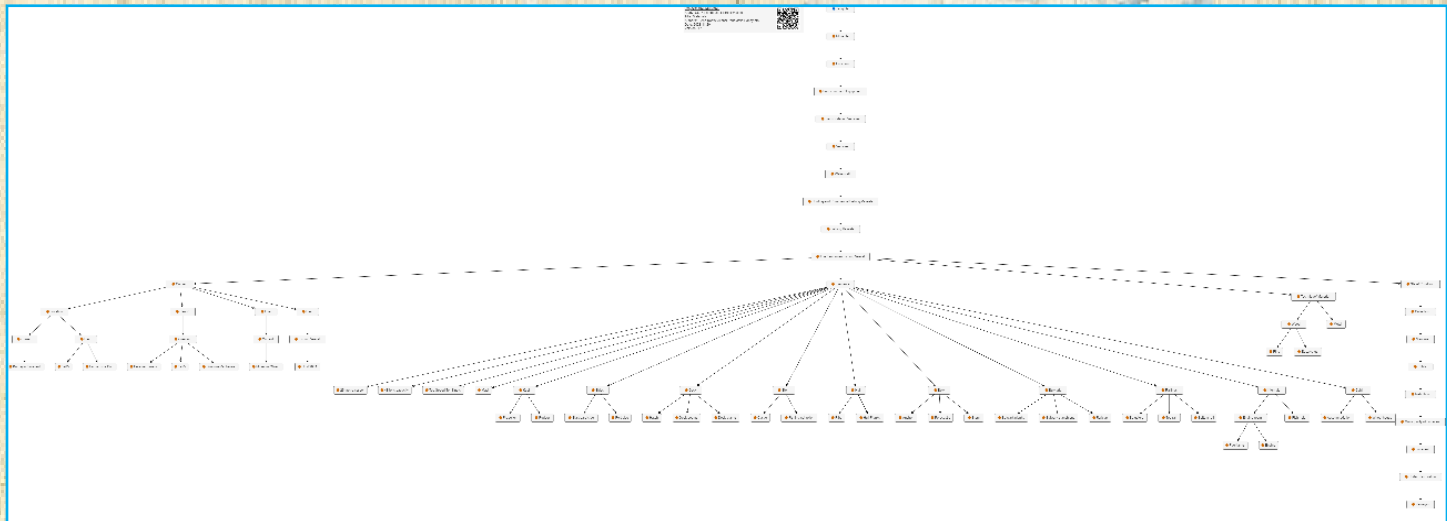
User Categorisation

User categorization in digital cultural heritage involves classifying users by their expertise and interest, facilitating tailored access and contribution to cultural heritage content.

