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Tonight, an ancient mechanical device

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found on a 2,000-year-old shipwreck.

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It's so complex that even the world's top scientists

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can't figure it out.

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It's like finding a jet plane in the tomb of King Tut.

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But who actually made it?

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Known as the Antikythera mechanism,

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its origin and purpose are shrouded in secrecy.

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The entire façade of it is covered with writing

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that had never been seen previously.

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How is it possible that this thing was made over 2,000 years ago?

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Now we'll explore the top theories surrounding this cryptic machine.

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This is essentially a device tracking the motions of the heavens.

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What if it was made in the future and traveled back to the past?

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Is there any evidence that aliens built the Antikythera mechanism?

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Can modern technology unlock its secrets?

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00:00:58,000 --> 00:01:02,000

Suddenly, it's capable of making life and death decisions.

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00:01:02,000 --> 00:01:07,000

This is one of the greatest mechanical inventions of all time.

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00:01:07,000 --> 00:01:10,000

What is the Antikythera mechanism?

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00:01:10,000 --> 00:01:12,000

Where did it come from?

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00:01:12,000 --> 00:01:14,000

And how does it work?

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00:01:26,000 --> 00:01:30,000

The Greek Isles 1900

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00:01:30,000 --> 00:01:33,000

A team of sponge divers are on their way home

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00:01:33,000 --> 00:01:37,000

from their fishing grounds off the coast of North Africa

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00:01:37,000 --> 00:01:41,000

when they're hit by a powerful storm.

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00:01:41,000 --> 00:01:45,000

The sponge divers boat swept into an area off the islet of Antikythera

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which is located north of Crete and south of the Greek mainland.

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It is a rocky and barren island with swift currents right off the coast.

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It's a very dangerous and treacherous area.

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00:01:57,000 --> 00:02:01,000

So the group is incredibly lucky that they don't wreck out there.

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00:02:01,000 --> 00:02:07,000

And after the storm settles down, they decide to go back out and dive for sponges one more time.

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00:02:07,000 --> 00:02:11,000

Diver Elias Stadiatus goes first.

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00:02:11,000 --> 00:02:15,000

He's underwater for about a minute and then he just jumps back into the boat terrified.

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00:02:15,000 --> 00:02:20,000

He's mumbling about men, women, horses in the deep.

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00:02:21,000 --> 00:02:28,000

The team's captain, master diver Demetrius Elcondos decides to go sea for himself.

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00:02:28,000 --> 00:02:33,000

Elcondos descends into the water and when he comes back up he has an arm in his hands.

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A bronze arm from a statue.

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00:02:36,000 --> 00:02:40,000

The quote-unquote bodies down there were actually corroded statues from a shipwreck.

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00:02:40,000 --> 00:02:43,000

The team can't believe what they found.

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This ship is huge.

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00:02:45,000 --> 00:02:51,000

It's 180 feet long even though only parts of the cargo and the vessel still remain.

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It's clearly very old and it lies at a depth of about 150 feet just to the north of Antikythera Island.

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It's an incredible find but you have to remember it is the year 1900 and scuba diving is in its infancy.

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By that I mean the suits are made out of canvas, you've got copper helmets, scuba tanks, not a thing yet.

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And many consider this to be the first major discovery in underwater archeology.

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Eventually Greek authorities ask the divers to help salvage items from the shipwreck.

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00:03:24,000 --> 00:03:32,000

They start pulling out statuary and pottery and silver and bronze coins and jewelry.

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00:03:32,000 --> 00:03:35,000

It's an unimaginable bounty.

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As the treasure haul grows authorities begin to ask what is this mysterious ship

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and where did it come from?

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00:03:44,000 --> 00:03:51,000

The coins and pottery on board appear to be ancient Greek and come from about anywhere from 80 to 50 BC.

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Because it's such a huge ship and contains many high-end marvelous goods

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00:03:57,000 --> 00:04:02,000

it's believed the ship was on its way to Rome for a triumphal parade of Julius Caesar.

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It does fit the timeline since Julius Caesar ruled until his death in 44 BC.

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But not everything appears to be valuable.

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00:04:11,000 --> 00:04:19,000

Amongst all these amazing artifacts they find this squarish piece of corroded metal and dirt that looks like a rock.

