
DOROTHEA
ON THE ROCKS
Animated adventure series
4 chapters x 6,5' x 6,5
+ 8 years
MOM
www.momworks.es

THE PROTAGONIST

When I was a child, I used to like looking at plants and animals. Being born in Wales made it easier for me to study nature and the past to understand everything around me.

I started observing and drawing nature just for the pleasure of it, but what I really wanted was to work on excavations, so I travelled alone to remote sites. Between 1901 and 1911, I explored the mountainous areas of Crete, Cyprus and the Balearic Islands. I found fossils of pygmy elephants and hippopotamuses in the first two, and in Majorca, I discovered the *Myotragus balearicus*.

My findings were new to science and theories of species evolution.

I looked where no one else was and became one of the world's most celebrated "fossil hunters".

LOGLINE

Dorothea on the Rocks is an animated adventure series based on the travels of British palaeontologist Dorothea Bate in the early 20th century.

SYNOPSIS

Dorothea on the Rocks follows Bate's wanderings from one part of the world to another, facing the many hardships that a young woman in the early 20th century had to endure to become a fossil hunter.

It is an epic series, with moments of emotion, disappointment and even fun, without neglecting scientific rigour.

On her journey, Dorothea discovers not only unlikely animals, but she comes close to losing her life on several occasions, convincing her parents to let her travel, making friends, confronting whoever it took to get funding for her travels and even fending off the obscene propositions of a vice-consul.

