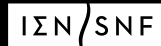


I D E A

Ancient Greek Science and Technology



ΙΔΡΥΜΑ ΣΤΑΥΡΟΣ ΝΙΑΡΧΟΣ
STAVROS NIARCHOS
FOUNDATION

I D E A



Ancient Greek Science and Technology



Temporary Exhibition
Ancient Greek Science and Technology

The exhibition IDEA – Ancient Greek Science and Technology displays the advancement of Greek Noesis in many scientific fields that attained numerous technical and technological achievements.

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EXHIBITION OBJECTIVES

Showcasing important fields of science and arts,
as well as the technological achievements in the Ancient Greek world.

Reminding the influence and contribution of those achievements
underlining their keystone role for the development of the Western Civilization.

I D E A

EXHIBITION AXES

Introduction

Thematic Areas

Central Axis of "Nous"

Epilogue

I ——— D ——— E ——— A

INTRODUCTION

An interactive timeline places a series of technological achievements in chronological order, defining the outline of the periods exhibited in IDEA.

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THEMATIC SECTIONS

The exhibition contains 7 main thematic areas:

- Basic Technologies
- Astronomy
- Exploration and Communication
- Body and Mind
- Arts
- Architecture
- Automata

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THEMATIC SECTIONS

SECTIONS AND EXHIBITS

Architecture - Building Technology	Parthenon (scale model)
Architecture - Building Technology	Crane (scale model)
Geography	Hero's Dioptra (replica)
Mathematics-Geometry	Archimedean Solids (3D animation)
Mathematics-Geometry	Pythagorean Theorem (interactive exhibit)
Metrics	Hero's Odometer (replica)
War Technology	Catapult (replica)
Mechanics	Archimedes' Screw (replica)
Telecommunications	Hydraulic Telegraph (replica)
Medicine	Asclepeion of Epidaurus (scale model)
Athletics	Hysplex (replica)
Automata	Mobile Automaton Theater (replica)
Astronomy	The Antikythera Mechanism (replica)
Painting - Sculpture	The Ephebe of Marathon statue (replica)
Painting - Sculpture	Pointing mechanism (replica)
Physics-Biology	Classification of animals- plants- minerals (3D animation)
Ceramics	Ceramics firing process (representation)
Ceramics	Cargo ship (replica) - Pointed Amforae (scale model)
Mining-Metallurgy	Lavrion Washing Table (scale model)
Music	Hydraulis (replica)
Naval Technology	Trireme Ram (replica)
Theatre	The Ancient Greek Theatre of Dion (scale model)
Hydraulics	Eupalinian Aqueduct (scale model)

I ——— D ——— E ——— A

CENTRAL AXIS OF “NOUS”

A luminous wall throughout the exhibition provides the synopsis of philosophical questions that constituted the cradle of the Greek Noesis and gave birth to numerous accomplishments in arts, science and technology.

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EPILOGUE

The Epilogue defines the end of the visit. It is designed as a relaxation space, where one can take a moment to feel and understand the beauty and value of Ancient Greece. It highlights the most important moments of world history and the contribution of the Greek spirit to it.

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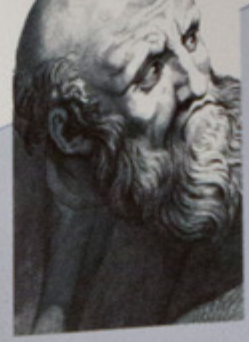
Panorama

I — D — E — A



Central Axis

I D E A



[445 BC]
Εμπεδοκλής
 ο Ακραγαντινός

Σύμφωνα με τον Εμπεδοκλή,
 ο υλικός κόσμος αποτελούνταν
 από τέσσερα στοιχεία

According to Empedocles,
 matter consisted of
 four basic elements

Empedocles
 of Akragas
 [445 BC]