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00:04:19,000 --> 00:04:25,000

It's about 7 inches wide and they bring it up with them but we're not really sure why they even look twice at it.

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Frankly I'm surprised they even bothered to bring it up from the sea floor.

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00:04:28,000 --> 00:04:36,000

It isn't until a year later that archeologist Valerius Stice is going through this pile of some of the more unimportant artifacts that were found

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00:04:36,000 --> 00:04:42,000

and he comes across this piece of corroded metal and at first doesn't think much of it until he looks inside.

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00:04:42,000 --> 00:04:48,000

And he comes across what appears to be a mechanical gear and he is confused. He is puzzled by this.

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Most scholars were convinced that the gear technology was invented primarily in Europe maybe during the Renaissance or later.

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So we can imagine the astonishment and the confusion of Mr. Stice.

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The device is dubbed the Antikythera Mechanism named for where it was found and it's much more complex than originally thought.

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Turns out that they brought up about three main pieces of the mechanism with 82 separate fragments many of which also had gears.

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But it appears that this is only a small part of the machine and Stice is looking at all of this and trying to figure out how it all goes together.

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The fragments are not in great shape. I mean they're really, really hard to get at. They're covered in dirt. They're aged.

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00:05:34,000 --> 00:05:42,000

Imagine trying to put this thing together. It'd be like putting together a 3D puzzle and all of the pieces are the exact same color.

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Two thirds of this thing are missing and the parts that we do have are covered in sediment because they've been sitting at the bottom of the ocean for 2,000 years.

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Faced with these challenges, Stice ultimately gives up and no one attempts to decode the machine for decades.

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Then in 1951, a British physicist named Derek de Sola Price is studying the history of scientific instruments of the ancient world and he becomes fascinated with the Antikythera Mechanism.

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He goes to Greece to see it in person. He examines what he thinks are inscriptions on the device.

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Now that in and of itself is remarkable because it's pretty uncommon to see Greek writing inscribed in metal.

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Many of the letters are rubbed off or corroded beyond recognition but they do manage to translate one word which translates to ray of the sun in ancient Greek.

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And then there are other letters which might be part of the word Aphrodite.

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00:06:42,000 --> 00:06:48,000

As Price manages to translate more of the text, he develops a theory.

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Most of the words that you could read had to do something with the sky.

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So because of the gearing and the inscriptions, this is what convinced Derek de Sola Price that he was dealing with an astronomical computer.

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Think about that and really let it sink in. This makes it a computer that was built more than 2,000 years ago.

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Price sketches out a rendering of what he thinks the original mechanism must have looked like.

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We're talking about a box with dials on the outside, you've got a hand turned crank and on the inside you've got a series of very complex gears interlocking and interweaving with each other.

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Price believes that this device actually calculates the movement of the sun, of the moon and possibly the planets.

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00:07:32,000 --> 00:07:36,000

What the user would have to do is they'd have to input, for example, a date.

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00:07:36,000 --> 00:07:44,000

And then it would spit back out the information for you as to where the sun or the moon or potentially a planet was in the sky at that time.

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00:07:44,000 --> 00:07:51,000

That is just one definition of a computer, right? You input information and then it will output data right back to you.

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00:07:51,000 --> 00:07:58,000

The entire concept of that is so far ahead of its time, like over a thousand years ahead.

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Having the math, the astronomy, the technological prowess to create it, it's just completely baffling.

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00:08:04,000 --> 00:08:10,000

The discovery challenges everything scientists thought they knew about the ancient world.

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There weren't astronomical, calendrical computers in ancient Greece. There were sun dials.

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That's what we thought was the height of their technology.

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The ancient Greeks get a lot of credit for being very advanced in the realms of places like art, philosophy, architecture, but building a computer.

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That's out of the realm of possibility. This device should not have existed in AD BC.

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For this level of technology, it's really when we start making mechanical clocks from the 1300s that you finally get gears like this on a regular basis.

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The first analog calculators we really don't see until the 1600s. So it's like at least 1500, 1600 years after this device was built.

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This is considered to be one of the greatest mechanical inventions of all time.

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And Price sums it up by saying that from all we know of Hellenistic math and science, we would think that a device like this could not exist.