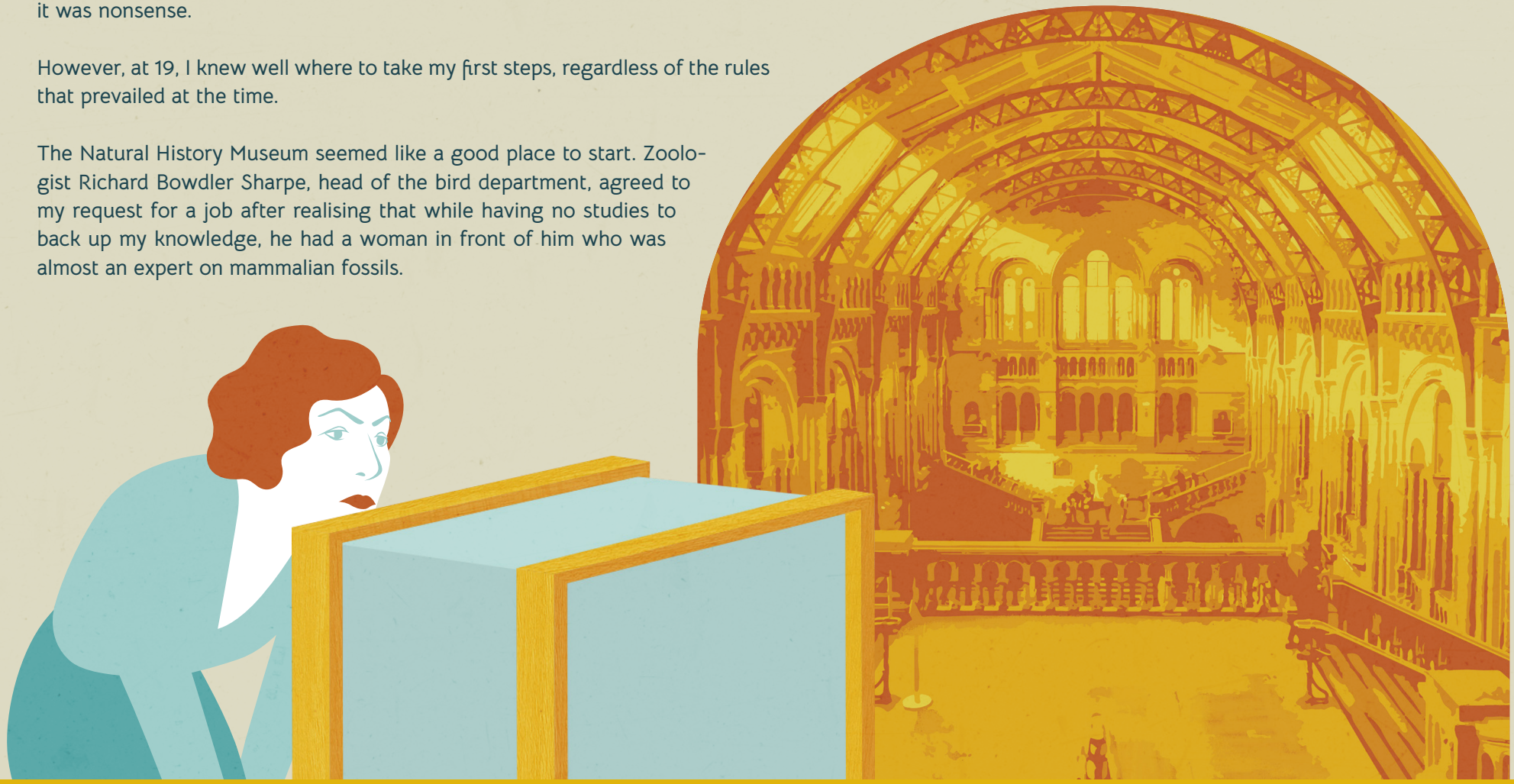

ADVENTURES...

A WOMAN WORKING IN THE MUSEUM

In 1898, it was still unthinkable that women be employed as scientists; indeed, it was nonsense.

However, at 19, I knew well where to take my first steps, regardless of the rules that prevailed at the time.

The Natural History Museum seemed like a good place to start. Zoologist Richard Bowdler Sharpe, head of the bird department, agreed to my request for a job after realising that while having no studies to back up my knowledge, he had a woman in front of him who was almost an expert on mammalian fossils.



TRAVELLER AT TWENTY-TWO

In 1901, I visited Cyprus to look for bones. I initially went for a short time but ended up staying for a year and a half.

It was a very fruitful time. While observing, trapping and researching live birds and mammals, I found bones of extinct hippopotamus and pygmy elephants, species endemic to the area, in caves.

When I was not travelling in remote areas, usually alone, I also enjoyed an active social life.

EXOTIC PLACES

In 1904, I spent some time in Crete, examining the caves of such exotically named places as Spratt, Falasarna, Jania, Kissamos, Akrotiri, Rethymnon...

Near Mylatos, in the Cataró plain and Jarumes, I recorded dwarf elephant bones. Among them, *Mammuthus creticus*, identified as the world's smallest mammoth.

The remains I found of this mammoth consisted of several molars and part of a humerus, which I took back to Britain.

DIFFICULTIES ALONG THE WAY

I spent my days crossing barriers and bandit-infested terrain, either on foot or on a mule and sleeping in insect-infested huts.

I trudged through turbulent waters to reach caves in isolated cliffs I struggled over, covered in mud, but never without my bag to store whatever I collected on the way, be it nets, insect boxes, a hammer, a weapon and even dynamite.

I contracted malaria in Cyprus and scarlet fever in Majorca, but despite the fever, I wanted to continue working, putting my discoveries before my health time and again.

ON THE TRAIL

I travelled to Majorca on the trail of a letter written by the Reverend Robert Ashington Bullen, who told me that in the Cova de na Barxa, there were some mysterious bones that I should go and investigate.

I knew this was a difficult undertaking: the island is very mountainous and full of caves to search for sites, but there was no reference to extinct fauna.

In the Capdepera cave, I found the fossil of a mysterious animal, which looked something like a cross between a goat and a rat, which I named *Myotragus balearicus Bate*, and which today remains one of the most unknown species on the planet.

