THE FIRST NEWSPAPER REFERENCES TO THE ANTIKYThERA SHIPWRECK DISCOVERIES

Magdalene Nikoli
Aristotle University
Department of Physics
Laboratory of Astronomy
GR-541 24, Thessaloniki, Greece
E-mail: manikoli@physics.auth.gr

John H. Seiradakis
Aristotle University
Department of Physics
Laboratory of Astronomy
GR-541 24, Thessaloniki, Greece
E-mail: jhs@astro.auth.gr

The Antikythera Mechanism is an ancient Greek bronze, geared device, often quoted as the world’s first computer [1,2,3]. But when, where and how was this extraordinary technological device, which has attracted widespread interest, discovered? The sequence of events, following the discovery of the Antikythera shipwreck and the Mechanism, are investigated through a series of newspapers articles dated from November 1900 to December 1902. The difficulties of the marine excavation, the financial and technical problems and the excitement that followed the discovery are described step by step.

1. Introduction

In order to unfold the thread of this unique and interesting story five contemporary Greek newspapers were thoroughly investigated between the 1st November 1900 and the 31st December 1902. In total about 440 articles were found in: Empros (161 articles), Estia (76 articles), Proia (9 articles), Skrip (154 articles) and Sfaira (42 articles).

From Antikythera to the Square Kilometre Array: Lessons from the Ancients,
Kerastari, Greece
12-15 June 2012

1 Speaker
2. The discovery of the Antikythera shipwreck

The unique path of the discoveries [4] began on Holy Tuesday of 1900 (according to the Julian calendar used at that time) when a group of Symiot sponge divers, including 6 divers and 22 rowers in 2 boats, probably sailing to Africa, were confronted by stormy weather in the passage between the islands of Crete and Kythera (Fig.1). Thus, they were forced to resort in the Ormos of Potamos in Antikythera where they anchored.

Antikythera is a small island, only 6 miles in length and 2 miles in width, located halfway between Kythera and the peninsula of Gramvousa in western Crete. The highest peak of its rocky and stony surface is 378 meters above sea level. In ancient times it was called Aigila or Aigilia while nowadays the locals call it Lious and Sigilio and the sailors refer to it as Tsirigoto. This particular passage, from ancient times until now, is extremely dangerous for ships as it is a region with moving sand, shallow water and irregular currents.

When the storm passed, one of the two boats sailed to nearby cape Glyfadia, in the northeast of Antikythera, probably in search of seafood for the days of fasting. Elias Lykopandis a strong and experienced diver (also called Stadiatis, due to his origin from Stadia of Asia Minor) dived, not far from the shore, at the position of Pinakakia. When he reached a depth of about 35 fathoms, he signaled to be pulled up. Captain D. Kontos and the crew were utterly surprised seeing what Elias had brought up with him from the bottom of the sea. Elias Lykopandis had discovered an ancient shipwreck full of marble and bronze statues and other ancient items, lying on the seabed. As evidence he had brought with him an oversized right forearm which was part of a bronze statue. And this was the beginning of the remarkable course of events that followed.

2.1 Reporting the discovery

After the discovery, the group continued its journey to the shores of North Africa, searching for sponges and later returned to Symi, without any incidents worth mentioning. Back home, they spent some months enjoying the fruits of a successful mission, while lively discussions were held and advice was requested from the elderly, about what to do with the treasure of the ship. Eventually, the Symiot professor of Archaeology at the University of Athens, A. Economou, convinced them to report the findings to the Government, rather than engage in an unlawful adventure. Thus, on November 6, Dimitrios Kontos and Elias Lykopandis went to Athens taking with them the bronze forearm as evidence and presented themselves to the Minister of Education, Spyridon Stais. This was the day when the first announcement about the shipwreck was published in the newspapers of the time. However, according to other information the divers had informed the Government about the treasure...
immediately after its discovery but nobody paid attention to them or did anything in order to confirm their words. Therefore, only when they brought the forearm as evidence they attracted the interest of the Minister and things started moving straight away.

3. The marine excavations

According to the newspaper articles the sponge divers agreed to participate in the marine excavation and they were promised to receive adequate remuneration for the treasures they would pull out and deliver to the Government. At the same time, during the excavation they would have a navy boat at their disposal with the necessary equipment, for the lifting of heavy objects. It was also agreed that an accredited archaeologist would be onboard in order to oversee the whole operation and this particular mission was entrusted to the friend of the sponge divers, professor Economou.

