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## Sunken Cities: Underwater Culture Heritage of Alexandria at Abukir Bay

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### **Abstract**

*The purpose of this research is to highlight on the Alexandria underwater culture heritage at Abukir Bay the efforts of SCA in the management of the UCH in Egypt through the establishment of a department specializing in that field.*

*In addition, the paper focuses on the Sunken Cities at Abukir Bay and efforts of the cooperation between Supreme Council of Antiquities (SCA) and the foreign missions to discover a number of underwater sites that Abukir Bay is one of them.*

*In addition, the paper introduces a New Vision for the site of the Sunken Cities, and how we benefit from this unique site in the future.*

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## **Introduction**

According to the definition of International Committee on the Underwater Cultural Heritage (ICUCH) and the 2001 UNESCO Convention that “Underwater cultural heritage” means all traces of human existence having a cultural, historical or archaeological character which has been partially or totally under water, periodically or continuously, for at least 100 years such as:

Sites, structures, buildings, artefacts and human remains, together with their archaeological and natural context. Vessels, aircraft, other vehicles or any part thereof, their cargo or other contents, together with their archaeological and natural context and objects of prehistoric character.

Alexandria underwater culture heritage dates back to different periods, there are many cities underwater in the Alexandria coast. the research will focus on the Sunken Cities in Alexandria at Abukir bay exactly, the history of these cities, why are the cities now underwater?

Also, the beginning of the discovery and the collections that came from these sites and Where these collections are now. the efforts of the ministry of Antiquates in protecting and preserving our underwater cultural heritage and we can benefit from it, in terms of increasing the national income and increasing the community awareness concerning of our underwater cultural heritage.

### **1. Alexandria Underwater Culture Heritage at Abukir Bay:**

For many centuries, Alexandria was the major port city in the Eastern Mediterranean. It was established by Alexander the Great in 332 B.C. and developed by his successors, the Ptolemies, who reigned until 30 B.C (Stanley, J. D., Jorstad, T. F., & Goddio, F., 2006.

### ***1.1. Abukir Bay:***

Abukir Bay is a large bay on the Mediterranean Sea near Alexandria, located between the Rosetta mouth of the Nile and the town of Abukir. It is characterized by its rich submerged heritage from the Pharaonic era to the modern time. In 1798, it was also the site of the battle of the Nile between the British Royal Navy and the Navy of the French First Republic by Napoleon. Its submerged heritage can be divided into two parts: the first part, the Sunken Cities (Canopus, Menouthis, Heracleum) and the second part, the fleet of Napoleon (Darwish, I., 2017).



**Fig. 1 - Satellite View of Abukir Bay.**

### ***1.2. Canopus:***

Canopus is an old Egyptian city, northeast of the modern port of Abukir. It is an area containing numerous remains was identified in 1999 (Goddio, F., & Masson-Berghoff, A., 2016). The name of Canopus mentioned for the first time in the 6th century BC in a poem by Solon. The settlement's Egyptian name was Pa-goti

(Darwish, I., 2017). The Greeks called it Canopus. Canopus was the site of a temple to the Egyptian god Serapis that was found next to a Christian monument are highly significant. This site is about 150 M long line of ruins, broken smooth red granite shafts of columns, limestone building blocks and other archaeological elements. Also, other artifacts from the Byzantine period including jewels, crosses, coins. To the northwest of the Byzantine structure, there is two meters of sand the well-preserved foundations of an Egyptian temple of limestone blocks.

The indicate that the Christian complex near the great pharaonic shrine of Serapeum corresponds to the Martyrium of Saint John and Saint Cyril. The identification of the sanctuary as the Serapeum of Canopus was confirmed by the discovery of the main temple of Thonis- Heracleion, because the distance between the sanctuaries corresponds to that mentioned in the ancient texts (Goddio, F., &



Masson-Berghoff, A., 2016).

**Fig. 2 - Map of Nile Delta Showing Ancient Canopus, Heracleion, and Menouthis.**

### 1.3. Menouthis:

A British aircraft pilot drew Prince Omar Tousson's attention to some ancient vestiges lying under water in Abukir, some 30 km from Qaitbay, east of Alexandria. Tousson recruited the services of a deep-sea diver and set off on the 5th of May 1933 to the indicated area, where a marble head of Alexander was recovered from a depth of 5 m, some 450 m east of Ramleh Fort.