INSTABILITY IN BETHLEHEM

The archaeologist Dorothy Garrod needed an expert to assist her in her excavations in the Wadi el Mughare caves on Mount Carmel (Israel), and I joined her in 1934, in a context of growing political unrest. Together we discovered the remains of fifty-four species.

The Palestinian Department of Antiquities also requested my services to elucidate the origin of some fossil bone remains. They turned out to be from one of the first elephants to exist outside the African continent, *Elephas planifrons*.

I was overjoyed, but that state disappeared as easily as a balloon pops. Upon hearing of my recent discovery, Archaeologist James Starkey convinced the department to put him in my place. I was angry but worked as a collaborator all the same even though he was listed as the project leader.

Starkey died shortly afterwards at the hands of the army. The sound of the Second World War could already be heard in the background. This marked the end of the excavations in Bethlehem.

KENYA

I worked for many researchers analysing and identifying fossils. They even called me to present my knowledge at the Pan-African Congress on Prehistory in Kenya.

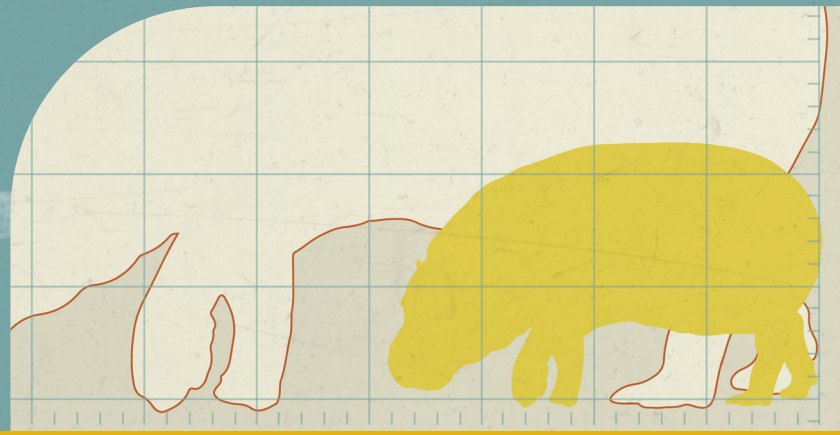
Finally, in 1948, at seventy, I was appointed to my first post as official director in charge of the Museum's premises at Tring in Hertfordshire.

DISCOVERIES

ISLAND THEORY OF EVOLUTION

One of the major discoveries I made in the Mediterranean islands concerned the rapid evolutionary changes of species. I found molars between 10,000 and 800,000 years old. It was what proved the existence of dwarf elephants and hippos.

In my studies, I observed that this range of size differentiation, the phenomenon of large animals becoming smaller as small animals become larger, was a constant feature of the isolation of faunas on islands, which influenced several groups of mammals. It was a subject I studied throughout my life. Today it is known as the island rule and is a common topic in how animals adapt to island areas.



My discoveries have greatly paved the way for zooarchaeology, and some studies have followed in my wake.

EXTINCT ANIMALS

In Cyprus and Crete, the fossils I found included extinct species of hippopotamus and pygmy elephants and, in Crete, I also found a normal-sized elephant.

In Majorca and Menorca, I discovered extinct species exclusive to these islands. Among them, the *Myotragus balearicus* is a splendid example of evolution, adaptation, survival and extinction.

I also collected over two hundred species of live birds, mammals and insectivores during my travels in the Mediterranean. These animals were sent to the museum to become part of the collections.

FEMINISM

An American archaeologist named Harriet Boyd led the excavations in Crete at the Minoan city of Gournia. Two other women, Edith Hall and Blanche Wheeler, worked alongside her.