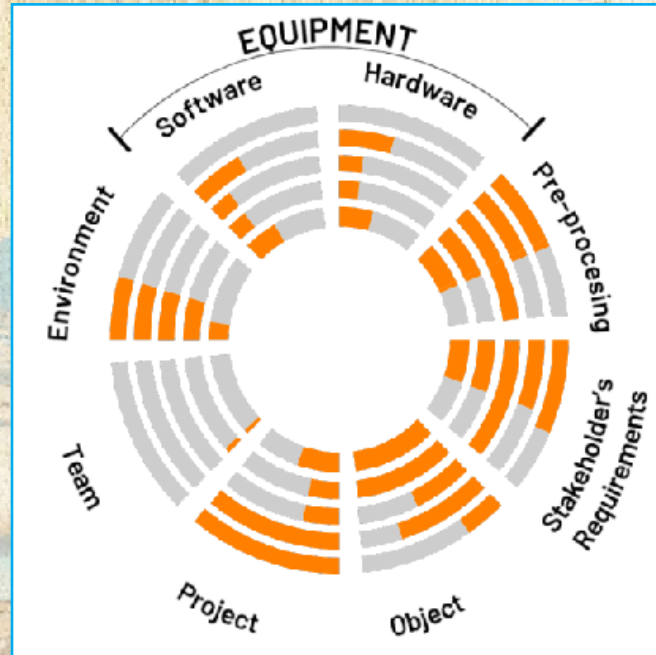


Taxonomy

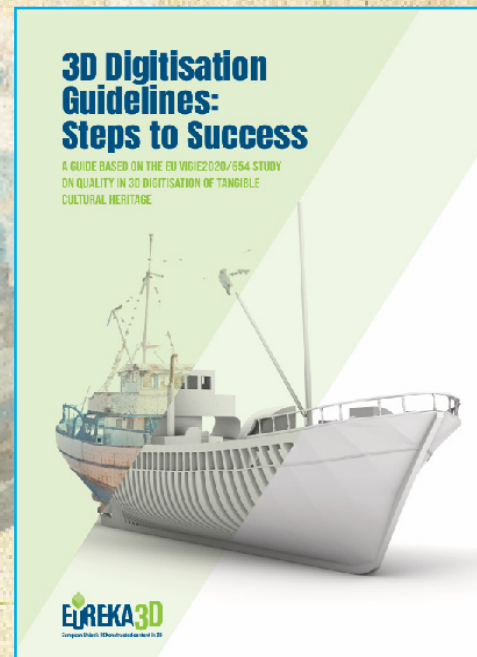
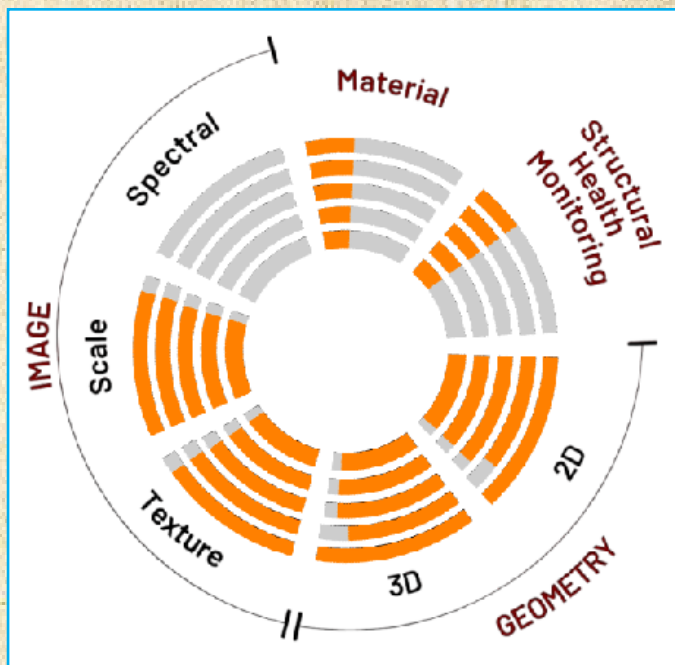
Taxonomy in digital cultural heritage, refers to the systematic classification and organization of information about the object. This process involves creating a structured framework that categorizes various attributes and metadata associated with the object.



Complexity Chart based on [EU VIGIE 2020/654 Study](#)