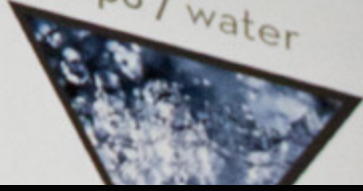
φωτιά / fire



γη / earth



αέρας / air



νερό / water

Interactive Surface





General View

I ——— D ——— E ——— A



ΑΥΤΟΜΑΤΑ AUTOMATA

ΑΥΤΟΜΑΤΑ ΣΤΗΝ ΕΛΛΗΝΙΚΗ ΜΥΘΟΛΟΓΙΑ

Η ποιητική φαντασία των Ελλήνων καλλιέργησε το πανόραμο τεχνικό όραμα για τις αυτοκίνητες μηχανές. Ήδη στον Όμηρο συναντάμε συχνά τη λέξη αυτόματων, οι λεγόμενες πύλες του ουρανού, οι αυτοκίνητες θεοσπινίδες που πρόσφεραν κρασί και νερό, τα αυτόματα πλοία των Φαιάκων.

AUTOMATA IN GREEK MYTHOLOGY

The poetic fantasy of ancient Greeks cultivated the ancient technical vision for automated machines. In Homer, we often encounter the word automaton, the automative gates of heaven, the automotive maidservants serving wine and water, the automatic ships of the Phaeakes.



Κυριοειδική, ελαστική κρηπίδα, σε ένα θέατρο του Τόλεμα.
Εθνικό Αρχαιολογικό Μουσείο, Αθήνα
Red Egyptian marble krater with
the deities of Egypt
National Archaeological Museum, Athens

I Δ Ε Α

General View

I D E A



ΣΟΓΡΑΦΙΚΗ-ΓΛΥΠΤΙΚΗ PAINTING-SCULPTURE



ΘΕΟΙ ΚΑΙ ΦΥΗΤΟΙ ΣΤΗΝ ΤΕΧΝΗ

Η ποίηση της τέχνης είναι η τέχνη της ποίησης. Η ποίηση της τέχνης είναι η τέχνη της ποίησης. Η ποίηση της τέχνης είναι η τέχνη της ποίησης.

GODS AND MORTALS IN ART

The poetry of art is the art of poetry. The poetry of art is the art of poetry. The poetry of art is the art of poetry.



ΚΟΙΝΩΝΙΕΣ COMMUNICATIONS





ΥΔΡΑΥΛΙΚΗ HYDRAULIC TECHNOLOGY

Γνώσεις υδραυλικής τεχνολογίας

Η χρήση του νερού στην αρχαία Ελλάδα συνδέεται με την κατασκευή υδραυλικών έργων, ένα ως σε μικρή κλίμακα, άλλοτε.

Μικρά έργα για οικιακή χρήση, κοινόχρηστα κτίρια, λατομεία και άλλες δραστηριότητες απαιτεί προηγμένη υδραυλική τεχνολογία.

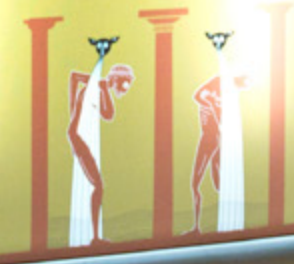
Σε μεγαλύτερη κλίμακα, οργανωμένοι λαοί για να υλοποιήσουν την πόλιν, την άρδευση των χωρών, τον αφορτισμό λιμένων και αποχετεύσεις νερού.

Knowledge of hydraulic technology

Water use in ancient Greece was related to the substitution of everyday needs and to large-scale works.

Water supplies for domestic use, sewage systems, bathhouses and other primary facilities are evidence of highly advanced hydraulic technology.

At a larger scale, technical works were constructed for the needs of cities, irrigation of fields, drainage of rivers and other functions.

