



The **TALES** *from* **MEDNIGHT**



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The night Blanca lost her fear of the dark

by María Ángeles Bonmatí Carrión

The Mystery of La Albufera

by Lena Guerrero Navarro

The Comet Poh

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by Stella Tsigou

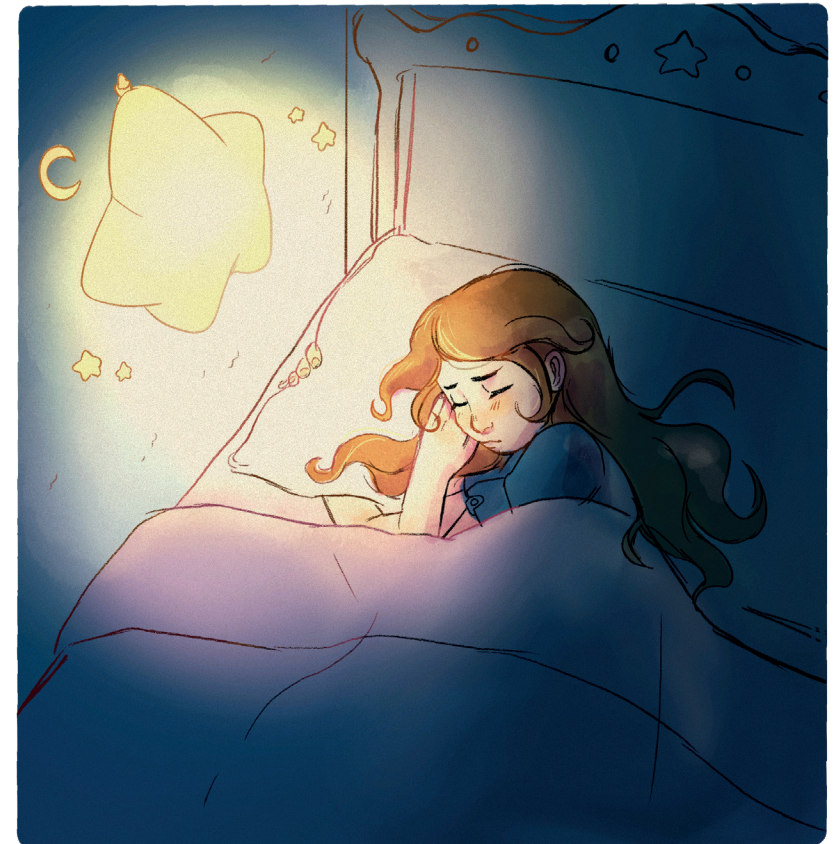
ILLUSTRATIONS BY **LUCÍA ROLDÁN CASELLES**

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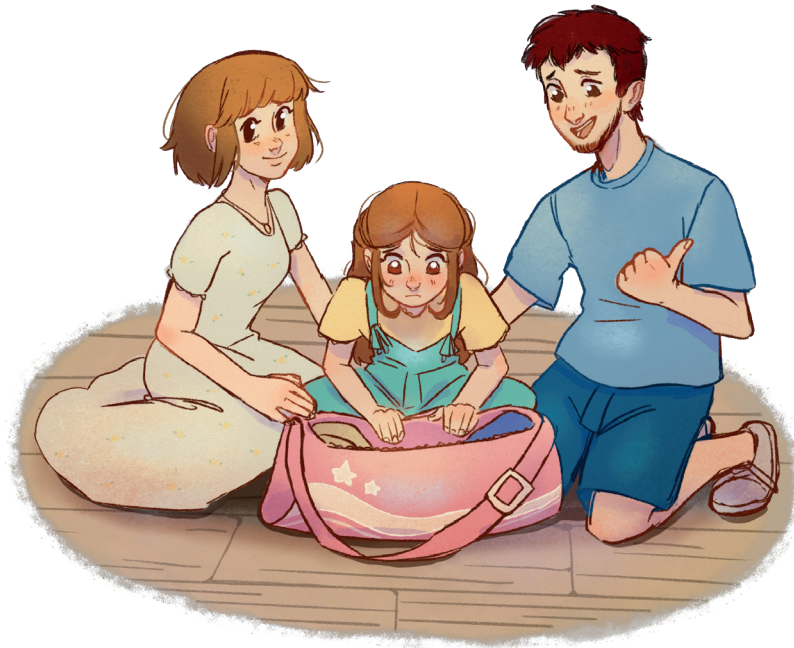
The night Blanca lost her fear of the dark