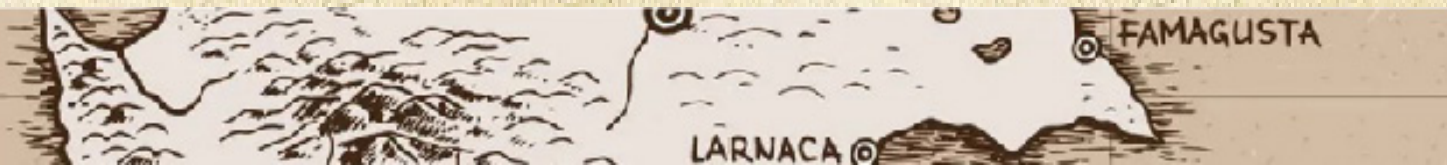


Quality Chart based on EU VIGIE 2020/654 Study

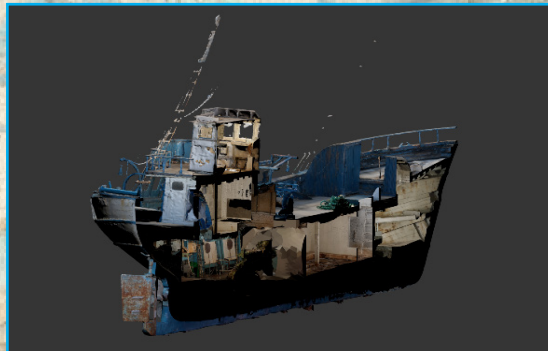


Model Development

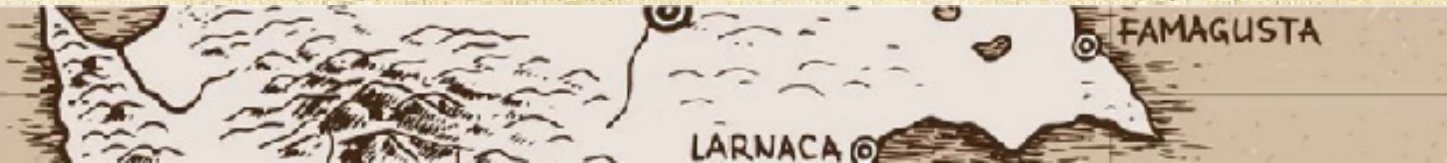
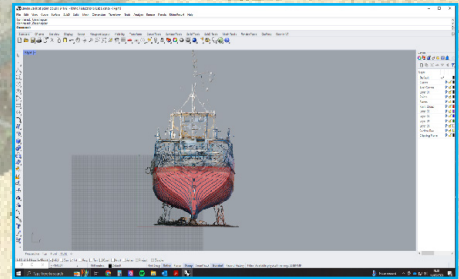
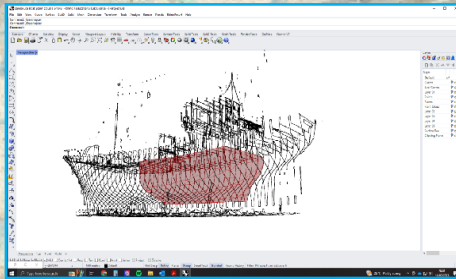
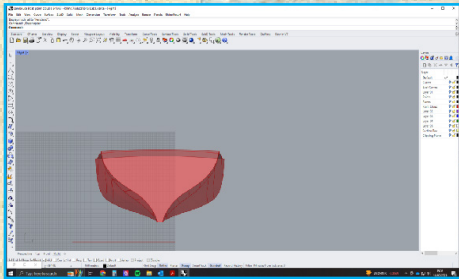
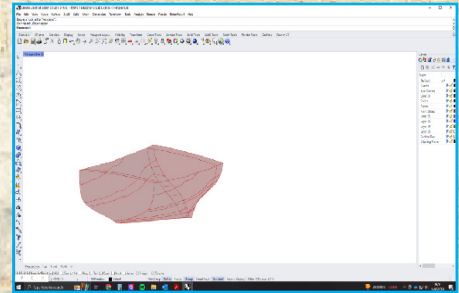
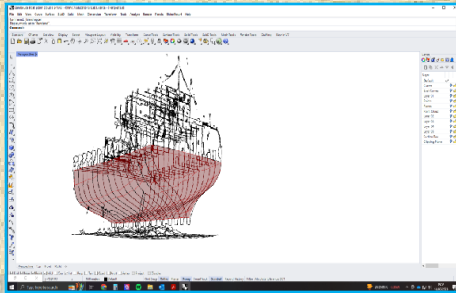
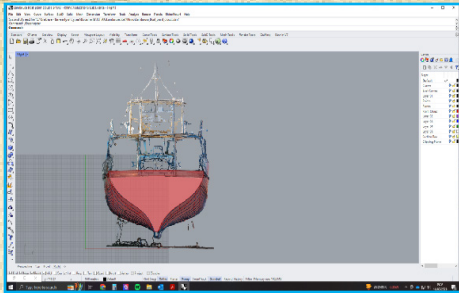
3D Photogrammetric Measurements