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Price spends the next two decades trying to uncover more answers.

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Price becomes convinced in his study that it is a planetary computer, but he's never really able to figure out who built it or how it could have been built in that time period.

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So Price works with what he has and with what he can see, but remember there are still two-thirds of this device missing.

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So what are those components? What might they do? And could they help to truly explain what the purpose is behind the Antikythera mechanism?

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Not only that, but the pieces that Price does have are all fused together. It's almost like a solid piece of stone. It's very hard to discern what's going on inside.

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But it won't be for long.

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The mysterious Antikythera mechanism stumps scientists for ten decades.

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How could something this complex date to ancient Greece? And what is its purpose?

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British physicist Derek DeSola Price thinks he knows.

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He believes that the device is an astronomical computer that was able to track the heavenly bodies

over time.

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But the technology that he's using to study the mechanism just isn't very advanced.

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The best he can do is an x-ray machine in the 1970s. And those images are flattened. You can't see the detail of the gears inside.

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So some of his conclusions are, by necessity, educated guesses.

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Then, in 2002, the British Science Museum's curator of mechanical engineering, Michael Wright, applies new technology to the device.

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Wright and his research partner take radiographs of the machine to fill in more of its functionality.

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As opposed to just a flat two-dimensional scan, these scans can focus on one plane at a time, which allows for more precise location for each of these gears inside the machine.

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After analyzing his scans, Wright believed that this machine was far more complex than what Price had originally asserted.

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And additionally, there was a turntable on the inside of it that rotated for each planet.

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One of the other cool things Wright finds is a half-white, half-black marble that he postulates can be used to predict the phases of the moon.

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This is confirmation of Price's theory that this is essentially a device tracking the motions of the heavens.

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But now we know more specifically what is tracking the moon, the sun, and the several planets the Greeks were aware of.

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The question is, why was it used?

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In 2013, a team at Cardiff University performs even more advanced scans.

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Led by astrophysicist Mike Edmonds and mathematician Tony Freeth, the approach that they take is too prompt.

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They use high-resolution surface scanning to make their way through all of the corrosion and the sediment that had built up on the device,

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and they also use a computed x-ray tomography to get closer looks on the inside.

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What this will help them to do is to create a highly detailed 3D image of the mechanism for the very first time.

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The approach yields yet another breakthrough.

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After they were able to finish their thousands of scans of the 82 pieces, something truly amazing emerges,

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and that is they find writing.

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It's extremely difficult to read something that is corroded, but because they had more advanced technology in their scanning of the device,

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00:12:35,000 --> 00:12:38,000

now you have hundreds, hundreds of letters.

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The entire façade of it is covered with writing that had never been seen previously.

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00:12:44,000 --> 00:12:47,000

Now keep in mind that a lot of the parts of the machine are still missing,

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but the pieces that they're looking at have about 3400 pieces of text that are written in ancient Greek.

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So what they're really looking at is a partial user's manual for the machine.

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The manual confirms the mechanism can track stars and planets, but it also reveals something new.

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There's a lower dial on the back of the device that no one has been able to figure out yet,

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but Frith and his team, they think they have the answer,

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because there are glyphs etched onto the segment in the intervals of one, five, and six months.

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And Frith thinks that this is used to predict the timing of eclipses.

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Now why is this important?

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Because to the ancient Greek, predicting eclipses is predicting the future.

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In the machine's instructions, there are references to the size and even to the colors of the eclipse,

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and that's what keys Frith in, because eclipses don't have colors in nature.

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But what's interesting here is that the colors are what the Greeks used for what they called astral divination.

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In ancient Greece, astral divination, or the reading of the stars, is a vital part of daily life.

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The Greeks used this large-scale astrology to determine the fortunes of entire countries and civilizations.

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Eclipses were omens, and the colors determined whether they were good or bad omens.

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They inherited this belief system from the Babylonians, who used to obsess over the sky and everything in it.

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They would record whatever they saw and the effects that it may have had on their lives.

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For instance, on the day they set sail on a voyage, any particular planet is in the sky and the ship wrecks,

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00:14:31,000 --> 00:14:35,000

the next time that planet happens to appear, they won't send a ship out.