María Ángeles Bonmatí Carrión



Blanca was afraid of darkness. At home, her father had hung on the wall one of those gadgets that emitted light all night long. Thanks to this, she felt safe and was able to fall asleep. The star-shaped contraption had replaced the Glowworm she slept with when she was younger. But Blanca had grown too old for glow-worms. And besides, ever since she first saw Sara, the newly appointed astronaut of the European Space Agency, on TV, she had decided that she wanted to follow her footsteps or, at least, study the realm of stars and space from Earth.

But back to Blanca's fear of the dark, at home this issue was solved thanks to "Estrellita", as they called that light on the wall that helped her sleep. But all the family were on holiday in a small Mediterranean village where they had gone to rest for a few days. And the problem was they had left "Estrellita" at home, so when they arrived at their destination and didn't find it in any suitcase, Blanca's parents feared the worst: a difficult night.



However, before facing that moment, they decided to enjoy their arrival in this place away from the hustle and bustle of the world. The village had been chosen precisely because it had some sort of prize for its night sky. This meant that there was very little artificial light in the streets and the stars (the real ones, which were the ones Blanca liked) were very visible. So, to take their minds off "Estrellita", they went for a walk and dinner with another couple of friends.

The restaurant where they dined was a small place with three or four tables and checkered tablecloths. Although the place was full, the patrons enjoyed their meals without making too much of a fuss. After dessert –a rice pudding that Blanca savoured to the last spoonful– they left the restaurant at dusk to continue their walk. They walked a couple of streets away from the restaurant, up three more narrow streets until, at last, they reached the top of a hill. And there, where there were no more houses and hardly any streetlights (there were few in the village, but there were some), Blanca looked up and felt something unfamiliar to her. At that moment she didn't know how to explain it: her skin bristled, and her eyes glazed over. Moreover, a strange force made it impossible for her to stop staring at the spectacle of light and colour that enveloped them. In the blink of an eye, hundreds, thousands, perhaps millions of stars lit up before them in the "darkness" –which, in fact, was not so dark– of the night. The Milky Way could, in that lost spot in the Mediterranean, open up and reach the retina of anyone who simply stopped to look around. With time, Blanca knew that that night she experienced for the first time an emotion that she would never let go of: the awe of observing the firmament in all its splendour.

There, at the top of that hill, the five of them remained silent. They never knew how long they lingered there, because time stood still. Those five people, that night, experienced something very similar to what must have been felt by all those who, before them, had walked that hill over the centuries. And the fact is that the firmament, immutable in the eyes of our species and nowadays so often masked, connects us with our ancestors and with our fellow humans: it unites us, like a kind of bond through time and space, to present humans and past humans.

After an indeterminate amount of time, as if awakening from a trance, they headed back to the cottage where they were staying. The



adults were chatting, but Blanca paid no attention to what they were saying. She was still in her own trance. The spectacle of light that, inexplicably, she had been able to contemplate thanks to the darkness she had been so afraid of in her room, had been engraved in her retina.

What she did not know was that, as she entered the courtyard of the house where they would sleep, another spectacle awaited her that she had never had the opportunity to contemplate before. Among the vegetation of that garden, small points of light could be glimpsed, like little twinkling stars that had fallen from the sky and were resting peacefully on the leaves of the plants. Blanca's mother explained to her that those little dots of light were fireflies, insects that communicated with each other thanks to those flashes that could only be seen in dark places.

