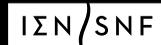


I D E A

Ancient Greek Science and Technology



ΙΔΡΥΜΑ ΣΤΑΥΡΟΣ ΝΙΑΡΧΟΣ
STAVROS NIARCHOS
FOUNDATION

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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.

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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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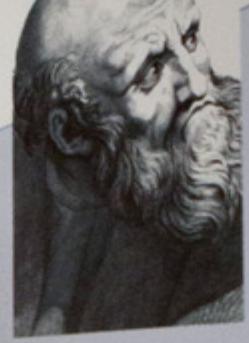
Panorama

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Central Axis





[445 π.Χ.]
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

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ΑΥΤΟΜΑΤΑ AUTOMATA

ΑΥΤΟΜΑΤΑ ΣΤΗΝ ΕΛΛΗΝΙΚΗ ΜΥΘΟΛΟΓΙΑ

Η ποιητική φαντασία των Ελλήνων καλλιέργησε το πανόραμο τεχνολογικό όραμα για τις αυτοκίνητες μηχανές. Ήδη στον Όμηρο συναντάμε συχνά τη λέξη αυτόματον, 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 automotive gates of heaven, the automotive maidservants serving wine and water, the automatic ships of the Phaeakes.



Κυριοειδική, ελαστική κρηπίδα, σε ύψος θέσεως του Τίτου
Κέντρο Αρχαιολογικών Μουσείων, Αθήνα
Red Agate of marble krater with
the device of Talos
National Archaeological Museum, Athens

I Δ Ε Α

General View

I ——— D ——— E ——— A



ΖΩΓΡΑΦΙΚΗ-ΓΛΥΠΤΙΚΗ PAINTING-SCULPTURE



ΘΕΟΙ ΚΑΙ ΘΗΤΟΙ ΣΤΗΝ ΤΕΧΝΗ

Η ποίηση της τέχνης και η τέχνη της ποίησης είναι δύο όψεις του ίδιου νοήματος. Η ποίηση είναι η τέχνη της λέξης, η τέχνη της φωνής, η τέχνη της μουσικής. Η τέχνη είναι η ποίηση της εικόνας, η τέχνη της μορφής, η τέχνη της χρώματος. Η τέχνη και η ποίηση είναι δύο όψεις του ίδιου νοήματος. Η τέχνη είναι η ποίηση της εικόνας, η τέχνη της μορφής, η τέχνη της χρώματος. Η ποίηση είναι η τέχνη της λέξης, η τέχνη της φωνής, η τέχνη της μουσικής.

GODS AND MORTALS IN ART

The poetry of art and the art of poetry are two sides of the same coin. Poetry is the art of words, the art of voice, the art of music. Art is the poetry of the image, the art of form, the art of color. Art and poetry are two sides of the same coin. Art is the poetry of the image, the art of form, the art of color. Poetry is the art of words, the art of voice, the art of music.



ΚΟΙΝΩΝΙΕΣ COMMUNICATIONS





ΥΔΡΑΥΛΙΚΗ HYDRAULIC TECHNOLOGY

Γνώσεις υδραυλικής τεχνολογίας

Η χρήση του νερού στην αρχαία Ελλάδα συνδέεται τόσο με κοινωνικούς υδραυλικούς σκοπούς, όσο και με τεχνολογικούς υδραυλικούς.

Μικρές τεχνολογίες για οικιακές χρήσεις, συνολικά υδραυλικές τεχνολογίες και άλλες εφαρμογές νερούς χρησιμοποιούνταν ως υδραυλική τεχνολογία.

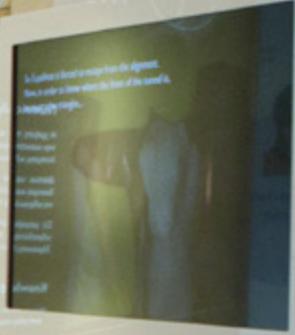
Σε μεγαλύτερες κλίμακες, χρησιμοποιήθηκαν τόσο για τον υδραυλικό των πόλεων, των λιμένων των νησιών, των αμφοθέσιμων λιμένων και αποχετεύσεων νερού.