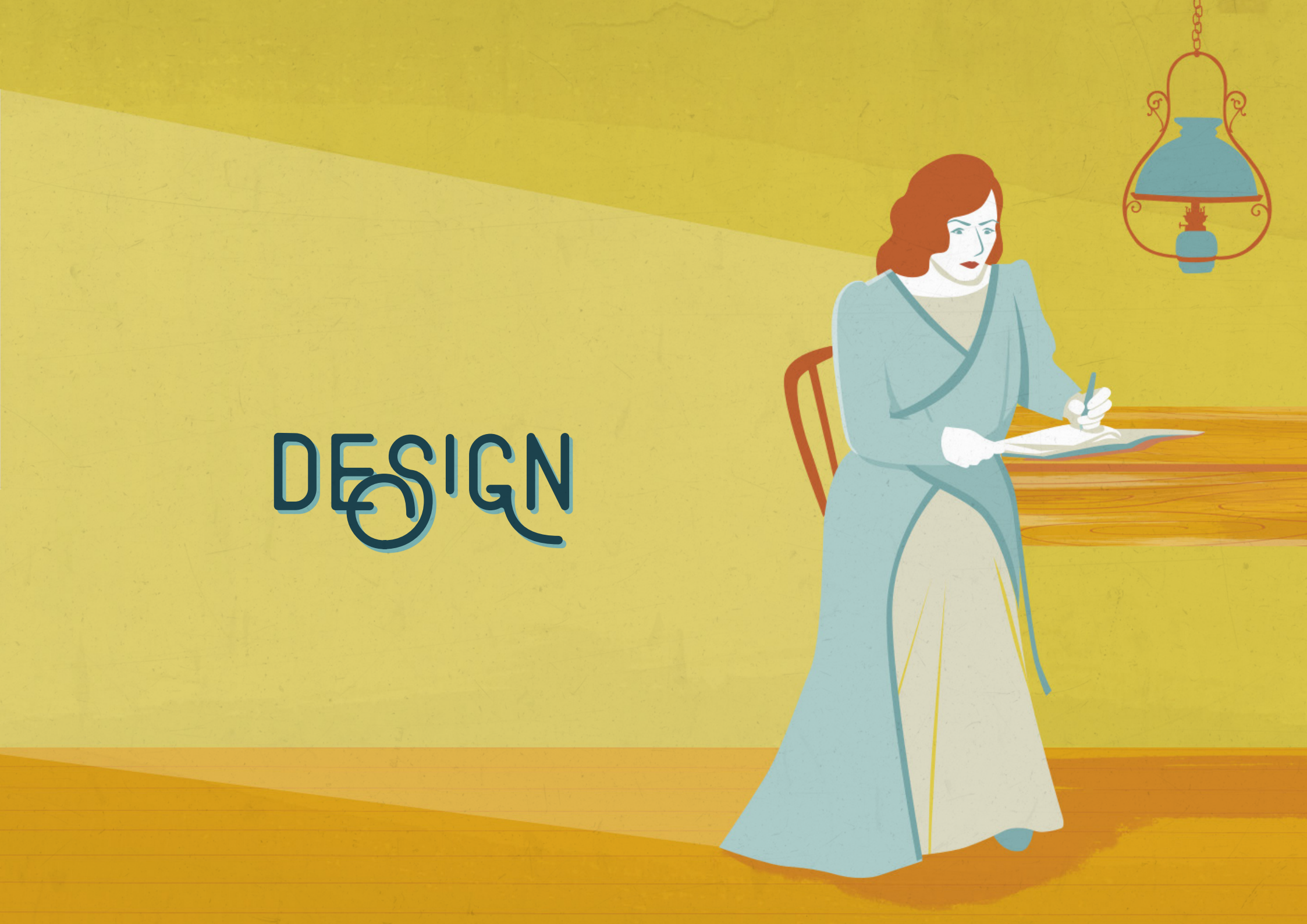
This image of not one but three adventurous women like me surprised, captivated and encouraged me to continue my work.

Many archaeologists and anthropologists have relied on my expertise in identifying fossil bones, including Louis Leakey, Charles McBurney and John Desmond Clark. And I became the first woman to be appointed to a professorship at Cambridge University.