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Now we might call that superstition, but to them, that is very, very real.

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Now imagine the value of being able to have this information in advance.

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Before the Antikythera mechanism, if they had planted a bunch of crops and then an eclipse came and it was a bad omen and the crops die out, bad luck, right?

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But with this device, they can now plan in advance because they know when the eclipses are coming.

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This would allow them to plan far up ahead when the best time to make offerings to the gods, when to plan for big events,

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and especially when to embark on campaigns and to invade and launch wars.

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If this theory is correct, the Antikythera mechanism is much more significant.

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Suddenly, it's capable of making life and death decisions.

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00:15:26,000 --> 00:15:32,000

It's quite possible the device could operate the government and make decisions about statecraft.

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And as some historians are quick to point out, they've only recovered a third of the machine.

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Just imagine what the mechanism may have been tracking or predicting in its full form.

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00:15:43,000 --> 00:15:54,000

Perhaps the weather, perhaps natural disasters, maybe even the rise and fall of entire dynasties

and civilizations, all laid out like clockwork.

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A map of the stars or a way to predict the future, whatever its purpose, the ancient Antikythera mechanism is a technical marvel.

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Scientists have been studying this device for over 100 years now, ever since it was first discovered on that shipwreck in 1900.

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And again, with something so enigmatic by all rights, something that should not exist, you are dying to know what was its original purpose.

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What is it meant to do?

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But perhaps even more, you want to know where it comes from. What brilliant civilization built this?

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When we think about whoever created this device and compare them to other creative geniuses like Leonardo Da Vinci, Thomas Edison, Albert Einstein,

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clearly this person is in the same class, if not somewhat above them because of the nature of the time they were in.

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Da Vinci conceived of a helicopter 400 years before a working one was built.

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And then you have this society in ADBC that imagines this complex mechanical device, the likes of which weren't seen for another 1500 years.

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And not only did they imagine it, they built the thing. So that might have Leonardo beat.

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But who actually made it? Was it really the ancient Greeks? I mean, the writing inscribed on it would suggest that it comes from there.

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What workshop in ancient Greece has the skill set to actually build something like this?

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And we know the great minds of ancient Greece. And it seems that almost nobody fits that bill. Almost.

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Probably the only person in ancient Greece who comes to mind as maybe possessing the constellation of skills needed to build something like this is Archimedes.

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Archimedes is an inventor, a scientist, an engineer whose fame grew and whose legend grew amongst those who lived even soon after him.

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Around 50 BC, the Roman statesman Cicero actually writes about Archimedes owning a sphere, quote,

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binding the disparate motions of the seven heavenly bodies. Could that have been the Antikythera mechanism?

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If Archimedes workshop is the source, the device would be even older than anticipated.

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Archimedes dies around 212 BC, and archaeologists and experts think the device was made about 20 years before the ship sank, which would have been 80 BC.

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That's almost 130 years after Archimedes died. Does this rule out Archimedes? Not necessarily.

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Maybe the device was already quite old when it set out on this fateful journey.

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Recent evidence proves this could be possible.

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Thanks to those 2013 scans, we were able to calculate a day zero for the machine, or the first date that it was calibrated when it started doing these really complex calculations of astral positions.

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And this date is way before 80 BC. Their best guess is about 204 BC, which is around Archimedes'

time.

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So maybe he started the device and his workshop finished it off.

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The device's inscriptions also may support this theory.

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Many of these inscriptions have to do with datings and calendars, which really helps us narrow things down, because the Greeks did not have a simple universal dating system.

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In 2008, researchers at the Antikythera Mechanism Research Project discovered that the names of the months on the device are the same ones used for the current colonies, one of those colonies being Syracuse, the home of Archimedes.

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But this theory is disputed by NYU professor Alexander Jones in a 2017 book.

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Jones considers the possibility of Archimedes' workshop, but ultimately rejects it because it doesn't line up with where the mechanism was found, which was on a voyage that was heading between Crete and the Peloponnese.

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Because we know for a fact that the ship was headed out of the Aegean and into the Ionian Sea, and Corinth and its colonies are nowhere on that path, so the cargo couldn't have come from there.