Knowledge of hydraulic technology

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

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

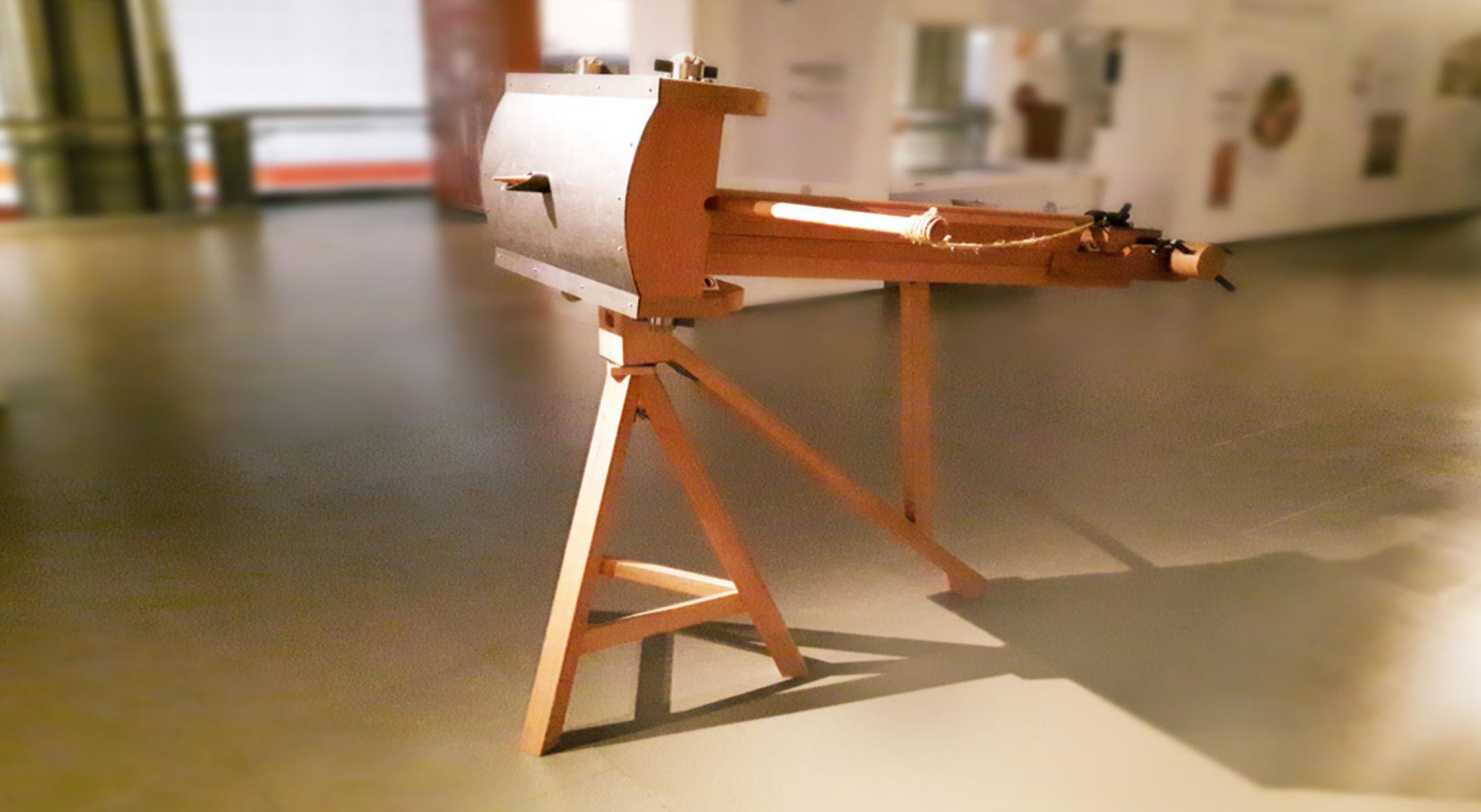
At a larger scale, technical works were constructed for the needs of cities, harbours of islands, drainage of rivers and other structures.



Conclusion
The hydraulic technology of ancient Greece was highly advanced and was used for a variety of purposes, from domestic use to large-scale works. This technology was a key factor in the development of ancient Greek civilization and its influence on the world.

General View





Exhibit

I — D — E — A



Επιτεύγματα των αρχαίων Ελλήνων

Ο Αριστοτέλης (384 π.Χ.) πρότεινε το πρώτο μοντέλο για το ηλιακό σύστημα, σύμφωνα με το οποίο ο Ήλιος κινείται γύρω από τη Γη, και οι πλανήτες, η Σελήνη και τα άστρα, περιστρέφονται γύρω από τον Ήλιο. Ο Αριστοτέλης πρότεινε επίσης ότι η Γη είναι σφαιρική, και ότι η βαρύτητα είναι η δύναμη που κρατάει τα αντικείμενα στη Γη. Ο Αριστοτέλης πρότεινε επίσης ότι η Γη είναι η κεντρική του σύμπαντος, και ότι οι πλανήτες κινούνται σε κύκλους γύρω από τη Γη.

