#### Albert Barillé

# Once Upon a Time... The Discoverers (Series, S01E02) : Archimedes and the Greeks [Il était une fois... les Découvreurs: Archimède et les Grecs]

France (1994)

TAGS: <u>Alexandria Archimedes Democritus Eratosthenes (of Cyrene) Greek</u>
<u>History Greek Philosophy Greek Science Hippocrates Praxagoras Protagoras Punic Wars Pythagoras Socrates Syracuse</u>





We are still trying to obtain permission for posting the original cover.

General information	
Title of the work	Once Upon a Time The Discoverers (Series, S01E02) : Archimedes and the Greeks [Il était une fois les Découvreurs: Archimède et les Grecs]
Studio/Production Company	Studios Procidis (see: Addenda)
Country of the First Edition	France
Country/countries of popularity	Australia, Austria, Belgium, Canada, Finland, France, Germany, Greece, Hungary, Iceland, Indonesia, Ireland, Israel, Italy, Poland, Portugal, Russia, Serbia, Spain, Sweden, Switzerland, United States of America
Original Language	French
First Edition Date	1994
First Edition Details	Il était une fois les Découvreurs: Archimède et les Grecs. Directed by Albert Barillé. Procidis, 1994, 26 min.
Running time	26 min
Format	VHS, DVD
Date of the First DVD or VHS	October 24, 2005 (DVD)
Available Online	hellomaestro.fr (accessed: October 26, 2020)



Genre	Animated films, Cartoons, Instructional and educational works, Made-for-TV movies
Target Audience	Children
Author of the Entry	Marta Pszczolińska, University of Warsaw, m.pszczolinska@al.uw.edu.pl
Peer-reviewer of the Entry	Elżbieta Olechowska, University of Warsaw, elzbieta.olechowska@gmail.com Katarzyna Marciniak, University of Warsaw, kamar@al.uw.edu.pl



#### **Creators**



Albert Barillé in 2007, photo: Michal Maňas, fr.wikipedia.org (accessed: October 26, 2020), CC BY 3.0.

## Albert Barillé , 1920 - 2009 (Director)

Albert Barillé (Warsaw, 1920 - Neuilly-sur-Seine, 2009) was a French director, television creator and producer, screenwriter and cartoonist. In the early 1960s, he was in the United States, where he noticed the huge impact television had on children. After his return to France, he realised that French TV offered a rather indigestible content to children viewers. He decided to create entertainment for children that at the same time conveyed knowledge and opened young minds to further search for knowledge. In 1962 he founded Procidis, a company whose first creation was a puppet animated series aimed at children: Les Aventures de l'Ours Colargol [Colargol's Adventures], the story of a little bear who wants to sing and travel the world but lacks the natural ability. In 1978, Procidis produced his most famous series II était une fois... I'Homme [Once Upon a Time... Man] and then its six seguels (Space, Life, The Americas, The Discoverers, The Explorers, Planet Earth). He was also the creator of Shadoks and Aglaé et Sidonie. In addition, several projects were unsuccessful: in the 2000s, Albert Barillé designed a series on Greek mythology, as well as another part of the Once upon a time saga which would have been titled: Il était une fois... le progrès. He was also the author of medical documentaries, theater plays, and popularized philosophy.

#### Sources:

Wikipedia (accessed: October 26, 2020).

hellomaestro.fr (accessed: October 26, 2020).

Michel Doussot, "<u>Il était une fois... Albert Barillé</u>", blogpasblog.wordpress.com, published August 14, 2012 (accessed: October 26, 2020).





Bio prepared by Marta Pszczolińska, University of Warsaw, m.pszczolinska@al.uw.edu.pl





#### **Additional information**

Casting French voice actors:

Roger Carel,

Olivier Destrez,

Marie-Laure Beneston,

Patrick Préjean,

Sady Rebbot.

Adaptations

Soundtrack translated into many languages, see: **Countries of** 

popularity.

Sequels, Prequels and Spin-offs

Episode 01: Il était une fois... les Découvreurs: Nos ancêtres les Chinois.

Episode 03: Il était une fois... les Découvreurs: Héron d'Alexandrie.

Summary

Archimède et les Grecs is the second episode of the series about discoveries entitled *II était une fois...* [Once Upon a Time...]. It presents the achievements of ancient Greek thought in terms of science and engineering by introducing Archimedes in an interesting and approachable way. The plot is similar to any other episode in the series: a white-haired, old Maestro narrates histories about important inventions from the past to a group of bored or inattentive children.

The starting point of the episode is when Maestro finds his gnomon and exclaims *heureka!* – I have found it. He explains to children that gnomon is not merely a stick, but rather a research instrument, which can tell the time, determine the vertical and horizontal lines as well as cardinal points. He tells the children that it was used to measure the Earth and promises to explain why he said the word *heureka*. Maestro





then names the ancient masters: Pythagoras, Hippocrates, Socrates, Protagoras, Praxagoras, and Democritus, and then moves on to Eratosthenes and his calculations based on his measurements from Syene and Alexandria, which were taken using a simple gnomon with a high degree of precision.