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Around the same time, astrophysicist Mike Edmonds also challenges the idea that Archimedes or his team created the mechanism.

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Edmonds heads the Antikythera Mechanism Research Project, and he has something that a lot of the other researchers don't, because he is an astrophysicist and he understands the mathematics that the mechanism was built to calculate.

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The thing is, the mechanism is extremely precise when it comes to position tracking of heavenly bodies, but only if you're standing in the right spot.

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There are some limits, though, to the genius of whoever built the Antikythera Mechanism, because it was designed around the belief that Earth is at the center of the universe and everything goes around us.

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Now, of course, we know that's not true, and we can calculate the position of a celestial body no matter what vantage point we're coming from.

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But back then, with the math that they had, it's all relative.

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Based on Edmonds' calculations, the Antikythera Mechanism was built at 35 degrees north latitude.

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This is where the machine works perfectly. Now, Archimedes lived up at about 37 degrees, and up there, the machine would have worked okay, but it would have drifted towards inaccuracy, because it's about 150 miles too far north.

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And that finding opens up a new possibility.

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When you look at that line that runs through 35 degrees latitude through the Eastern Mediterranean, you realize there's not a whole lot there.

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There's Crete, there's Cyprus, and that's about it, and neither of those were hubs of technology, really.

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This leads some theorists to suggest that the location the device was built vanished.

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In 1996, author David Hatcher Childress proposes the lost city of Atlantis as the Antikythera Mechanism's place of origin.

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In a way, there was no more fitting home for the mechanism than Atlantis.

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Greek philosopher Plato describes it as a powerful, advanced, mechanically superior civilization that was on a large island and succumbed to natural disasters.

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For centuries, researchers have looked for the remains of that lost city.

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If you start thinking about Atlantis, if it existed, and that's a big if, there are a couple of top candidates for where it might have been, and one is off Santorini.

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What the modern Greeks call Santorini, the real name is Thira, Zejadedokenno.

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In 6050 BCE, it blew up and destroyed two-thirds of the island.

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And it triggered off these enormous earthquakes and tsunamis that swallowed up a lot of Santorini and also impacted Crete and possibly any other islands that sat in between the two.

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Now, I know most people might think Atlantis, that's a place of fiction, right?

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But there actually was a real-life civilization that was submerged by water, and they were called the Minoans.

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And many historians think that the Minoan civilization actually inspired the story of Atlantis.

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The location actually lines up with the origins of the Antikythera mechanism, a now-missing island just north of Crete that sits at 35 degrees latitude.

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But not everyone's convinced.

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One of the challenges with the Atlantis theory, even if Atlantis existed, is the timing.

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It would have been long gone by ADBC.

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If this is a relic from Atlantis, it would have been quite old by the time you loaded onto the ship.

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Now, it's not completely impossible because after all, it's a partial thing that survived 2,000 years at the bottom of the sea.

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It might be even older than that, but this one's going to be really difficult to prove.

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The author proposes a shocking idea. The machine may not be as old as we think.

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Pretty much everyone who has studied or even looked at or read about the mechanism would say, how is it possible that this thing was made over 2,000 years ago?

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That is, until author J.H. Brennan presents a novel, new approach to the problem.

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What if it wasn't made 2,000 years ago? What if it was made in the future and traveled back to the past?

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In his book, *Time Travel, A New Perspective*, Brennan asks,

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Was the Antikythera mechanism carried to ancient Crete from the future?

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Sounds preposterous. But does it sound any more preposterous than thinking that the ancient Greeks made this device?

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Some would say no.

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It's sophisticated understanding of astronomy, it's mathematical prowess, as well as its mechanical engineering genius.

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We have no other evidence that this type of skill ever existed in AD/BC other than this device.

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We have no other device that has a similar level of technology. There's no evidence for anything else like this mechanism in ADBC.

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Even pioneering researcher Derek DeSola Price says that finding this device on a Roman shipwreck is like finding a jet plane in the tomb of King Tut.

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Just the fact that it's a clockwork gear-based mechanism is something we didn't think existed in ancient Greece.

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One of the gears on the Antikythera mechanism is what's called a differential gear.

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A differential gear is a gear in which the cogs are of different sizes.