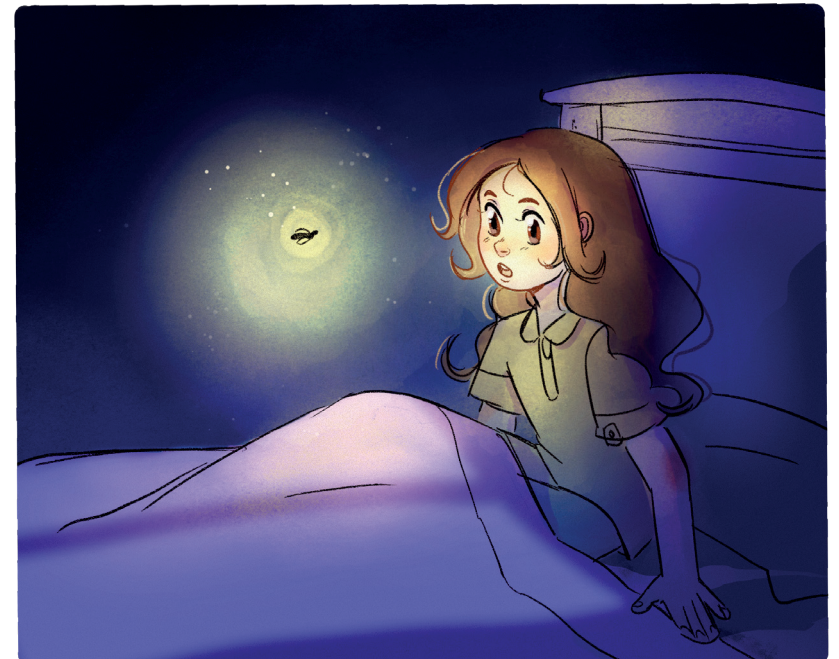
That night, when Blanca went to bed, she didn't recall "Estrellita". When she closed her eyes, she could still see thousands of tiny "little stars" (giants in fact) hanging on that black wall that was the firmament.

She was remembering that image when, suddenly, she saw something come through the window. Something small and luminous: one of those little dots that sprinkled the bush below. Blanca watched as the firefly approached and landed on her nose. And so, she fell asleep. But it was not a normal night, because it was spent chattering through dreams:

"I hear you're afraid of the dark," said the insect.

"Yes, I am. When I can't see, I imagine that there are scary things under the bed or behind the wardrobe," Blanca explained.

"It is only natural that you have that feeling, because you humans are trained to see very well in the daytime, in the light. In the dark you feel more insecure. However, darkness is not dangerous. Especially in your room: everything will stay the same when there is no light. Right now, for example, the light is off and you are sleeping peacefully. Besides, you need darkness to sleep better. Oh, look... we are coming to an area that can confirm this for you. It's the clock that tells the time in your brain. Hello!"



“Hello, Mari Luz! What brings you here today?” greeted a group of neurons in unison.

“I dropped in to see Blanca, who is afraid of the dark in her room.”

“Hello, Blanca. Nice to greet you. I am the clock in your brain. Although I am made up of many neurons, we work in unison, and we inform your body of the time. Have you ever wondered why you get sleepy at the same time every day? I am responsible and, together with other areas of the brain, I make sure that you sleep well every night. But let's go back to the darkness... Every cell in your body needs darkness at night, just as it needs light during the day. I go a bit crazy when it's lit up all night... I can't keep track of the time and I send out conflicting signals. Also, I've been told around here, because of your brain, that some don't work well either when you leave the light on all night and make you sleep worse.”

“Well, I didn't know that... The truth is that today I have made up with the darkness a little bit... thanks to it I have been able to see something wonderful: the Milky Way,” answered Blanca.

“Exactly: artificial light at night is not only harmful in your bedroom. It can also cause problems in the streets when used badly (for example, when it is brighter than necessary). One of them is that it prevents you from seeing the sky that you have been able to enjoy tonight. The other, even more serious, can be better described by Mari Luz.”