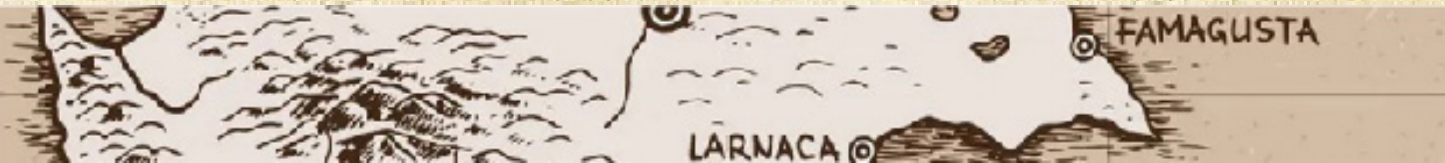
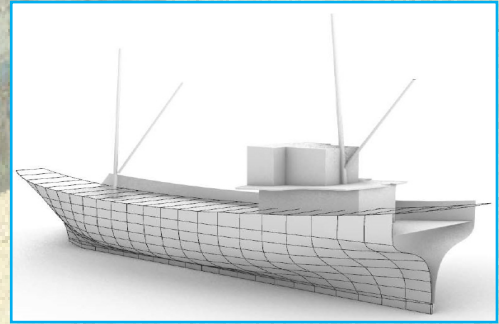
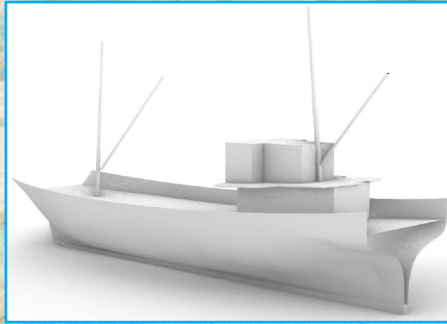
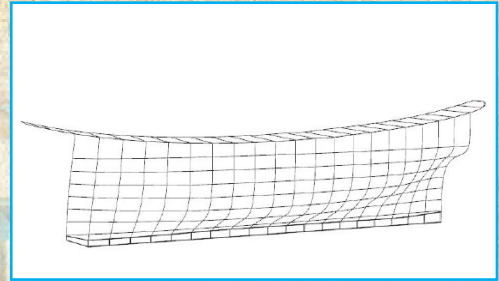
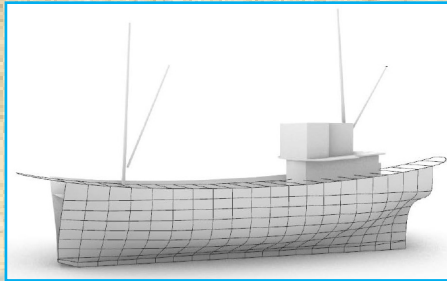
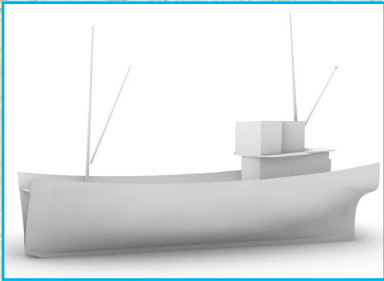
Photogrammetry Cross-sections



Creating the Lambousa BIM Model



Building the Lambousa 3D Mesh Model



Video Page

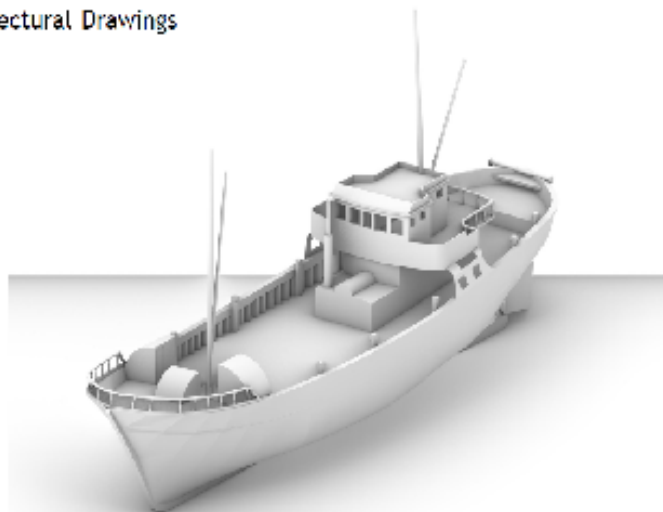
[Pre Modelling of Lambousa \[VIDEO\]](#)



