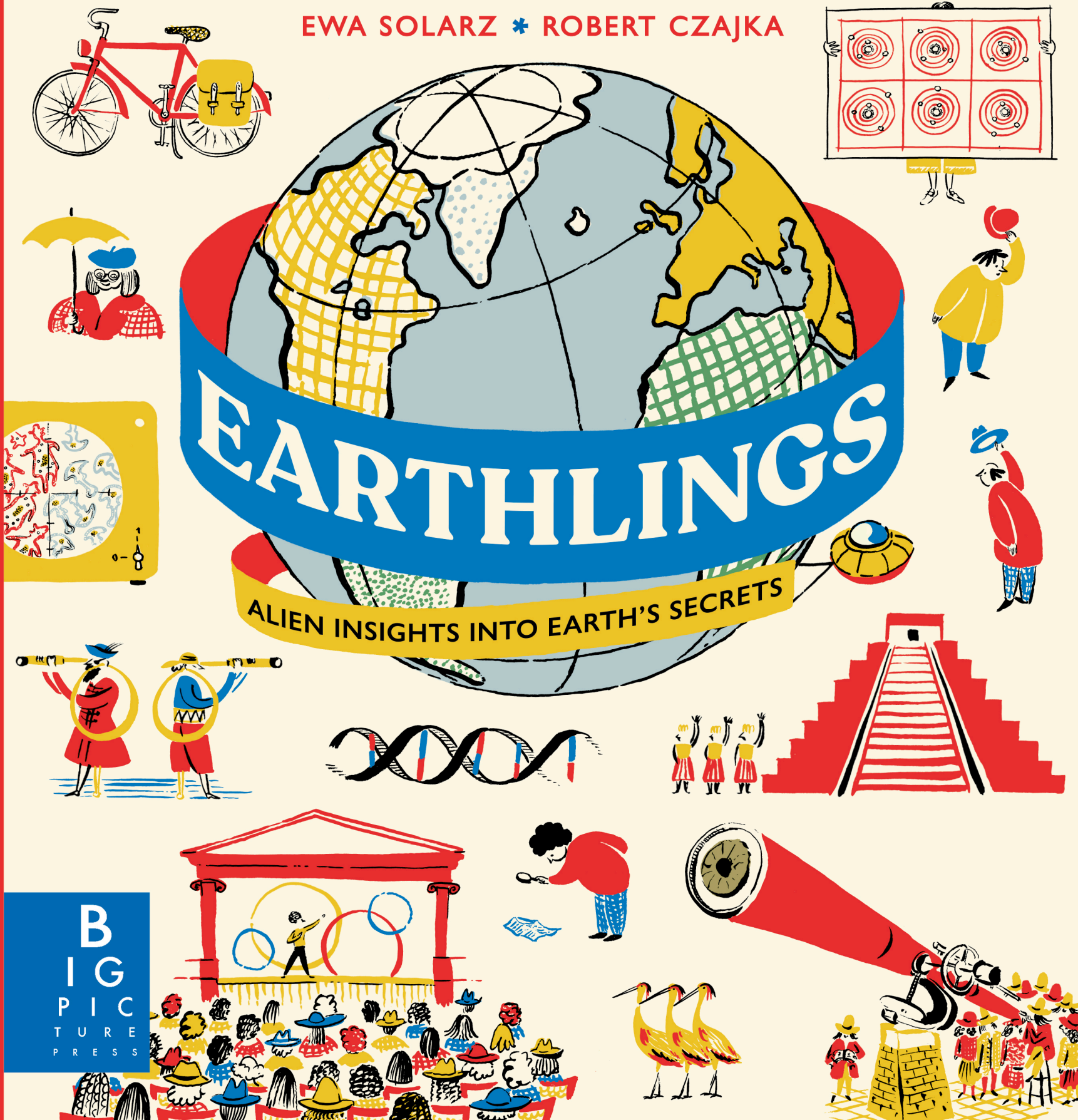


EWA SOLARZ \* ROBERT CZAJKA



## EARTHLING ASTRONOMERS

Humans once believed that their planet was at the centre of the Universe and that all other celestial bodies revolved around it.



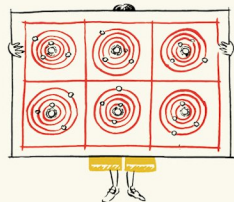
Thales of Miletus (624–547 BCE) proposed that the Earth resembled a flattened disc floating on the ocean, with the Moon, Sun and planets revolving around it.



Ptolemy (second century CE) believed the Earth was surrounded by eight transparent spheres that held up the celestial bodies circling around it.



According to Nicolaus Copernicus (1473–1543) the Sun was fixed at the centre of the Universe, with Earth and all the other planets revolving around it.



Giordano Bruno (1548–1600) determined that the Sun was just one of many stars – and that it wasn't at all the centre of the Universe. He believed that other stars (perhaps with their own inhabitants) host other planetary systems. He was burned at the stake for voicing these 'revolutionary' notions.



## FLAT EARTHERS

In spite of extensive astronomical research and evidence, not all Earthlings are convinced that the Earth is round. Some believe they are living on a flat disc surrounded by a wall of ice, with the North Pole at the centre of it.

## LAND AND WATER

Seen from space, Earth resembles a blue ball.



Despite its name, there's not all that much dry land on Earth. Most of the planet is covered in water.