The next account describes a student of Euclides – Archimedes. He is introduced through the history of his remarkable and innovative inventions created to make work easier. Those include Archimedes' screw pump, used to irrigate fields, compound pulleys allowing to lift a ship in the harbour and transport goods using only one hand, but also, defensive war machines used to protect his native Syracuse from Roman invasion, such as catapults, ballistas, onagers, the legendary death ray burning mirrors and a huge crane-operated hook – the Claw of Archimedes – used to lift enemy ships out of the sea before dropping them to their doom. Among the portrayed stories about the inventor, Maestro describes the problem of determining the content of gold in the ruler's precious diadem without destroying it. Archimedes discovers the solution while in the bathhouse and Maestro explains to the children the meaning of *heureka* and teaches them the law of Archimedes and its applications.

#### **Analysis**

The creators of the episode not only explained how to use the term heureka. They also crammed into a compact 26 minutes as much information about the ancient world of science embedded in the cultural context as possible, while accounting for the needs of the young viewers. In the background of the narration about key historical figures, a timer appears on the upper left corner of the screen, informing us of the years in which the depicted scenes happened. There are numerous references to Antiquity, although most are simplified to match the schematic formula of the series, which does not embrace complex details, but rather a general outline. For instance, the Roman soldiers attacking Syracuse are depicted in a comic way they wear ancient-like garments, but not with the richness of detail typical for the dress, armour and equipment of a Roman legionary. It is probably due to the simple graphic design of all the episodes in the series. The historical and cultural back story for Archimedes is sketched by introducing the names of his great predecessors. Maestro names Pythagoras in association with mathematics, Hippocrates with medicine, and Socrates with philosophy. In the background of the





story, one can see the Athenian acropolis, and on Maestro's table, there are copies of famous ancient dramas: *Oedipus Rex* and *Electra* by Sophocles and *Andromache* by Euripides. The viewer learns that Protagoras considered man to be the measure of all things, Praxagoras believed reason to be the leading force, and Democritus discovered the atom, an element smaller than a grain of sand. The character introduced next is Eratosthenes of Cyrene, the chief librarian at the Library of Alexandria. As a Greek mathematician, astronomer, and geographer, he is best known for calculating the circumference of the Earth. His calculation was based on the measurements taken in Syene and Alexandria and equalled 250 thousand stadia (39,609 km) which is remarkably accurate.

The figure of Archimedes of Syracuse is presented as the leading scientist in classical antiquity, a mathematician, physicist, engineer, inventor, and astronomer, who derived and proved the formula for the area of the circle or the surface area and volume of a sphere. Most importantly, however, he is portrayed as a Greek citizen of Syracuse. Syracuse, the wealthiest city of Sicily, then inhabited by half a million people, was depicted as a Hellenistic city: ruled by a rich sovereign, equipped with an opulent harbour, forum, bathhouses, with motifs of meanders on the walls. The city is presented not only in the times of its wealth, but also in the times of siege during the second Punic War, in which the Greeks defend themselves bravely with the help of Archimedes' inventions, while the Romans are shown as insidious aggressors, but in a satirical manner, not entirely seriously.

The episode familiarises children with the figure of Archimedes and his remarkable inventions. It introduces information about Antiquity and imparts knowledge quite effortlessly. It is also understood that such a simplified depiction of the Greek world serves only as an introduction or supplement to further exploration and learning about Antiquity.

Classical, Mythological, Traditional Motifs, Characters, and Concepts Alexandria Archimedes Democritus Eratosthenes (of Cyrene) Greek History Greek Philosophy Greek Science Hippocrates Praxagoras Protagoras Punic Wars Pythagoras Socrates Syracuse

Adventure Authority Heritage Historical figures Intellect Students





Other Motifs, Figures, and Concepts Relevant for Children and Youth Culture **Teachers War** 

### Further Reading

Bonsangue, Martin V., "In Search of Archimedes: Measurement of a Circle", The Mathematics Teacher 110.1 (2016): 71–76 (accessed: January 31, 2022).

Jaeger, Mary, "The Defense of Syracuse" in Archimedes and the Roman Imagination, University of Michigan Press, 2008, 101–122 (accessed: January 31, 2022).

Santucci, Lora C., "Recreating History with Archimedes and Pi", The Mathematics Teacher 105.4 (2011): 298–303 (accessed: January 31, 2022).

Simms, D. L., "<u>Archimedes and the Burning Mirrors of Syracuse</u>", *Technology and Culture* 18.1 (1977): 1–24 (accessed: January 31, 2022) .

Strickland, Stephanie, "The Romans Captured Archimedes", Prairie Schooner 68.3 (1994): 7-7 (accessed: January 31, 2022).

Wootton, David, "<u>Eureka!</u>" in *Galileo: Watcher of the Skies*, Yale University Press, 2010, 22–24 (accessed: January 31, 2022).

#### Addenda

#### STUDIO / PRODUCTION COMPANY:

Studios Procidis, with input from television stations which broadcast the series, in the order of the credits: France 3, Canal+, Televisión española (RTVE), Westdeutscher Rundfunk (WDR), Südwestfunk (SWF), Société suisse de radiodiffusion et télévision (RTSR RTSI), Radiodiffusion-télévision belge (RTBF), Oy. Yleisradio Ab.