However, I was never able to present my work at the Royal Society in London. I could not read them in public as men did. I was not allowed to have an authoritative voice as a scientist despite having publications.

Nor was I ever on the scientific staff of the Natural History Museum in London, a privilege only given to men. Women enjoyed it from 1928 onwards.

DESIGN




DOROTHEA

MIQUEL

He is Dorothea's companion on her trips to the Balearic Islands. He proves to be of great help as a guide, translator and excavation worker. Miquel is one of Dorothea's closest friends, with whom she shares joys and disappointments. He has an essential mission: sending all the fossils they found to the museum.

HENRY AND ELIZABETH

Dorothea's parents raised her in the countryside and allowed her to investigate the species near their home. The relationship becomes complicated when they want her to stop thinking about her travels and settle down at home with them.

VICE-CONSUL

He initially helps Dorothea on her first trip to the Balearic Islands, but everything gets complicated when the vice-consul wants something more from her.

FATHER CALDENTEY

An amateur naturalist, he gives Dorothea the contacts that lead her to the cave where the mythical *Myotragus balearicus* hides.

DOROTHY GARROD

An archaeologist and one of Dorothea's close friends. Together they conduct important excavations in Palestine, breaking all the rules of what is expected of a woman.

ROWLDER SHARPE

Known at the Natural History Museum for his temper, the first thing he does when Dorothea asks him for a job is to tell her to go away. However, he discovers her talent gradually and ends up supporting her unconditionally.


BACKGROUND

DOROTHEA AND THE MYOTRAGUS

DOCUMENTARY

This series is based on the animations developed for the documentary **Dorothea and the Myotragus**, which was highly acclaimed at international film festivals.

Although it is based on this first approach to her story, the series extends other key moments in her career. Thus, she emphasises her research in the Balearic Islands and other islands of the Mediterranean Sea, especially Crete and Cyprus, and her latest research in the world. It also delves into her palaeontological findings, which are still of scientific relevance seventy years after her death.

AWARDS

- AUDIOVISUAL — PREMI CIUTAT DE PALMA — 2020
- BEST FILM — WRPN Women's International Film Festival — 2021
- BEST FILM — Toronto Feedback Female Film Festival (TOFFFF) — 2021
- BEST DOCUMENTARY — Independent Film Awards, Bristol — 2021
- BEST DOCUMENTARY — New York International Film Awards™ - NYIFA — 2020
- BEST DOCUMENTARY — Open Window International Film Challenge — 2020
- SPECIAL MENTION — Evolution Mallorca International Film Festival — 2020