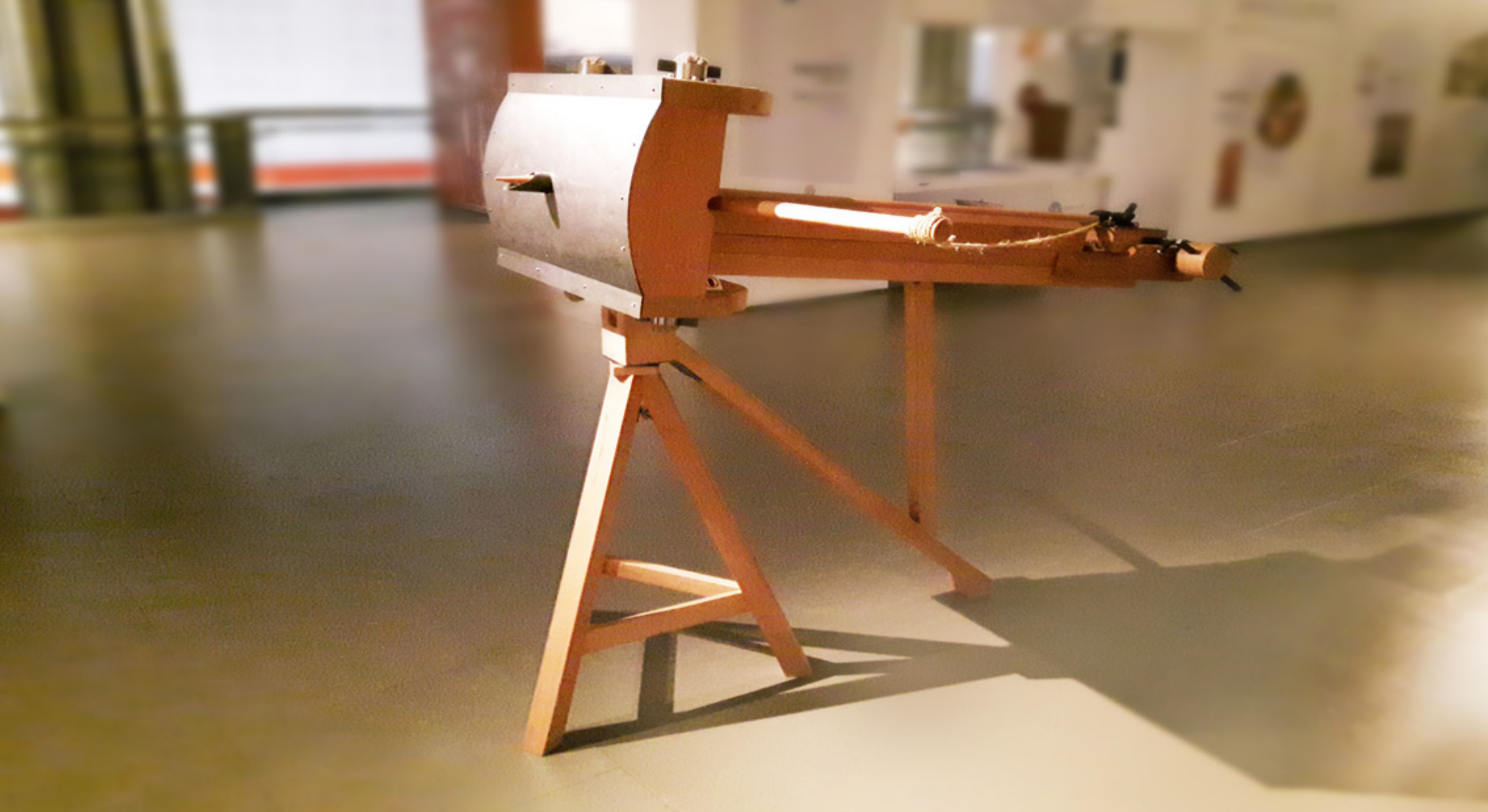


Construction Methods
The construction of hydraulic works in ancient Greece was a complex task that required advanced engineering and organizational skills. The use of stone and brick allowed for the construction of durable structures that could withstand the elements and the passage of time.

The Leontine aqueduct
The Leontine aqueduct is a prime example of ancient Greek hydraulic engineering. It was built to supply water to the city of Leontini in Sicily and is considered one of the most advanced aqueducts of the ancient world.