Through 1933–1942, Tousson and his assistant undertook a number of exploratory missions that uncovered other remains. At the end of this period, Tousson associated the town of Menouthis and its temple with a site found underwater by re-examining ancient sources. With the location of Menouthis thus fixed it became easy to situate the city of Heracleion on the map (Tousson 1934).

This ongoing The European Institute for Underwater Archaeology (IEASM) project started June 1997 with plans to survey a 150-square kilometer off Abu-Qir Bay, about 30 kilometers to the east of the Pharos site. The objective was to discover the submerged remains of the two long-lost cities of Menouthis and Heraclium, which disappeared more than 1000 years ago. These cities were renowned for their riches and lifestyle, as well as their temples dedicated to the gods Serapis, Isis, Anubis, and Hercules.

IEASM conducted a geophysical bathymetric survey using the mapping techniques developed in the Eastern Harbor. Survey methods included side-scan sonar, sub-bottom profiler, and magnetometry. In 1999, the discovery of Menouthis and Heraclium was announced. Several fractured columns and other architectural elements had been found submerged in silt fewer than 8 m below the sea surface. Many artifacts were discovered including several granites and marble statues ranging in date from the 25th pharaonic dynasty to the Byzantine period. In addition, a collection of jewelry, gems, and gold coins were found to date to

Byzantine and early Islamic periods. In Menouthis, the remains of one of the famous Isis temples were discovered. (Khalil, E., & Mustafa, M. (2002).

#### 1.4. Thonis-Heracleion:

Thonis and Heracleion are mentioned as separated cities in the ancient Egyptian and Greek sources. The trilingual decree of Canopus is one of them that issued in Egypt in 238 BC.

Excavation on the site provided evidence to prove that Thonis and Heracleion were, in fact, the same town (Goddio, F., & Masson-Berghoff, A., 2016).

In 2001, The first step of excavation started in the Heracleion city from 14th of April to 8th of June. These excavations were with cooperation between the Egyptian team of UCH and the team of IEASM. They found a ruin of the city, its port, and ruins of sunken ships and number of antiquities (Darwish, I., 2017).

Twelve years of underwater archaeological excavation in Thonis-Heracleion have brought to light important information about the topography of this site, located at the Canopic mouth of the Nile (Goddio, F., 2015).

#### 1.5. The Fleet of Napoleon:

The European Institute for Underwater Archaeology (IEASM) has relocated the wrecks of Napoleon's fleet sunk in 1798 and has added the discovery of the frigate La Serieuse. In fall 1998 and 1999, IEASM worked to salvage the flagship L'Orient. So far, the IEASM team has recovered gold, silver, and bronze coins, ceramic, leather, wooden and metal artifacts from daily life, human and animal

remains, weapons, and artillery. A large section of the ship's hull was uncovered and is being studied by measurement and data collection (Khalil, E., & Mustafa, M., 2002).

## **2. Why are the Cities Now Underwater?**

What are the main reasons for submerged this landscape beneath the water of Abukir Bay? Actually, various causes may be the reasons for this, including seismic (earthquakes, and tsunamis), hydrological (floods and variations of sea level) and geological (subsidence). IEASM and team working alongside them revealed that the site in the Canopic region was subjected to all three elements, which operated in different timescales. There was the long-term subsidence of the edge of the Nile. Also, the sea level has risen in the local area by 1 to 1.5 Mover the last 2000 years. This was the cause of the collapse of the major temples of Thonis- Heracleion at the end of the second century BC (Goddio, F., & Masson-Berghoff, A. (Eds.), 2016).

## **3. The Efforts of SCA to Protect this Underwater Culture Heritage:**

Actually, the efforts of Ministry of Antiquities (SCA) started by establishing a department of Underwater Culture Heritage (UCH) specializing in that field, after many years of individual attempts, to explore the underwater cultural heritage of Egypt. This work was with cooperation between the Supreme Council of Antiquities (SCA) and foreign missions (Khalil, E., & Mustafa, M. (2002).

## **4. The Collections of Sunken Cities:**

In 2001, The first excavation started in the site of Heracleion city by the team of The European Institute for Underwater Archaeology (IEASM) and the Egyptian team from the Inspectors of Underwater Culture Heritage (UCH). They

succeeded in finding the ruins of the city, some remains of the sunken ships and a number of monuments, for instance; (Darwish, I., 2017).