Water covers 71 per cent of the Earth's surface while land covers the remaining 29 per cent of the planet.





Nearly all the water on Earth is salty. For every litre of fresh water on the planet, there are forty litres of salt water.



Nearly all the fresh water on Earth is either stored in glaciers or is deep below the Earth's surface. Only around one litre for every one hundred litres of fresh water is directly accessible to humans. This is known as 'surface water'.

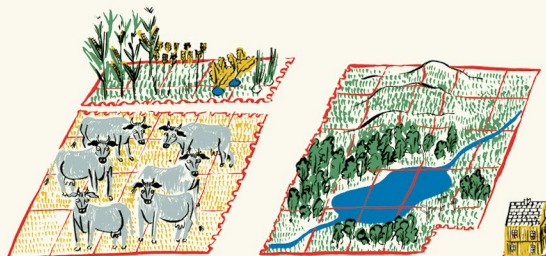
Of all the water on Earth, 97.5% is salty. Of all the fresh water on the planet, 69% is locked in glaciers and 30% is stored as 'ground water', whereas 1% is accessible as 'surface water'.



Most Earthlings live on land, but they can also be found high above ground or on the water. They dive into the ocean or sail ships across it. Some even live in houseboats on rivers and canals. They also like to paraglide or fly around in aeroplanes...



Not all of the land on Earth is habitable. Mountains and deserts, for example, are not suitable for human life.

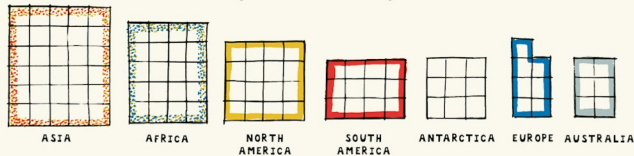


More than half of the land that is suitable for human dwelling has been turned into fields for farming and pastures for grazing. Forests cover about one-third of the land. Earthling cities make up just one per cent of the planet's land surface.

43% of the Earth's land is suitable for life, 24% is covered in mountains and 33% is made up of deserts. 77% of fertile land is used for grazing animals, while 23% is used for agriculture. Every year, Earthlings cut down ten million hectares of forest.



Earth's land surface is split up into continents. The largest piece of land – Eurasia – has been split into two continents: Europe and Asia.



The largest of all the continents on Earth is Asia and the smallest is Australia.

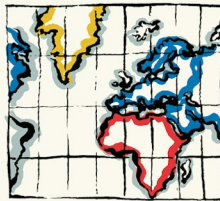


Earthlings inhabit six of the seven continents. The greatest number of people live in Asia, while Australia has the least number of people. Antarctica has no people at all.

59% of Earthlings live in Asia, 18% in Africa, 9% in Europe, 8% in North America, 5.5% in South America, 0.5% in Australia and Oceania. Finally, 0% of them come from Antarctica.



The harsh conditions on Antarctica have prevented humans from settling here. This part of the planet only hosts research scientists: approximately 1,100 in the winter and 4,400 in summer.



Earthling maps don't display the actual scale of the continents or countries. This is because it is impossible to project the three-dimensional structure of the globe onto a flat surface without distorting its proportions. The regions of Earth that are closest to the Poles are most affected by such distortions and end up appearing larger than they really are. This is why maps will show Africa to be approximately the same size as Greenland, even though it is actually 14 times bigger.



Some places on Earth are uninhabited, meaning that no Earthlings live there at all. There are also places that are full of Earthlings. The average population density on Earth is 62 Earthlings per square kilometre.



From the time of Gerard Mercator – a Flemish cartographer of the sixteenth century – most maps of Earth have north at the top. This wasn't always the case, however. In ancient Egypt, the northern region of the world was situated to the east. Islamic maps, published even earlier, had the south on

top because Mecca was believed to be the origin of civilisation. So when cartographers were looking towards Mecca, they assumed they were looking up. Christian maps, however, would have the east at the top, as this is where they believed the Garden of Eden would have been.

# LIFE ON EARTH

Humans tend to think that they control life on Earth, but really they are just a part of nature.



In the early days of life on Earth, living creatures only inhabited the water. Eventually, microbes appeared on land, followed by lichen, moss, fungi and plants.



Around 375 million years ago, prehistoric fish came out of the water and began evolving into land animals known as vertebrates, which eventually evolved into human beings.



## EARTH'S BIOMASS

Earth is a green planet. For every kilogram of human mass, there are 8,200 kilograms of plants and 1,300 kilograms of bacteria.

Earthlings make up barely 0.01% of Earth's biomass, i.e. 60 million tonnes; plants make up 82%, i.e. 450 billion tonnes; bacteria 13%; fungi 2%; and all other living things 3%.



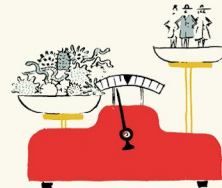
All the people in the world put together weigh less than all the mushrooms on Earth ...



... seventeen times less than all the insects, arachnids and crustaceans ...



... twelve times less than all the fish ...



... and three times less than all the viruses.



## ANIMALS

Earthlings tend to avoid wild animals and are typically more familiar with mammals that have been domesticated. This is the result of thousands of years of hunting animals and settling on their natural habitats.

63% of mammals have been domesticated by human beings (cows, pigs, goats, sheep), while 34% of mammals are wild animals. Every day, up to 150 animal species go extinct.