General View





Exhibit

I ——— D ——— E ——— A



Επιτεύγματα των αρχαίων Ελλήνων

Ο Αριστοτέλης (384 π.Χ.) εισηγήθηκε το κέντρο της Γης ως κέντρο του σύμπαντος. Ο Πτολεμαίος (127 π.Χ.) επινόησε το γεωκεντρικό σύστημα. Ο Αριστοτέλης (384 π.Χ.) εισηγήθηκε το κέντρο της Γης ως κέντρο του σύμπαντος. Ο Πτολεμαίος (127 π.Χ.) επινόησε το γεωκεντρικό σύστημα. Ο Αριστοτέλης (384 π.Χ.) εισηγήθηκε το κέντρο της Γης ως κέντρο του σύμπαντος. Ο Πτολεμαίος (127 π.Χ.) επινόησε το γεωκεντρικό σύστημα.

The achievements of the ancient Greeks

The ancient Greek astronomer Aristotle (384 BC) proposed the geocentric model of the universe, with Earth at the center. The astronomer Ptolemy (127 BC) developed the geocentric model of the universe, with Earth at the center.

Μια σημαντική κληρονομιά

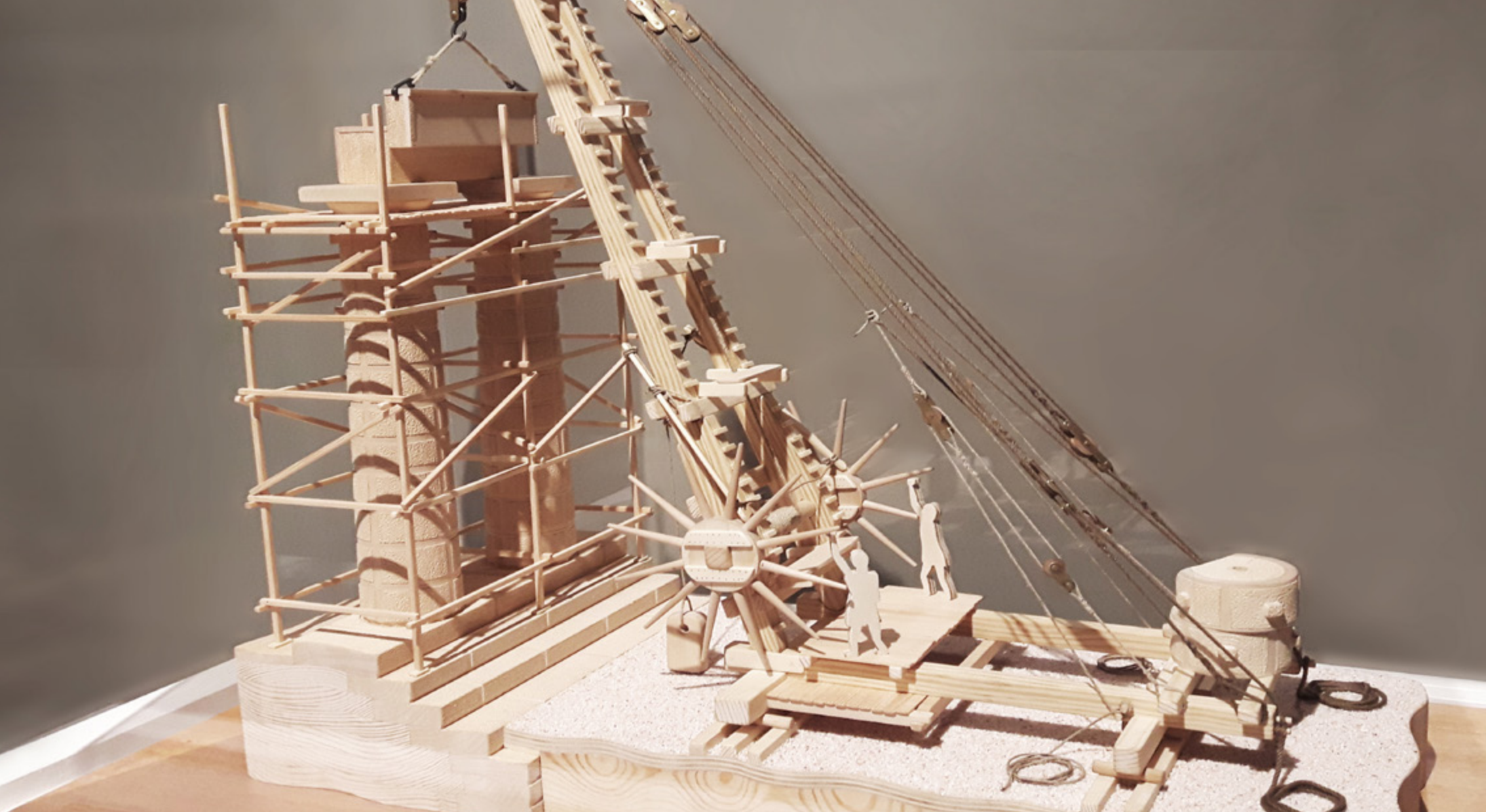
Από την ανακάλυψή τους οι αρχαίοι Έλληνες για την κεντροκεντρική θεωρία των πλανητών, οδήγησε τις σύγχρονες αναζητήσεις των επιστημόνων σχετικά με την κεντροκεντρική θεωρία των πλανητών, από τον Κόπερνικο μέχρι τον Γαλιλαίο και τον Νεύτων.