- A statue of a king, red granite, wearing the double crown of Egypt, 5.30 M.
- A statue of the Nile god Hapi, red granite, 5.65 M.
- A statue of goddess Isis
- A large number of golden, bronze and silver coins go back to the Ptolemaic period.
- Collection of large pottery,
- Granite blocks from the temple of Heracleion.
- Head of the god Serapis, white marble.
- Head of Alexander the great, white marble.
- Collections of jewelry, earrings, rings etc.
- A number of stelas with Hieroglyphic Inscriptions.

### **5. How Can We Benefit from these Collections?**

These collections of underwater antiquities used in different temporary exhibitions outside Egypt in; Institut du Monde Arabe, Paris, the British Museum, London, Museum Rietberg, Zurich and Saint Louis Art Museum. The collections still outside Egypt to the moment. This collection is a good ambassador for our underwater cultural heritage outside Egypt.

### **6. New Vision for the Site of the Sunken Cities (Abukir Bay):**

There is no doubt that this site is very rich and attractive for the visitors, therefore we must have to create a cultural resource center, this physical building located on or near the site; this center will introduce a full information about the history of this area, and itself. This visitor center will be a powerful tool can be used effectively in the raising awareness process to stimulate the public towards understating their history of both maritime and the underwater archeology (Nizar, N., 2017). This center will include the following;

#### ***6.1. Simulation Model for the Sunken Cities:***

It will be a large model for the three cities and a video for each city with everything is underwater to the moment. It should be better to let the visitors to link what they will see from the model and linked it with the current situation of underwater archaeology.

According to the existence of these cities underwear, simulation is a very good idea, give you the time to think, and to ask yourself how the three cities are now underwater. This type of exhibition is more attractive for the visitors and something new, they did not see it before for underwater archaeology in Egypt.

#### ***6.2. A Museum Exhibition for the Underwater Collections:***

It was mentioned that a big number of underwater collections came out from the Excavations in this site. These collections went to different places and museum in Alexandria; National Museum of Alexandria, Museum of Alex library, Greco-Roman Museum etc. but now these collections are outside Egypt in a temporary exhibition in different Countries.

Normally, these collections have to come back to its place, it will be a very attractive display for these collections in a new display with interactive screens, showing the underwater Archaeology as an attractive tool in the museum display.

### 6.3. Diving Center for the Public:

Establishing a diving center for the visitor is something essential not for study or training for underwater Archaeology team (UCH). Using this center in diving to see the remains of the sunken cities underwater and wandering the cities is very attractive for the visitors. Also, this center will be a source of income.

### 6.4. Using the Facilities to Increase Income:

The facilities of the center can enrich the income that will help support the center to continue to introduce its message for the community, this will be by different resources; paid tickets for the center, cafeterias, paid workshops for the kids, paid ticket for the diving center, gift shops including gifts from the collections of the site.

## 7. CONCLUSIONS:

Briefly, Egypt is a rich country in its cultural heritage sites and underwater archaeology. The protection of this cultural heritage needs a lot of efforts from all, to maintain and to manage this heritage. The society has a very big role to increase the community awareness for our heritage and how we help in its protection. The Government also has to have the same role in the protection of cultural heritage through the legislation and laws.

Alexandria is one of our underwater archaeology sites. It has different sites of underwater archaeology. Excavations started in Alexandria individually, from the time of OmarTousson, through Kamel Abul-Saadat to the work of the Egyptian team of SCA (UCH) with cooperation with the foreign missions. As a result of all these, many objects came out from different sites in Alexandria.

Abukir Bay is one of the most important underwater sites in Alexandria. This site had three old cities, Canopus, Heracleion, and Memphis. After many years of excavations between the Egyptian team and The European Institute for Underwater Archaeology (IEASM). These excavations revealed a lot of objects and ruins of temple and ruins of the old cities.

On the other hand, what is the best way to benefit from all these results? Setting up a cultural center on this site is something necessary to serve the community and get income, to help this center to continue introducing its services and achieve its goals.

Finally, the protection of underwater cultural heritage is essential. Not only, its protection but also, how to manage this heritage and benefit from it to increase the national income.

### **Biography:**

Sayed Abuelfadl Ph. D Candidate Heritage and museum studies, Helwan University, Egypt, graduated from Faculty of Archaeology Cairo University, Holding an MA in Museum Studies from Faculty of Tourism and Hotels Management, Helwan University in 2017 and works as Curator at the National Museum of Egyptian Civilization (NMEC) Egyptian Ministry of Tourism and Antiquities Since 2004.

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