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So you have a large gear and a smaller gear, the large gear has to spin at a more rapid rate to keep up with the smaller gear.

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So a common differential gear exists in your car because when you make a turn, the outer wheel has to spin faster than the inner wheel.

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The differential gear in the Antikythera mechanism is used to determine the angle between the sun, the moon and the phases of the moon.

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And there it is in ADBC in this machine.

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The next time that we see a differential gear used in a device is in the year 1720 in a clock made by Joseph Williamson.

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And it is not in common use until the early 1800s.

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Maybe now Brennan's time travel idea isn't so far-fetched.

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If the mechanism features technology from 1800 years into the future, how do you reconcile that?

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Proponents of this theory also point to the fact that nothing else like it exists.

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Breakthroughs in the history of science are generally developed over time.

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When you look at the history of something like the printing press or a telephone or an automobile, there are precedents.

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There are partial steps in the development of the device that get it to where it is today.

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We didn't just suddenly have a corvette.

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There were a lot of rudimentary attempts at a vehicle that got us to the corvette.

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But the mechanism has no precedents in ancient times.

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We have found nothing else like this, not even close.

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So you have to ask where are the other devices?

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Why haven't we found any other mechanisms that can do even a fraction of what this one does?

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When we think about clockworks and you want to look at its development from rudimentary clockwork to more advanced,

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you're really going to be looking at the period just before the Renaissance.

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That's when it started. You're not going to be looking at ancient Greece.

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For all these reasons, the idea that the anti-kithera mechanism traveled through time does have some supporters.

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But then there are other theorists who are even more out there who say,

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the anti-kithera mechanism didn't just time travel, it is the time machine.

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So on the front of the device, you have the positions of various objects, the sun, the moon and the planets.

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You then have a crank that you use to rotate to a particular date that then puts everything in the position where they're going to be in the sky.

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So therefore you have a device that is calculating both space and time.

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When physicists like Albert Einstein and Stephen Hawking talk about time travel,

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the question becomes whether or not space and time can fold in on itself to allow a person to jump in between time periods.

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So those inputs on the anti-kithera mechanism, could they be coordinates for a journey through spacetime?

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The mechanism could literally be an atlas to the cosmos in four dimensions, including time.

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It's a map to get you to your destination.

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But with only one third of the anti-kithera mechanism to examine,

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its additional functions, or its possible purpose, can't be fully determined.

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Nothing of what we currently have is a time machine. Let's just be clear about that.

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But could the mechanism's missing parts help power a journey through time?

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It makes for a fun story. The very first time traveler finishes their prototype.

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They decide they want to encode the instructions in ancient Greek,

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because they've long admired the society for its well-known wisdom.

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So much so that that's actually where they want to go on their first destination.

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So they go back to ancient Greece in the time machine, they're there,

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some tragedy befalls them, the shipwreck, and poof!

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The only anti-kithera mechanism is now stuck in 80 BC.

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In 1968, one influential author suggests he knows the secret to the anti-kithera mechanism.

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In his 1968 book, *Chariots of the Gods*,

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Eric Von Daniken questions numerous ancient technologies,

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which he believes were too advanced to have been created by the humans in those respective eras.

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So these are things like the pyramids and Machu Picchu, Stonehenge,

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and the anti-kithera mechanism.

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According to Von Daniken, the reason is clear.

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These things were not created by humans.

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They were made by highly intelligent extraterrestrials.

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The theory is definitely out there, but it attracts a lot of believers.

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If this machine is beyond human knowledge, what other option do we have?

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Von Daniken believes that in the distant past, extraterrestrials land on Earth,

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they make contact with humans, they share their knowledge and want to help advance scientific progress,

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and in the places where this happens, we see these unexplainable advancements,

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like in ancient Egypt, or in this case, ancient Greece.

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The theory is that this is extraterrestrial technology given to humans

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that's based on their understanding of tracking the stars and the planets

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so that they can help humans better understand the universe around them.

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According to Von Daniken, the reason you have ancient Greek language written on the device

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is that either the extraterrestrials built it for them and then translated the instructions into ancient Greek,

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or taught them how to build the device and the Greeks themselves put the instructions on it.

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In 1999, Von Daniken publishes *Odyssey of the Gods*,

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in which he suggests that ancient Greece was once a nexus of alien activity.