“Yes, for animals, light pollution (that's what we call the excess of artificial light at night) is very dangerous. For nocturnal birds, such as owls, it destroys part of their habitat: darkness; while migratory birds become disoriented and many never reach their destination. For us fireflies, it prevents us from communicating with each other and raising a family. I'm sure you haven't seen any of my species in the city, have you? We can't live with that 'deafening' light. And these are just a few examples of how bad it is for us living beings to have too much light at night.”

“Thanks, Mari Luz and clock... By the way, do you have any specific name?”

The clock was about to answer when a whirlwind appeared, enveloping Blanca and sending her back to her bed. She opened her eyes and there was light coming through the window: it was dawn. She was particularly awake and happy and went to look for her parents, who were

already preparing breakfast. There were still several days left to enjoy the surroundings and, above all, those dark nights.

When she was back home, Blanca never lit “Estrellita” again, and she was left hanging on the wall as an ornament and a reminder of times gone by. And Blanca slept better and, best of all, she knew why.

The Mystery of La Albufera

Lena Guerrero Navarro



At dawn, the water glistened reflecting the golden colours of the sun. Little sparkles lit up the lake as the reeds swayed in the wind. Everything in this place seemed to have its own song and everyone danced together in perfect harmony.

In the lake lived Sami, a small toothcarp known to all. His little fish body shone like little mirrors in the sun. Sami had wonderful colours, browns and greens that helped him to hide among the plants. But the most beautiful thing about Sami was the blue stripes on his body, it was as if he was carrying the reflection of the Valencia sky. His fins, which boasted yellow edges, allowed him to swim nimbly, always ready for adventure.

Sami had always been curious about the world around him, wondering why things were the way they were. But Sami was not alone in his curiosity. In the vibrant ecosystem of La Albufera, many other animals also wondered about the vast universe around them. Herons and ducks, with their elegant plumage, used to watch the fish from the surface, stared at Sami in amazement, wondering how he could be underwater for so long without coming up for air. It was a lake full of curious friends!

Insects, like dragonflies, hovered above the surface, sometimes landing on the lily leaves, and looked down, captured by the underwater spectacle. Often, they wondered what life was like underwater and whether it would be similar to their aerial world. They marvelled at how fish could breathe and live in a world so different from their own.

Sami was happily swimming among the reeds when he came across a small rat named Rita, who gently approached the shore. Curious, Rita asked, "Sami, why don't you drown under water?"

The little fish smiled and replied: "To be honest, Rita, I've never questioned it before. It has always seemed natural for me to be down here, swimming among the reeds and seaweed. But now that you mention it, yes, how come I can breathe underwater and you can breathe out of it?"

Rita laughed softly, wagging her tail in amusement. "Well, it seems we both have great mysteries to solve. I've never understood how some beings, like you, live underwater. For me, the land has always been my home, and I couldn't imagine myself anywhere else. It is as natural for me to breathe up here as it must be for you down there."

Both friends, intrigued by their differences and similarities, decided



to embark on an adventure to discover the answers to their questions. They travelled around the lake, asking every creature they met. They talked to the snails and crabs, but found no convincing answer.

They chatted with the frogs, a group that was near a wet area of the lake, enjoying both the cool water and the warm sunshine. A bright green frog, named Renato, came forward to greet them.

"Hello, Sami; hello, Rita!" croaked Renato in a bubbly voice. "I hear you have questions about how we live. It's funny, because our life is a bit of both worlds."

Sami, intrigued, asked, "What do you mean by 'both worlds'?"

Renato grinned, showing his wide mouth. "Well, when we're tadpoles, we live completely underwater, like you, Sami. But as we grow up, we experience incredible changes. Our bodies begin to transform."

Rita, jumping up and down with excitement, asked, "And then what happens?"

“We develop legs, we lose our tails, and our breathing changes. Then, although we still enjoy the water and can dive into it, we need to come to the surface to breathe air,” Renato explained, jumping slightly to emphasise his point.