EPISODES

EPISODE I

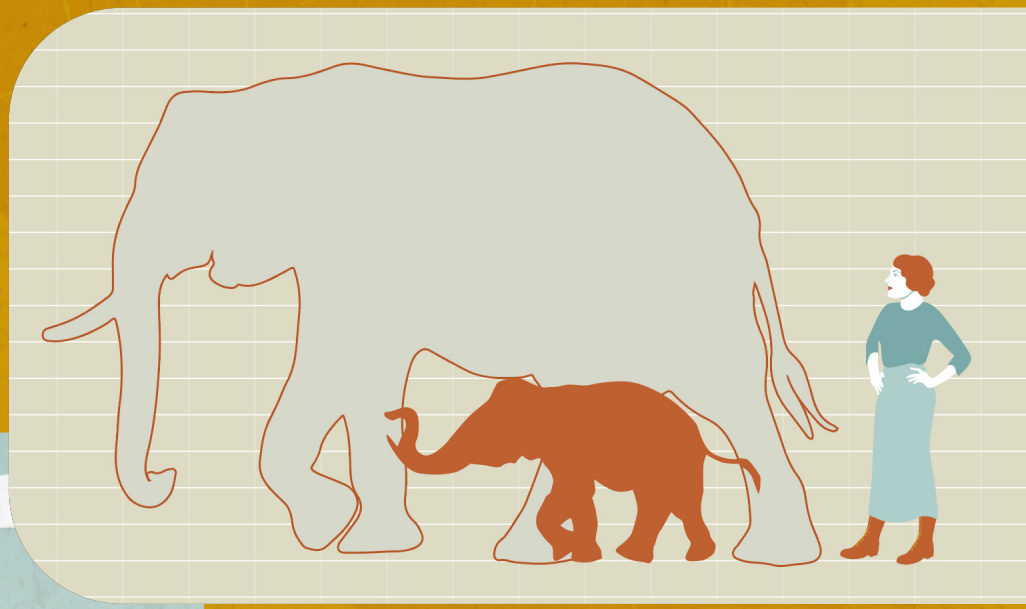
FOSSIL HUNTER

At 19, Dorothea was the first woman to be accepted as a collaborator at the National History Museum in London. She was soon encouraged to explore the Mediterranean. At 22, she set sail for Cyprus.

EPISODE 2

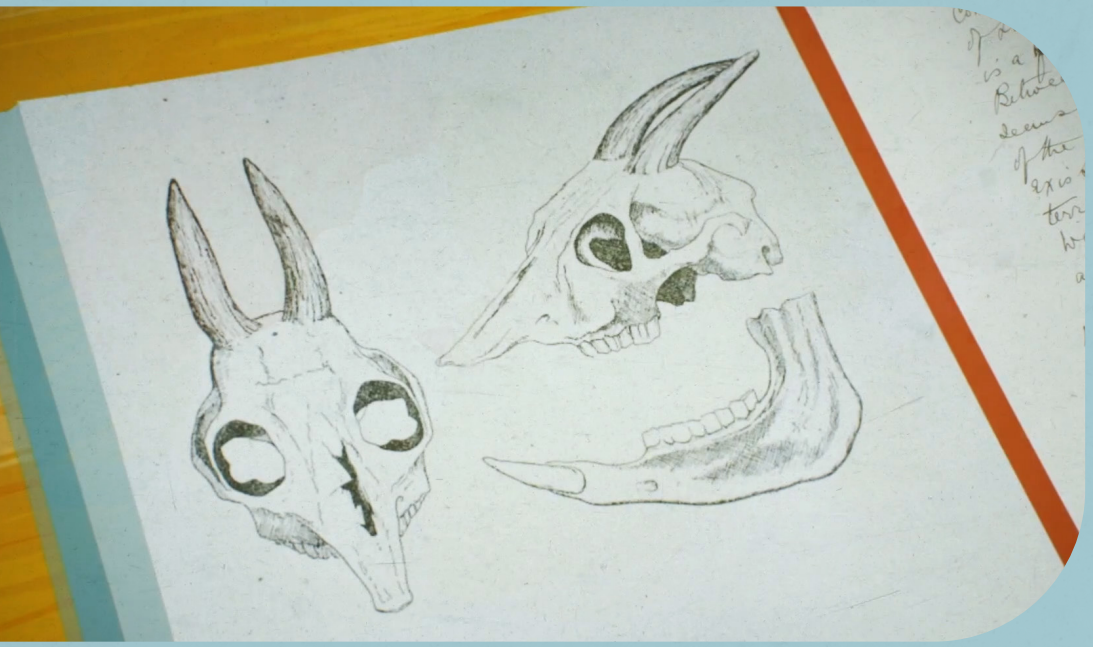
THE DWARF MAMMOTH

Dorothea travelled to Crete. She travelled to places with exotic names in pursuit of fossil remains. She found several molars and part of a humerus from the world's smallest mammoth.