LAMBOUSA Naval Drawings

Modelling of the Lambousa Fishing Trawler

Naval Architectural Drawings



LAMBOUSA Trawler Showcased at Twin it! Event

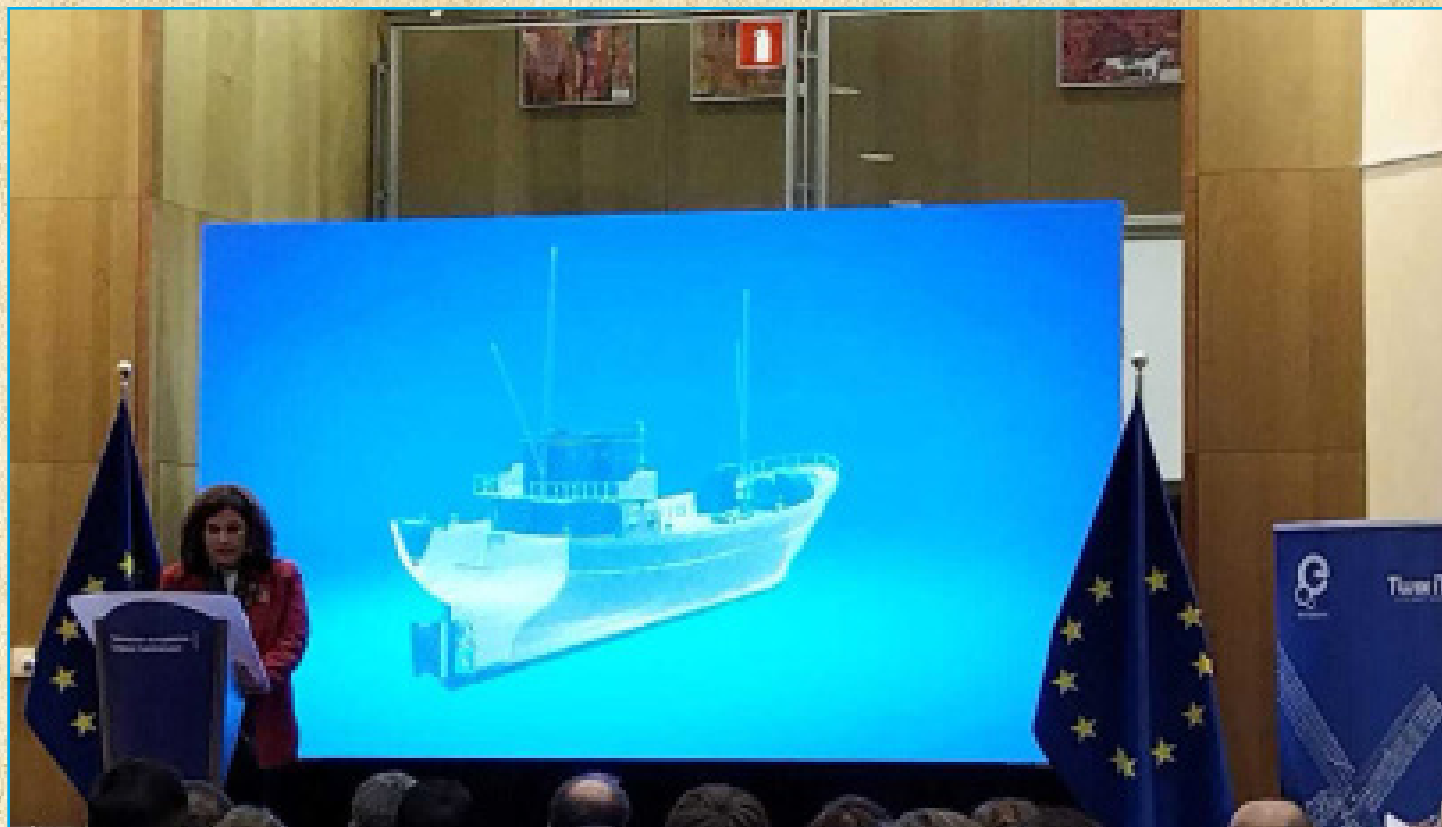
The high-level event of the [Twin it! 3D for Europe's Culture](#) campaign, held on 14 May 2024 in Brussels, showcased the transformative impact of 3D technologies on cultural heritage. Hosted by the European Commission and the Europeana Initiative under the Belgian Presidency of the Council of the EU, the event featured presentations from 10 EU Ministers of Culture, EU representatives, and experts. Among the highlighted projects was the 3D model of the LAMBOUSA