The achievements of the ancient Greeks

Aristotle (384 BC) proposed the first model for the solar system, according to which the Sun moves around the Earth, and the planets, the Moon and the stars, revolve around the Sun. Aristotle also proposed that the Earth is spherical, and that gravity is the force that keeps objects on Earth. Aristotle also proposed that the Earth is the center of the universe, and that the planets move in circles around the Earth.

Μια σημαντική κληρονομιά

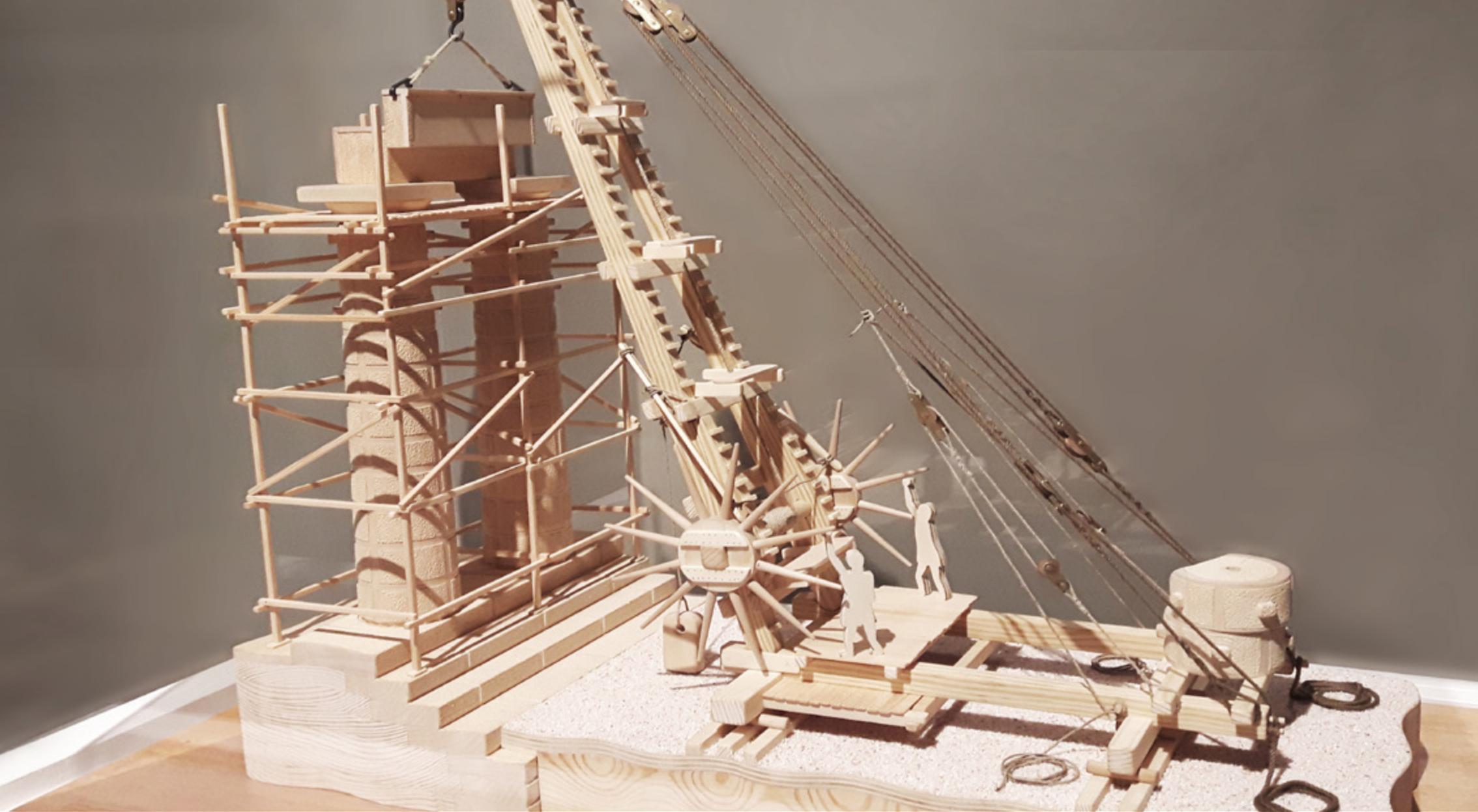
Από την ανακάλυψή τους, οι αρχαίοι Έλληνες για την λειτουργία των ηλιακών ρολογιών, έδωσαν τον δρόμο για αργότερα κληρονομιά στην κατασκευή ηλιακών ρολογιών. Αυτά τα ρολογιακά σχέδια βασίζονται στην αρχή λειτουργίας των ηλιακών ρολογιών, που είναι βασισμένα στο έργο του Αριστοτέλη, από τον 4ο αιώνα π.Χ. μέχρι σήμερα.