An important legacy

The ancient Greek astronomer Aristotle (384 BC) proposed the geocentric model of the universe, with Earth at the center. The astronomer Ptolemy (127 BC) developed the geocentric model of the universe, with Earth at the center.

Exhibit





Exhibit

I D E A



Exhibit

I D E A



ΤΗΛΕΠΙΚΟΙΝΩΝΙΕΣ
TELECOMMUNICATIONS

ΕΡΜΗΣ

Ο Ερμής κατά την ελληνική μυθολογία είναι ο αγγελιαφόρος θεός. Διεύθε, διεύθε, μου μεταφέρει την πληροφορία. Σίβηλα του ήταν το κρηκόσιο και το φτερωτό πέδιλο.

HERMES

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ΤΗΛΕΠΙΚΟΙΝΩΝΙΕΣ
TELECOMMUNICATIONS



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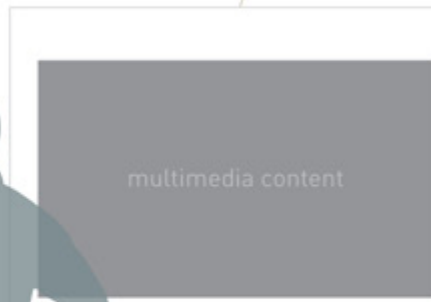
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multimedia content




Graphic Design

I D E A





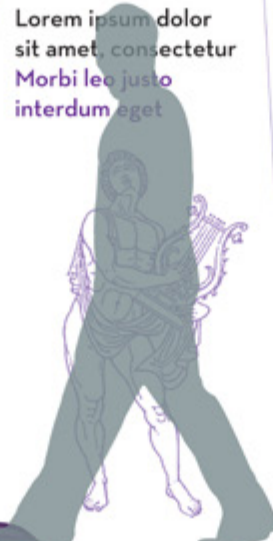
**ΜΟΥΣΙΚΗ
MUSIC**




ΟΡΦΕΑΣ
 Μουσική τέχνης αναπτύχθηκε από τον αρχαίο ελληνικό πολιτισμό. Ο Ορφέας, ο μισθός του Διούσι, ήταν ο θεός της μουσικής και της ποίησης. Ο μισθός του Διούσι ήταν ο θεός της μουσικής και της ποίησης. Ο μισθός του Διούσι ήταν ο θεός της μουσικής και της ποίησης.

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**ΜΟΥΣΙΚΗ
MUSIC**





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multimedia content

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Graphic Design

INTERACTIVE APPLICATIONS

- A Digital guide (application for mobile devices)
- B Interactive on line game application
- Γ Interactive applications throughout the exhibitions

I ————— D ————— E ————— A

MUSEOPEDAGOGICAL APPLICATIONS

A Playing with the exhibition

An interactive application with tangible interaction. It provides a comprehensive and easy overview of all exhibition sections. Visitors place special cards on an interactive surface and receive information through a multimedia application regarding the issue they are interested the most.