trawler, presented by the Deputy Minister of Culture, Mrs Vasiliki Kassianidou. This presentation included the LAMBOUSA's story and the interactive eBook, exemplifying the campaign's success in cultural preservation through 3D technology. The event was inaugurated by Thierry Breton, European Commissioner for Internal Market, and Jan Jambon, Minister-President of the Flemish Government.

[Photos from the event](#)





The Legacy of the LAMBOUSA Trawler



The LAMBOUSA fishing boat is a cornerstone of Mediterranean maritime heritage, exemplifying Greek traditional woodcarving techniques and enduring seafaring traditions. Its transformation into a floating museum by Limassol's Municipality enriches the multidisciplinary user community, making it a vital tool for education in naval engineering and cultural tourism. The preservation of LAMBOUSA not only showcases the last of Cyprus' traditional fishing trawlers but also serves as a living memory of the Cypriot fishing history, enhancing the collective maritime identity. By offering insights into the complex craftsmanship of Cypriot mariners, LAMBOUSA plays a pivotal role in educating the public and fostering a deeper appreciation for historical vessels. This initiative helps safeguard the island's maritime legacy, promoting

a greater understanding and appreciation of Cyprus's rich cultural heritage.



Acknowledgements



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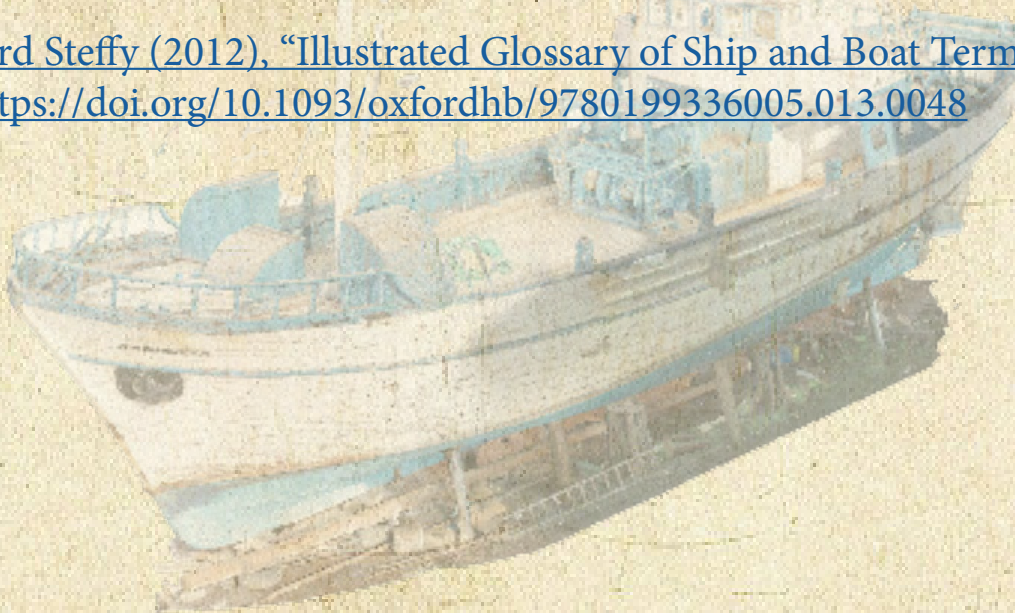
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Links and References

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- [Pattichion Municipal Museum – Historical Archive – Limassol Studies Centre](#)
- [Shipping Deputy Ministry](#)
- [Department of Fisheries and Marine Research](#)
- [Cyprus State Archives](#)
- [ERA CHAIR Mnemosyne at Digital Heritage Research Lab](#)