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Von Daniken sees evidence of this all around.

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The Antikythera mechanism, the advanced political structure and civilization that they build,

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even the stories that they tell about their gods.

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Extraterrestrials capable of traveling distant galaxies would look like gods to ancient humans.

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Von Daniken believes these visitors are an inspiration for the Greek gods, Zeus, Apollo, Aphrodite,

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and the other residents of Mount Olympus.

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Another thing that comes up in Greek legends is flying.

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Gods fly, chariots fly.

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This is unusual in a society where they've never seen anything that flies other than birds and insects.

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As we know, there are no flying vehicles in ancient Greece, but maybe some came to visit.

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Is there any evidence that aliens visited these ancient cultures?

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Not exactly, but the Greeks and Romans observed and recorded some strange happenings in the sky,

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and some of those accounts are pretty curious.

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In 2007, Goddard Institute astrophysicist Richard Stuthers publishes a report on unexplained aerial phenomena in the ancient world.

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Stuthers analyzes these texts from ancient Greece and Rome and finds a ton of unusual phenomena in the skies at that time.

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Now some of it can be explained as meteors and asteroids, but a lot of it remains unexplained.

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In 65 AD, historian Josephus in his History of the Wars records an event in Judea that can only be described as a battle in the sky,

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with chariots and troops of soldiers and armor shooting fire at each other.

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This event had many witnesses and has led some people to argue that this was an alien encounter.

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Stuthers compares these accounts to modern UFO reports, which as we know, our military has begun declassifying.

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Other ancient records describe objects in the sky that are disc shaped and metallic in texture and have soundless movement and are able to hover.

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And this actually sounds a lot like modern UFO sightings, so it doesn't prove that aliens visited ancient Greeks, but it's interesting.

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Could this origin hint at the true purpose of the Antikythera mechanism?

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So let's assume, just for a minute, that it is alien technology.

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Well then what was it used for? I mean why give the Greeks this machine?

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Von Daniken suggests that due to its portable size, it was probably made as a navigation device. It would have been easily carried and mounted on a ship.

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According to Von Daniken, the aliens were hoping that the humans would advance from ships at sea to ships in the sky or spaceships.

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This device was ultimately designed to navigate our solar system, not just the Mediterranean.

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Some speculate the machine might be capable of even more.

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Don't forget all the missing parts. While the pieces we have helped track the planet's closest to Earth,

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alien theorists think that the full device might have been used to track aliens' homeworld,

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or other navigational aids that might have helped us get from here to there.

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Alien theorists also speculate that there might be a communications component within the missing section.

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Maybe it doesn't just track the aliens' home, maybe it is a way of sending messages.

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Let me be very clear, was this incredibly precise machine made by highly intelligent extraterrestrials?

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No, probably not. I mean, probably not.

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But I think it is absolutely amazing how the mechanism inspires wonderment in everyone who comes across it.

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How did it get here? Where did it come from? The stories that people come up with for this thing are incredible.

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The possibilities are endless.

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In 2021, a team led by Dr. Tony Freeth completes a significant breakthrough, a working model of the Antikythera mechanism.

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Dating back to one of the original researchers, Derek deSola Price, many people have tried to recreate the mechanism, or partial versions of the mechanism.

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But this one is different. It includes every gear, every inscription, and every functionality.

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It even includes the wooden case. Everything we know, every piece we've found, all put together in working order.

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It doesn't reveal any additional functions, but it's definitely a useful tool to have to see this all come together, and it could lead to future discoveries.

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But Freeth building this model has an unintended consequence.

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It leads many people to argue that the mechanism never worked at all, and all the theories around its possible uses are in fact wrong.

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Over the years, many have questioned whether the Antikythera mechanism ever worked.

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In 1980, the American scientist and Nobel Prize winner Richard Feynman goes to Greece, and he sees the Antikythera mechanism for himself in Athens, and he wonders whether it could have functioned.

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Freeth's model works. However, we have no proof that the original mechanism ever actually did.

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And Freeth takes some liberties in assuming how certain gears fit and how they may have fit together.

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With the benefit of modern technology and the ability to work backwards, he can kind of guesstimate and put the thing together the way he feels it should work.