B Playing with words

An installation titled “Do you speak Greek?” which displays, through a fun and educational way the connection of Greek language to the modern “western” way of thinking. Visitors, choosing Greek and English alphabet letters can compare the phonological relation between the two languages and get information about Greek words used in other languages.

I D E A

SOUVENIRS FOR MUSEUM SHOP

- Exhibition catalogue
- Information brochure of the exhibition
- Posters in various sizes
- Postcards
- Miniatures / exhibit copies
- Pencils, erasers, pens
- DVD with exhibition productions
- Interactive games in digital form
- Science kits for children replication experiments mentioned in the exhibition

I D E A

MARKETING PLAN

- Brand identity shaping
- Treatment for total promotional campaign
- Promotional activities before the beginning of the exhibition (site, on-line game, social media, advertising)
- Promotional strategy including world wide web promotion, big international sponsors, public relations, creative kit for each partner

I D E A

MARKETING TOOLS

- On-line application game
- Google map with marked discoveries
- Creating word of mouth on-line and in person
- Promotion of the exhibition by the partners to their networks
- Creating specialized interest through individual thematic sections

I D E A

Γηράσκω αεί διδασκόμενος

Σουκράτης (469-399 π.Χ.)



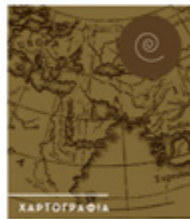
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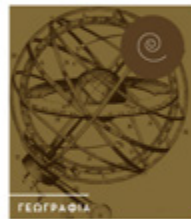
ΤΗΛΕΠΙΚΟΙΝΩΝΙΕΣ



ΜΕΤΡΗΣΙΜΗ



ΧΑΡΤΟΓΡΑΦΙΑ



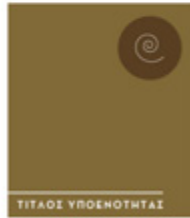
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ΝΑΥΤΙΚΗ ΤΕΧΝΟΛΟΓΙΑ



ΤΙΤΛΟΣ ΥΠΟΣΗΜΕΙΩΜΕΝΗΣ



ΤΙΤΛΟΣ ΥΠΟΣΗΜΕΙΩΜΕΝΗΣ



ΤΙΤΛΟΣ ΥΠΟΣΗΜΕΙΩΜΕΝΗΣ



Site

I — D — E — A

EXHIBITION CHARACTERISTICS

- Rental time: minimum 3 months
- Space required: 600 – 850 m²
- Exhibition insurance: 200.000€
- Indicative rental cost: 25,000 - 30,000 € per month
- Alternative forms of collaboration:
 - rent
 - percentage on ticket sales
 - barter (i.e. exchange of exhibitions)

I ——— D ——— E ——— A

TECHNICAL DESCRIPTION

Introduction- Epilogue

The basic sections are made of aluminium frames 2.50m high that form walls in a Π shape, 30cm thick. This is covered with MDF sheets, 10 mm thick. A digitally printed coated block-out synthetic fabric is stretched over the MDF.

Central Axis of “Nous”

The main connecting axis running almost through the entire length of the exhibition is made out of an anodized aluminium frame. It is 3m high, 60cm wide and all sections are 10.50m long. It is internally lit and covered with printed fabric placed on the frame with special aluminium accessories.



TECHNICAL DESCRIPTION

Exhibition Sections

All sections follow a basic technical scheme regardless of their size or shape.

They are made of aluminium frames 2.50m high that form walls in an L or Π shape, 30cm thick.

They are covered with MDF sheets, 10mm thick. A digitally printed coated block-out synthetic fabric stretched over the MDF.

I D E A



NOESIS
THESSALONIKI SCIENCE CENTER
& TECHNOLOGY MUSEUM

The exhibition is fully funded by the Stavros Niarchos Foundation

ΙΣΝ / SNF

ΙΔΡΥΜΑ ΣΤΑΥΡΟΣ ΝΙΑΡΧΟΣ
STAVROS NIARCHOS
FOUNDATION