An important legacy

The ancient Greeks' engagement with astronomy of clocks, among other things, is a great legacy of our world, that has contributed, even today, the construction tools in astronomy and in space, largely based on the Greek legacy.

Exhibit





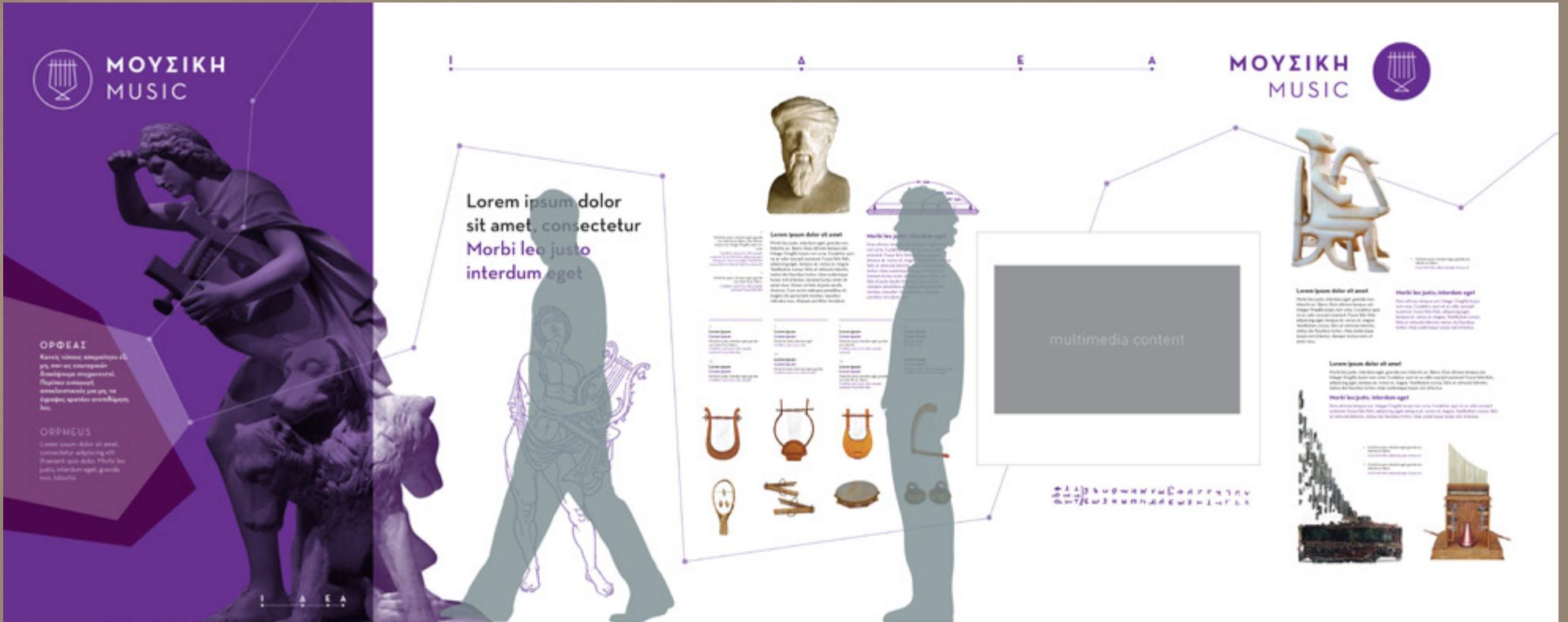
Exhibit

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Exhibit

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Graphic Design

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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

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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

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Γηράσκω αεί διδασκόμενος

Σουκράτης (469-399 π.Χ.)