“It’s fascinating,” Sami said, his eyes sparkling with admiration. “You, Renato, have experienced two different worlds, but have you ever stopped to think how this is possible?”

Renato scratched his chin with one leg. “Of course I did, but it’s one of those mysteries I haven’t figured out yet. When I was a tadpole, I simply swam and breathed. And now, as a frog, I jump and breathe in the air. But I don’t know exactly why or how this transformation happens.”

The conversation with Renato left Sami and Rita in awe of the incredible diversity and adaptability of nature. Life, with its mysteries and wonders, continued to surprise them at every step of their journey. Although they did not find an answer at the time, the conversation with Renato reminded them of how much there was still to learn.



One day, as they were on their quest, a slow, majestic shadow crossed the lake bed. On closer inspection, they discovered that it was Tessa, an elderly turtle with a weather-worn shell, each crack and mark telling a story of the decades she had lived.

Tessa, with her deep eyes full of wisdom, looked at the two curious friends and said: “It’s not every day I see a fish and a rat travelling together. What are you looking for?”

Listening to their concerns and curiosity about breathing and life, Tessa smiled with a serene expression and replied: “Nature is vast and complex, full of mysteries and wonders. All of us, whether underwater or in the air, have evolved in unique ways to adapt to our environments.”

Pausing for air, she continued, “Fish, like you, Sami, have gills. These gills allow them to extract oxygen from the water, an ability that many land creatures cannot imagine. Meanwhile, land creatures, like you, Rita, have lungs, adapted to absorb oxygen from the air, essential for moving on land.”

Rita and Sami looked at each other in confusion. “I understand what you’re saying, Tessa, but how exactly do they work?” asked Rita, her delicate rat eyes twinkling in puzzlement.

“Imagine,” Tessa began, “that the gills are like a sieve that we use to strain pasta. The water comes in and, just like the strainer separates the water from the pasta, the gills separate the oxygen from the water. That oxygen is vital for Sami and other fish to live underwater. It’s as if Sami has a little magic sieve on his side that allows him to ‘strain’ the oxygen out of the water and breathe.”

Sami, with an astonished expression, looked at his body, trying to imagine his gills as magical strainers.

Tessa continued: “Now, for the lungs, think of a balloon. When we inflate a balloon, it accumulates air and expands. Similarly, Rita, your lungs ‘inflate’ when you breathe in air. But instead of simply filling up with air, they draw in the oxygen needed to give you energy and keep your body moving. So, in essence, every time you breathe, you are ‘inflating’ and ‘deflating’ those little balloons inside you.”

Rita smiled as she imagined little balloons inside her, filling and emptying with each breath.

Tessa, noticing the ongoing curiosity in the young friends’ eyes, decided

to tackle another mystery they had mentioned before.

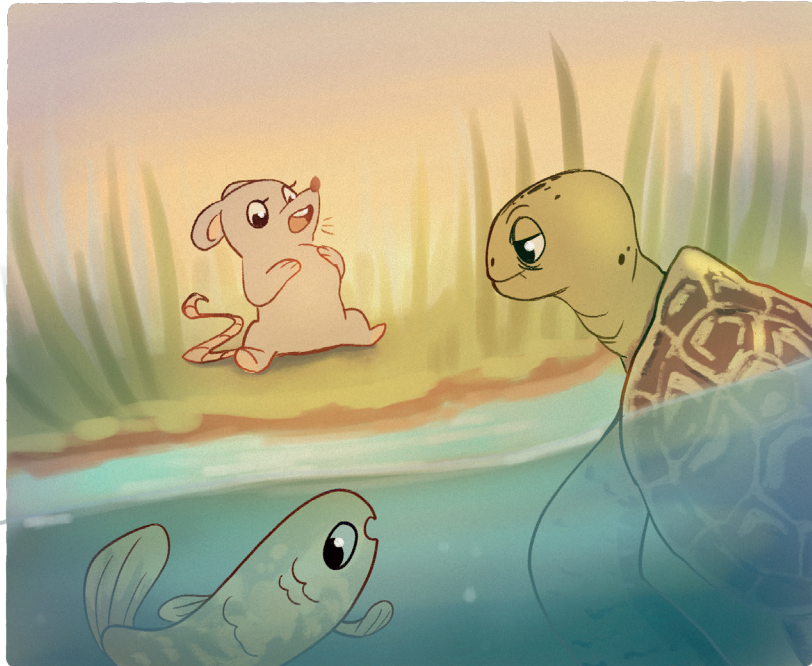
“Ah, the wonder of tadpoles and frogs,” she began with a smile on her wrinkled face. “It’s another of those amazing adaptations that nature gives us. When frogs are small and called tadpoles, they live completely underwater, and to do so, they breathe through gills, just like you, Sami.”