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This does not mean it's accurate to the original, and Freeth makes no such claim.

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It's not meant to be taken as a literal reconstruction of the mechanism.

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He points out, however, that it does prove that something with this functionality could fit in a box that size.

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But is there any evidence the device ever actually functioned?

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Theorists quickly point to the fact that it took us more than 120 years since the object was found in 1900 to build a replica that works the same way.

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And that's with hundreds of top scientists studying it and the benefit of modern technology.

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This just wouldn't have been possible in ADBC.

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People point out that Freeth's model does not look exactly like the mechanism, which is currently a mass lump with no moving parts.

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The mechanism is a few hunks of metal and rock with a few gears sticking out of it, looking more like something from a Frankenstein movie or a class project than a computer.

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It wouldn't be the first time experts were fooled.

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In the 18th century, a man named Johann Kemplendepasmen creates a clockwork robotic chess player that becomes known as the Mechanical Turk.

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The machine has a life-sized human head and torso with arms that are resting on a cabinet, and on the cabinet is a chessboard.

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And human beings come up and play chess against this machine, and the machine wins.

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The Turk makes its official debut in 1770 in Schoenbrunn Palace, which is the summer residence of Austrian rulers.

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Before it starts to play, the audience is invited to come up and check the machine to see that it is actually real, that there are no strings moving the arms or no devices of any kind allowing it to move.

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But it all checks out, and people when they're playing the Mechanical Turk try to perform some illegal moves,

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but the machine will start to shake its head and say no, as if it's recognizing that that move is not allowed. It's really incredible.

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The Mechanical Turk becomes a sensation across Europe.

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It tours European capitals in 1783, stopping at Versailles and playing all of the best chess players in the world.

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It plays Benjamin Franklin, Napoleon Bonaparte, the king of Prussia, brilliant minds who all marvel at this chess-playing automaton.

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But in 1834, a series of articles reveals the device to be fraudulent.

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For 60 years, it fools everyone, but it turns out that it's all an illusion with a human chess master inside the cabinet playing and manipulating the machine.

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But even though the Turk doesn't work without a human operator, it is still a brilliant design.

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The device is put on display in Philadelphia in a museum until it burns down in 1854.

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People celebrate it as a cunning piece of clockwork, regardless of the fact it didn't automatically play chess.

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Can the same be said of the Antikythera mechanism?

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The parallels are clear. The Antikythera mechanism could be the original Mechanical Turk, and maybe it was a showpiece,

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a marvelous clockwork housed inside of a statue that appeared to track the heavens through time automatically, but it wasn't actually automatic.

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Inside the statue, there was an operator making it all work.

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Despite the questions it raises, most historians still believe the Antikythera mechanism is genuine.

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We know the Greeks were big fans of amusements and entertainment, but if that's the case for this device, why engrave it all over with the detailed instructions?

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What purpose does that serve an audience? I don't think it was meant to be gawked at, and for entertainment, it was meant to be used.

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00:40:40,000 --> 00:40:49,000

And if it didn't work, why was it on a ship with all of these other marvelous treasures bound for someone potentially as important as Julius Caesar?

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00:40:49,000 --> 00:40:52,000

I think they thought this was a really valuable object.

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00:40:52,000 --> 00:41:02,000

Dozens of academics have dedicated their lives to studying this thing, and it has rewritten the history books to show what mankind is capable of.

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00:41:02,000 --> 00:41:17,000

Our species is incredible. We may not know what the Antikythera mechanism actually did, but we can take pride in the fact that somebody was brilliant enough to create this thing over two millennia ago,

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00:41:17,000 --> 00:41:24,000

and hopefully someday soon there will be somebody brilliant enough to solve its mysteries.

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00:41:25,000 --> 00:41:34,000

Recovery efforts continue to this day at the site of the Antikythera shipwreck. In 2017, an

additional gear was recovered.

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00:41:34,000 --> 00:41:46,000

Scientists are now working to determine its function. Perhaps new discoveries will unlock the machine's secrets, or they may simply leave us with more unanswered questions.

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00:41:46,000 --> 00:41:52,000

I'm Lawrence Fishburne. Thank you for watching History's Greatest Mysteries.