ΕΚΘΕΜΑΤΙΚΕΣ ΕΝΟΤΗΤΕΣ ΕΞΕΡΕΥΝΗΣΗ & ΕΠΙΚΟΙΝΩΝΙΑ



ΤΗΛΕΠΙΚΟΙΝΩΝΙΕΣ



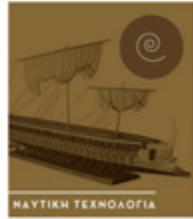
ΜΕΤΡΙΚΗ



ΧΑΡΤΟΓΡΑΦΙΑ



ΓΕΩΓΡΑΦΙΑ



ΝΑΥΤΙΚΗ ΤΕΧΝΟΛΟΓΙΑ



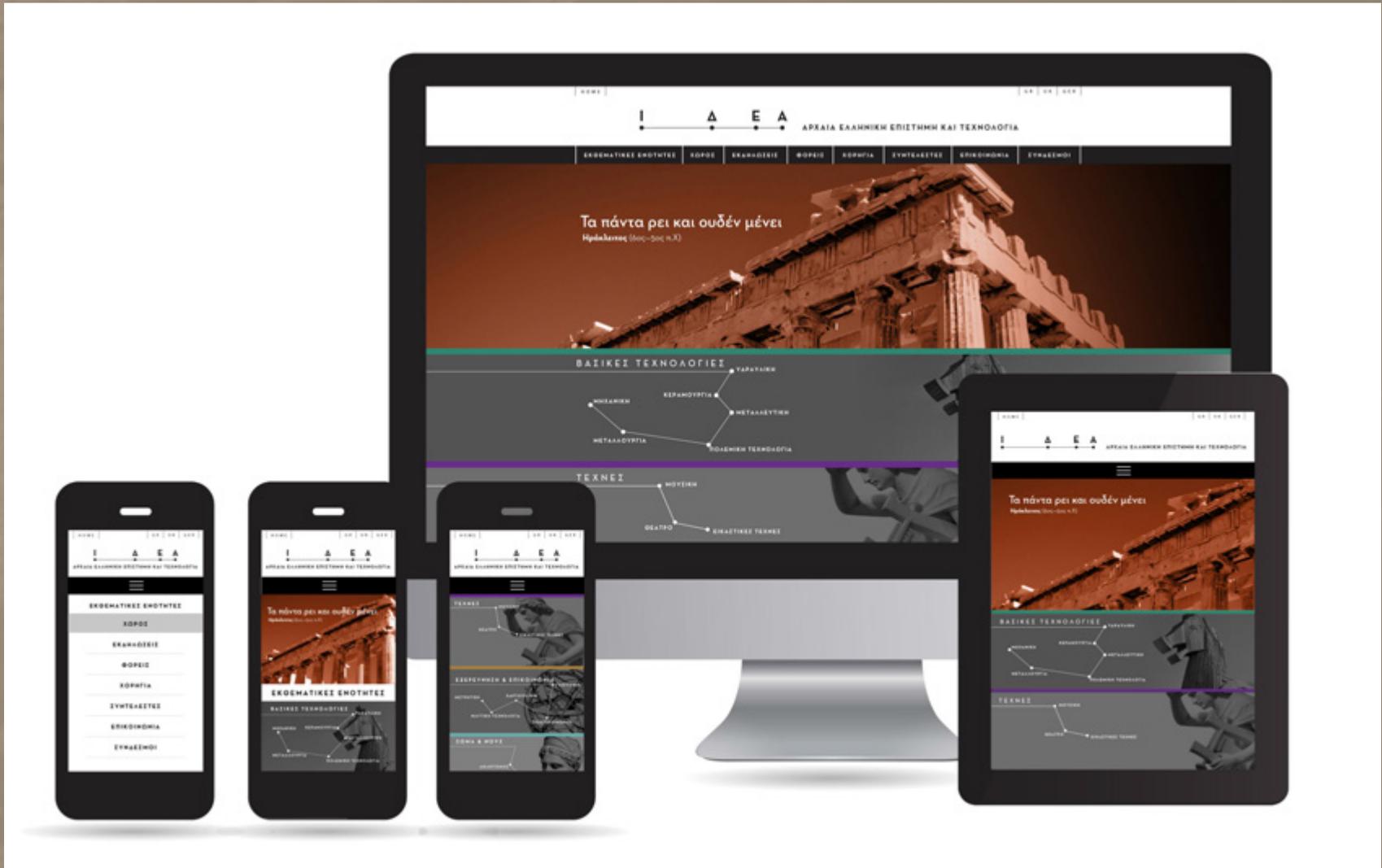
ΤΙΤΛΟΣ ΥΠΟΕΝΟΤΗΤΑΣ



ΤΙΤΛΟΣ ΥΠΟΕΝΟΤΗΤΑΣ



ΤΙΤΛΟΣ ΥΠΟΕΝΟΤΗΤΑΣ



Site



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.

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TECHNICAL DESCRIPTION

Exhibition Sections

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

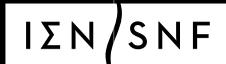
They are made of aluminium frames 2.50m high that form walls in an L or Π shape, 30cm thick.

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

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The exhibition is fully funded by the Stavros Niarchos Foundation



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