3.1 Organizational matters

The troopship “Mykali” was immediately made available and with captain Andreas Sotiriadis and officers assembled from other ships at the last minute, she sailed on November 24, 1900. Right from the beginning the divers had to deal not only with the bad weather and the rough sea but also with the unsuitability of “Mykali” which due to her size many times could not approach the site of the excavation and assist the divers in their work. This is why the assistance of other, smaller ships (“Aigialia”, “Kissa” and “Syros”) was often requested. Despite these difficulties the divers were not prevented from doing their job and they recovered antiquities immediately, from the first day of their mission. Initially, it was assumed that a week or even a month would be enough for the hoisting of the antiquities but soon they realized that more time was required as the statues lying on the seabed were not only numerous but also they were of unique archaeological value and thus the divers would have to be extra careful.

3.1.1 Diving techniques

Despite the initial difficulties the chronicle of the excavation began immediately and soon a large number of archaeological treasures was brought to light. The divers work was very hard and they had to put a lot of effort and labor. They could stay in the water only for 8 minutes from which 5 were needed for descend and ascend and thus only 3 minutes were left to work on the seabed. When they worked more than that they returned to the surface almost unconscious and “pale-green”. Apart from that, according to some articles, an earthquake that had occurred the previous years had caused damage and had accumulated boulders on the wreck smashing a large part of the treasure. The bonding of the marble objects with the natural rocks was so strong that the divers were unable to separate them, so their work became more and more difficult, day by day. Moreover, the long stay in the sea (almost for 2000 years) had also destroyed and damaged many of the statues while others had been transformed into lumps of calcified objects. Even the ones that had remained relatively intact were probably being destroyed during the hoisting, due to their delicate state.
It should be mentioned that during these two years many articles were published describing the efforts of the Greek Government to come to an agreement with expert companies from abroad, which would undertake the excavation of the rest of the antiquities that were lying on the seafloor. The most famous of these companies was from Genoa but its demands were excessive and thus they never came to an agreement.

Some newspapers suggested that more suitable equipment should be brought from abroad or even stop the excavation altogether and leave the antiquities to be discovered by later generations with more appropriate technology. On the other hand, many specialists as well as the Ministry’s personnel disagreed and expressed the opinion that the damage seen in many statues was not caused by the divers and that in no case should they leave them to get more corroded by the sea water.

3.2 Difficulties during the excavation

Bad weather, prevailing for long intervals, forced the divers to often interrupt their work. By the end of February 1901 they were frustrated and wanted to abandon the excavation, saying that they believed that there was nothing else left to be found. However, the Minister, who had visited them at Antikythera [5], convinced that more antiquities lied on the seafloor to be discovered, taking into account that there were missing parts of many statues, tried to persuade them to continue their work by giving them additional financial reward. And he did so! The divers at the end of March 1901 repeated the excavation.

On April 28, 1901 a sad event was published in the newspapers. The sudden death of the diver Georgios Kritikos shocked everyone while 2 days later a human skeleton was found in the vicinity of the shipwreck.

During the months that followed, they extracted a few antiquities that were thought not to be of great archaeological value and finally, by the end of September 1901, the excavation was halted permanently. The divers could not recover any further antiquities anymore and being disappointed abandoned the excavation and returned to their home at Symi.

Another important issue that occupied the journalist’s interest for a long time was the compensation of the divers. The amount of their reward was set at 150.000 drachmas and despite their demands and objections and a dispute with the Ministry, they finally signed the contract of payment in January of 1902.

4. The Antikythera treasures

Despite the above mentioned adversities, the interval between November 1900 and February 1901 was very productive and during this period, most of the antiquities were found. Among these there were: marble and bronze statues, parts of statues (head, arms, legs or bodies), sculptures, pottery, bronze vessels, jugs, cups, plates, utensils and food containers, bronze and gold jewelry, a war sword, parts of a decorated bed, the head of a bronze lion, parts of horses, an anchor as well as parts of the ship, some statues representing boxers in action, athletes and other adolescents.
All these statues and items were transferred with “Mykali” and “Syros” every time they returned to Piraeus from Antikythera. During these frequent journeys the Minister of Education, the curators of the antiquities, as well as other important people, often sailed from Piraeus to Antikythera and vice versa in order to supervise the work of the divers. (Fig.2)

4.1 The exhibition of the treasures

In the beginning the antiquities were exhibited in the Ministry of Education, where people could visit them until the end of January 1901. Every day, crowds of people visited the Ministry mainly Greeks but also scholars from abroad, who admired the antiquities and mostly the imposing statue of Hermes (nowadays known as the Antikythera Youth), which caused admiration, enthusiasm and emotion. Everyone agreed that these antiquities were unique and their value was immeasurable. On February 3, 1901 they started being transferred to the Archaeological Museum where they were placed in a special room that Minister Stais had ordered to be prepared only for them. Outside the room there was the label “Kythera finds”.

