

Ancient Greek Technology



Todd Bruns

A Futuristic Look Through Ancient Lenses: Greece

October 24, 2012

To begin...

◆ *Sing, clear-voiced Muses, of
Hephaestus famed for
inventions. With bright-eyed
Athena he taught men glorious
gifts throughout the world - men
who before used to dwell in
caves in the mountains like wild
beasts. But now that they have
learned the crafts through
Hephaestus the famed worker,
easily they live a peaceful life in
their own houses the whole
year round. Be gracious,
Hephaestus, and grant me
success and prosperity! --
Homeric Hymns*

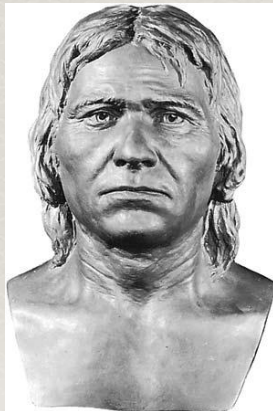


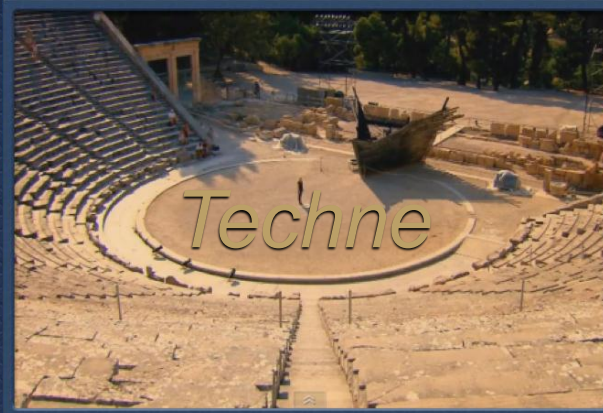
To begin...

- ✿ *Through Ancient Lenses...*
- ✿ *The Brilliance of the Greeks*
- ✿ *Who's Who?*
- ✿ *Steam Engine*
- ✿ *Vending Machine*
- ✿ *Alarm Clocks*
- ✿ *Showers*
- ✿ *Automatic Doors*
- ✿ *Analog Computer*



Through Ancient Lenses...





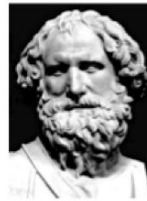
Greek Brilliance



HERO of
Alexandria
10-70 CE



CTESIBIUS
of Alexandria
283-222 BCE



ARCHIMEDES
of Syracuse
287-212 BCE

Who's Who?

Steam Engine

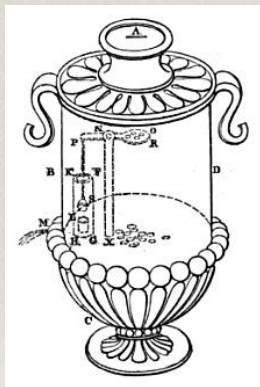


Hero of Alexandria in the first century CE

Complexity: First use of steam for power

Used as a "temple wonder"

Vending Machine



Hero of Alexandria in the first century CE

Complexity: Pre-electricity vending machines used this same principle

Too much Holy Water

Alarm Clocks



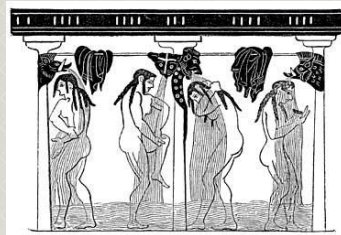
Ctesibius?

Complexity: Uses air pressure to move water from one container to the next

Called "clepsydras" ("water thief")

Showers

???



Complexity: Not unlike modern shower system

Lead pipes delivered water and removed it

Pergamum

Automatic Door

*Hero of Alexandria in
the first century CE*

*Complexity: Utilizes
the physical
principles of
pneumatics*

*Was it ever really
constructed?*

QuickTime™ and a
GIF decompressor
are needed to see this picture.

Analog Computer

*Archimedes of
Syracuse*

*Complexity:
Technology that
rivals today*

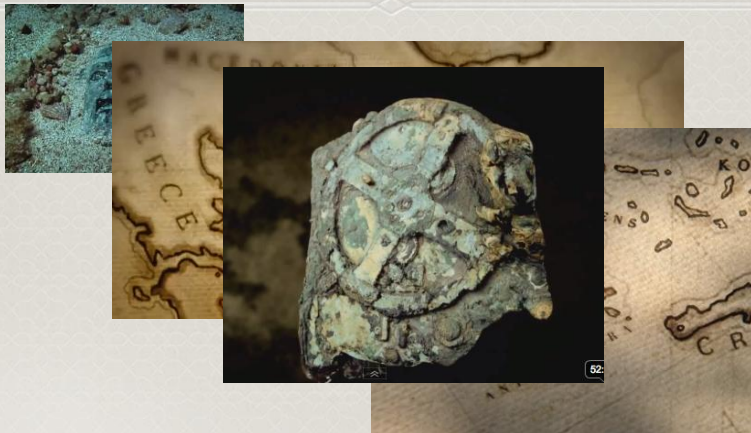
*Demonstrates an
incredible level of
understanding of the
physical universe*





It was a dark and stormy night....