EPISODE 3
MYOTRAGUS

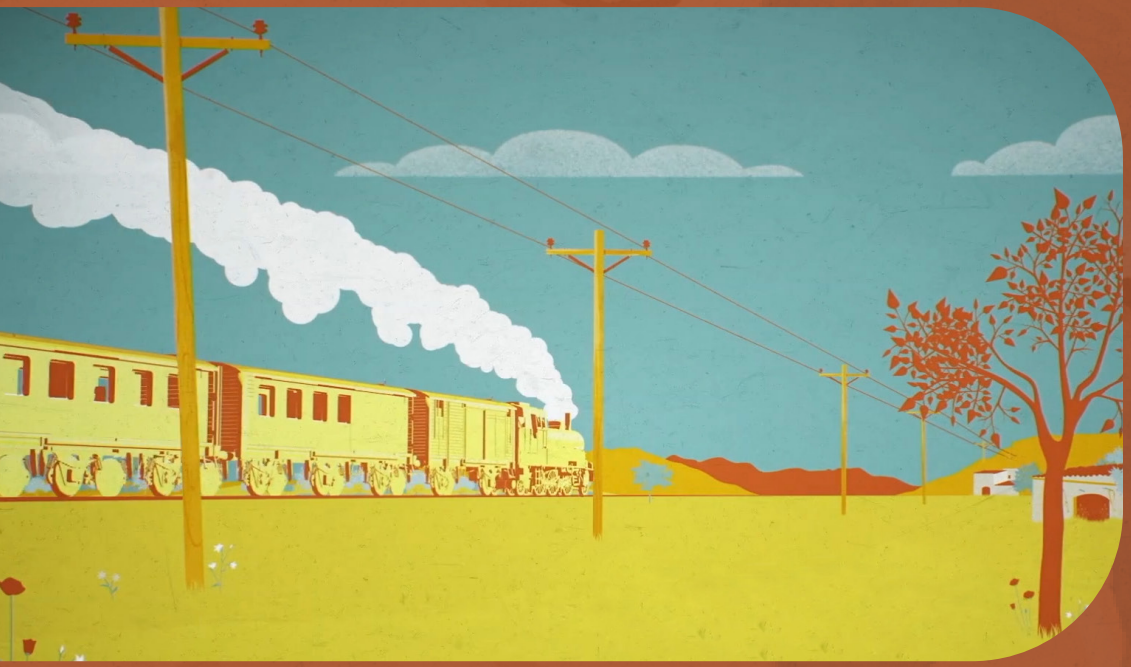
The young researcher received a letter from a fossil collector. He informed her that he had found a deposit of bones in Majorca. This was the best encouragement for a scientist with a restless spirit. In Capdepera, she discovered the bones of a very strange animal, the *Myotragus balearicus*.



EPISODE 4

AN ELEPHANT OUTSIDE AFRICA

In Israel, she and archaeologist Dorothy Garrod located the remains of over fifty extinct animal species. She also discovered one of the first elephants to exist outside the African continent. But war was about to break out.



GOALS

VISIBILITY

Fortunately, in recent years, there has been a trend in giving visibility to women's achievements which, until now, have remained in obscurity.

The main objective of the series is to vindicate the figure of Dorothea. With the discovery of the fossils of *Myotragus balearicus* in Majorca and of the pygmy elephants and hippopotamuses in Crete and Cyprus, she contributed enormously to the theories of the evolution of species on the islands, especially in the Mediterranean.

Dorothea Bate, who once received great international recognition for her discovery, fell into oblivion after her death.

CREATING NEW SCIENTIFIC VOCATIONS

Dorothea on the Rocks is a tool for creating new scientific vocations, especially in girls, who can find in the protagonist a mirror in which to reflect themselves.

Often, academic and scientific institutions denounce the lack of women in science and the need to create references to reverse this situation.

THE TEAM

DIRECTION, PRODUCTION AND SCRIPTWRITING: Marta Hierro and Núria Abad

ANIMATION, GRAPHICS AND EDITING: Luis Ozonas

3D GENERALIST AND ANIMATION: Adri Bonsai

ILLUSTRATION: Elisa Martínez

SOUND: Marc Farré

ORIGINAL MUSIC: Xisco Albéniz

MOM

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Consell de Mallorca

Mallorca
Film Commission