Many archaeologists studied the findings and proposed different cities as the origin of the shipwreck, including Attica, Istanbul, Milos, Rhodes or even Argos. According to the newspapers published in 1901 and 1902, there was also another suggestion, stating that this could have been one of the ships with which Sullas (138 BCE – 78 BCE) had transferred stolen masterpieces in order to sell them or decorate important buildings in Rome. But all these were only guesses. The only certain thing was that the wreck had occurred during the Roman times and this was determined by the utensils and vessels that had been found.
4.2 The statue of Hermes

In early July of 1901 the cleaning of the Antikythera’s finds was completed except for the welding of the statue of Hermes [6]. That’s why on October 6, 1901 the famous Austrian technician Wilhelm Sturm finally came to Athens from Vienna in order to undertake the welding of the statue, after many discussions and despite his initial reluctance. He examined the statue at the Archaeological Museum and characterized it as one of the best that existed in the world’s museums. He said that the welding wouldn’t be difficult but it would require 4–8 months, a rather long period, which he didn’t have due to his responsibilities in the Archaeological Institute of Vienna. A week later he left Greece, suggesting that the statue should be sent in Vienna in order to restore it there. The proposal was rejected for obvious reasons.

Apart from W. Sturm many other technicians showed their interest to undertake the welding of the magnificent statue and attracted the journalist’s attention at times. A dispute was raised by a Greek technician, Nikolaos Vranakis, who claimed that he had proposed the same method of welding as Sturm’s, 10 months earlier. On February 1902 an Armenian technician from the Imperial Museum of Istanbul asked to be assigned the task of welding the statue of Hermes. But the Minister was very reluctant in choosing one of them as he had someone else in mind. And this man was the famous French sculptor Alfred André who had initially refused to come and that’s why the director of the French Archaeological School of Athens was asked to mediate in order to convince him to come. And indeed he came! On May 6th 1902 the expert technician arrived in Athens. After examining the statue he decided that the welding wouldn’t be difficult. He would do it with a mixture that he had personally invented. He also indicated that he would place an iron frame in the interior of the statue in order to make it stronger. But he suggested that it would be preferable to do at a cooler epoch, so he left a few days later renewing his appointment for August 1902. His award was set at 20,000 francs. The whole work was completed by the 2nd of October and the statue had become majestic. Alfred André had done an amazing work, which was warmly praised by the press.

5. The discovery of the Antikythera Mechanism

On May 1902 a modest but most important announcement appeared in the newspapers. It reported the discovery of the “Antikythera Mechanism”. On the 20th of May the former Minister of Education, Spyridon Stais, who was visiting the Archaeological Museum with his wife and her sister, while admiring the statue of Hermes, he investigated some scattered pieces of bronze antiquities, lying around the statue. Observing one of them more carefully he noticed part of a small gear on it. He was able to assemble a few more pieces to form a plate on which the whole gear could be distinguished. Then he noticed that around the gear there was an inscription with distinct greek letters. Immediately everyone tried to read the inscription and got really excited hoping that by this reading the time and place of origin of the ancient artifact could be verified. After a thorough examination the phrase “…ray from the Sun…” (“ΗΛΙΟΥ ΑΚΤΙΣ”) was read. The first impression was that this plate was part of a nautical device, probably of a gnomon, which was used as a compass. The numismatist Ioannis Svoronos on the other hand insisted that this was an astrolabe, an instrument that the ancients used in order to determine the position of
their ship. Despite the original enthusiasm about the discovery of the geared device only 7 articles about it were published in the newspapers in the next few days. Probably the archaeologists couldn’t fully understand the incredible astronomical and technological knowledge hidden in it so they lost interest and finally ignored it and dealt with other more comprehensible and closer to their expertise issues.

6. The Cousteau excavation

The site of the shipwreck remained unexplored for the next decades until Jacques Yves Cousteau started his explorations on June 12, 1976. He was most interested in finding bronze items, which were considered to be rare and precious. His contribution was very important. He excavated several bronze items, jewelry and -most important- a handful of coins from Pergamum, with which the Antikythera shipwreck was dated between 85 and 67 BCE. He was the last to visit and search the site of the shipwreck.

7. Concluding remarks

These were the most important events discovered during a 2 year “journey” through the contemporary greek press about the Antikythera wreck, which even though it had its difficulties, it brought to light a great part of the Greek legacy, for which everyone felt proud. It should also be stated that the role played by the Minister of Education was very important. During this time three Ministers of Education assumed duties: Spyridon Stais (May 1900-November 1901), Antonios Momferratos (November 1901-December 1902) and Alexandros Romas (December 1902).