Discovery



First Investigation



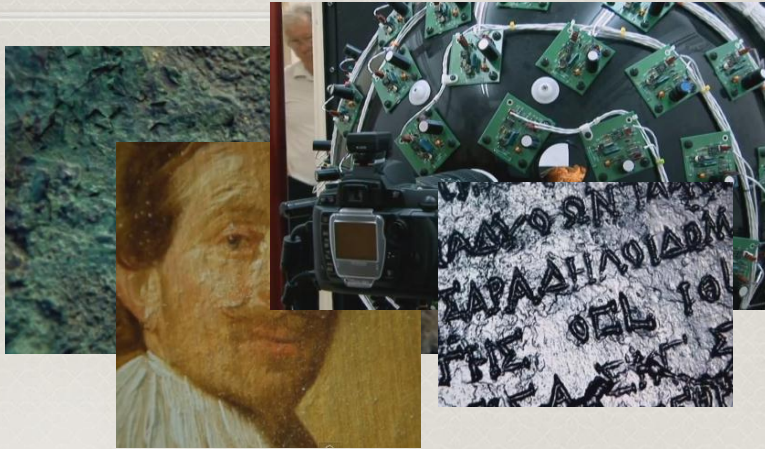
Derek Price



Second Investigation



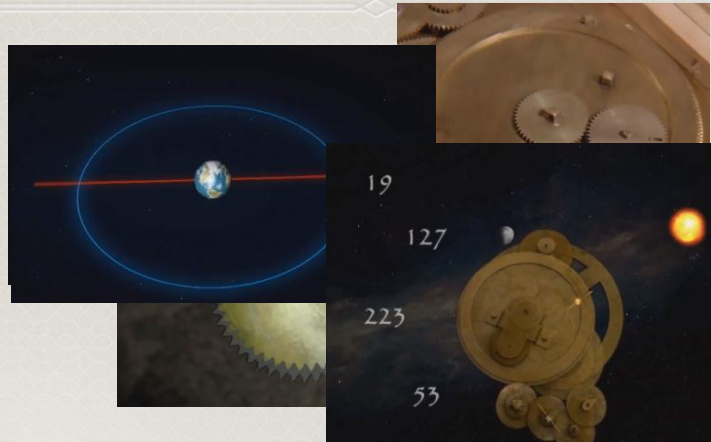
Second Investigation



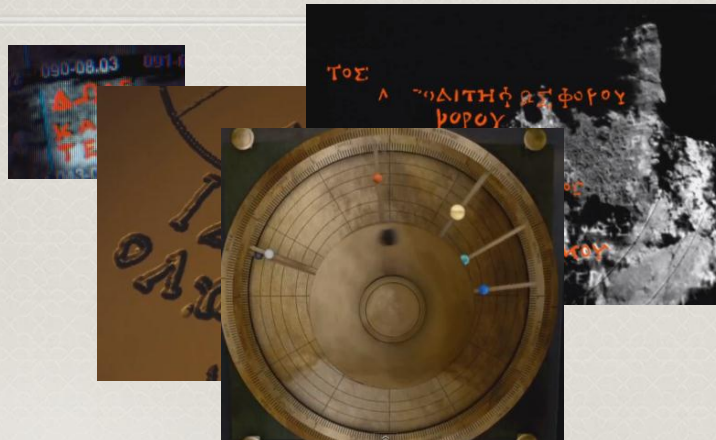
Meanings



Ingenuity



Who built it?



Where did it go?



Coda

Thank You
Todd Bruns

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credits:

Homeric Hymn:

http://www.sciencefiction.about.com/library/bibl_text_homeshymns_haphaia_sus.htm

Hephaestus <http://www.mercur.com/GML/Hephaestus.html>

Hero, Ctesibius, and Archimedes portraits wikipedia.org

Steam Engine and Vending Machine wikipedia.org

Ptolemy's Alarm Clock model

http://www.mechanica.de/Grecks/Technology/AncientGreekTechnology_v009.html

Show me image http://www.view.victron.com/who_invented_it.php

Show it!

Automatic Door gif

http://www.realschule.bayern.de/lehren/dokumente/unt/maj/gh/meron/2006_07/11.htm

BBC documentary "Antikythera: The World's First Computer",

available at <http://www.youtube.com/watch?v=H3a4L2V6eU>