In the following pages some important early newspapers reports (with their English translation) are presented.
### Skrip November 6, 1900
**The first announcement in the newspapers**

**ANTIQUITIES IN THE SEA**

According to reports from Kythera, divers working between the island and cape Malea [This is a mistake: the island of Antikythera is located between Kythera and the Gramvousa peninsula in Crete] discovered, in the seabed, several copper statues, without though hauling them, due to the absence of the necessary means. Only the hand of a copper statue was pulled up. It is of great art and seems to belong to an oversize statue of Poseidon.

Mr. Stais came in agreement with Mr. Voudouris to send a warship bringing with her the general curator of the antiquities Mr. Kavvadias, professor Oikonomou from the University [of Athens] and other archaeologists. The divers will be given adequate remuneration in order to point out the site where the antiquities lie, which hopefully are of great value.

**“Kriti” to Kythera**

The Navy Ministry ordered yesterday the troopship “Kriti” to sail to Kythera bringing with her Mr. Kavvadias and the rest of the archaeologists.

### Empros March 3, 1901
**Temporary interruption of works and questions**

**THE KYTHERA FINDINGS**

The Symiots to the Minister

Yesterday, the Symiot divers, who are still in Athens, visited the Minister Mr. Stais, and said that they agree to continue the excavation after the Easter holidays, which they will spend in their home island.

During this period the owners of the sponge-fishing boats will remain in Piraeus.

**The marble statues. What Mr. Mitsopoulos says**

The Ministry of Education invited the Mineralogy Professor and Rector of the University Mr. Mitsopoulos to give his opinion about the variable extent of decay that individual marble statues have suffered.

The questions which Mr. Mitsopoulos was asked to answer are:

1) Why some of the statues had remained on the seabed completely unchanged, while others were eroded by sea salt?
2) Why some of them were covered by calcification?
3) How long did it take for this chemical decay to occur?

The answers to these questions, will shed light on the archaeological investigation of the antiquities.
Antikythera: Early newspaper references

Nikoli

**Skrip May 22, 1902**
The discovery of the Antikythera Mechanism

**Empros October 6, 1902**
The completion of the Hermes welding by mister Andre

---

THE ANTIKYThera ANTIQUITIES

**The inscribed plate**

The copper inscribed plate, which was discovered among the Antikythera antiquities thanks to the former Minister’s Mr. Stais insight, is of outmost importance because its reading will reveal from when and where the antiquities, which sank with the shipwreck at Antikythera, came from. Therefore the interest that the announcement of this accidental discovery among the archaeologists is well justified. Now, they will be able to determine what the wonderful copper statue, which was excavated from the sea of Antikythera and has provoked so many conflicts and discussions in order to be named “Hermes”, among many and lively objections and protests, represents.

The eminent archaeologist Mr. Vyzantinos was the first to visit the Museum yesterday in order to examine the plate. After a long and careful research he managed to assemble the pieces as well as he could and was able to read the following letters:

ΤΩΝ.... ΙΝΟΝ....

On another plate which was apparently stuck on top of the first one, at the bottom of the sea, he read the following:

ΓΝΩΜΩΝ.... ΦΙΡΜΙΟΣ....

Mr. Vyzantinos’s opinion is that the style of the Antikythera antiquities belongs to the epoch 150 BCE to 200 AD. However, today after re-examining the inscription with a lens, he will be able, hopefully, to give a definite answer about the epoch. A more thorough investigation will probably lead to a safe determination of the epoch of the antiquities and of the shipwreck which carried them.

Today, the director of the Austrian Institute Mr. Bilmen will also visit the Museum, together with many other archaeologists, who are experts in reading ancient inscriptions.

---

THE HERMES WELDING

Mister Andre’s decoration

The French sculptor Mr. André departed yesterday, returning to France with his assistants.

Before his departure he visited the Prime Minister, Mr. Zaimis and the Minister of Education Mr. Momferratos.

After his departure Mr. Momferratos with a letter to the Prime Minister proposed to honour Mr. André, as a token of appreciation for performing such an excellent welding on the Antikythera masterpiece.

The welded statue has been placed on a temporary base and will be open for public viewing today.

---

The Ministers in the Museum

Yesterday morning the Prime Minister Mr. Zaimis, the Minister of Education Mr. Momferratos, Mr. Negris from the Ministry of Finances and the secretary general of the Ministry of Education Mr. Kollivas, visited the copper statue of Hermes.

The Ministers stayed for about an hour admiring the welded statue.
Acknowledgements

It is a pleasure to thank the Antikythera Research Project group and the National Archaeological Museum of Athens. Without their research efforts and the safeguarding of the Antikythera fragments respectively, this work wouldn’t have been initiated. We would also like to acknowledge the in-situ assistance of the personnel of the Library of the Hellenic parliament and for their efforts to digitize several early newspapers.

References