Rita broke in with surprise, “So tadpoles have gills like fish?”

“Yes, exactly,” Tessa nodded. “But as they grow into frogs, something magical happens. Their body starts to change, it’s a process called metamorphosis. They lose their gills and develop lungs, just like you, Rita. Once they have lungs, they can breathe in air and live out of water, although they often choose to stay close to it.”

Sami pondered for a moment, “So, it’s like they started life as a fish and then transformed into a land creature. That’s amazing!”

After listening to Tessa’s explanations, a spark of excitement ignited in Sami and Rita’s eyes. They realised that they couldn’t keep all this information to themselves.



“Renato must know all about this!” exclaimed Rita, wiggling her paws in excitement.

“You’re right!” agreed Sami, her flippers vibrating with anticipation. “Maybe then he can better understand why tadpoles and frogs are so different.”

Wasting no time, the two friends bid Tessa a quick farewell, thanking her for sharing her wisdom. “Thank you, Tessa!” they shouted in unison as they walked away. They both headed towards Renato’s pond on a mission to share the wonderful knowledge they had been given.

Although they had found their answer, their adventure had taught them something more valuable: that every being has its own purpose and place in this vast world, and that diversity is what makes nature so wonderfully rich and complex.

The Comet Poh

Axel Domínguez López



It is a beautiful spring day. Two small tyrannosaurs are about to start exploring outside the nest, unaware that an asteroid is approaching the Earth.

This huge chunk of rock has been drifting for years and today it is about to collide with the Earth. As it gets closer, it increases its speed, attracted by the Earth's gravity. As it enters the Earth's atmosphere, friction causes it to become a fireball, shining much brighter than the Sun.

The asteroid hits the Earth, setting off a series of events that will bring an end to the dinosaurs' realm...

"Ahhhh!" shouted Chick Poh as he turned off the television.

Chick Poh got scared. He looked out of the window to see if an asteroid was on its way to Earth. He was very worried that history might happen again.

He started to build a pillow fort to protect himself. He went to the kitchen to grab supplies. And a torch. Chick Poh was ready for any eventuality.



He had barely finished setting everything up when his dad came into his room to call him for dinner.

"Hey, Poh...", Papa Rooster started to say; but when he saw the huge fort, he became speechless. After a brief pause, he exclaimed, "What a wonderful fort!"

"I'm ready for the asteroid!" replied Chick Poh as he ate a chocolate.

"Which asteroid?" asked Papa Rooster intrigued.

"The asteroid that wiped out the dinosaurs," replied Chick Poh.

"But that asteroid was many years ago, there are none on their way to Earth nowadays. You have nothing to worry about," added Papa Rooster, trying to calm him down.

"How can you be so sure?" asked Chick Poh as he was about to open another chocolate.

"Take your jacket; let's go to the observatory and I'll show you how astronomers detect asteroids and comets," explained Papa Rooster. "You'll see that there's nothing to worry about."

On the way to the observatory, Chick Poh kept asking questions as he peered out of the window to try to spot an asteroid.

"We have arrived!" announced Papa Rooster.

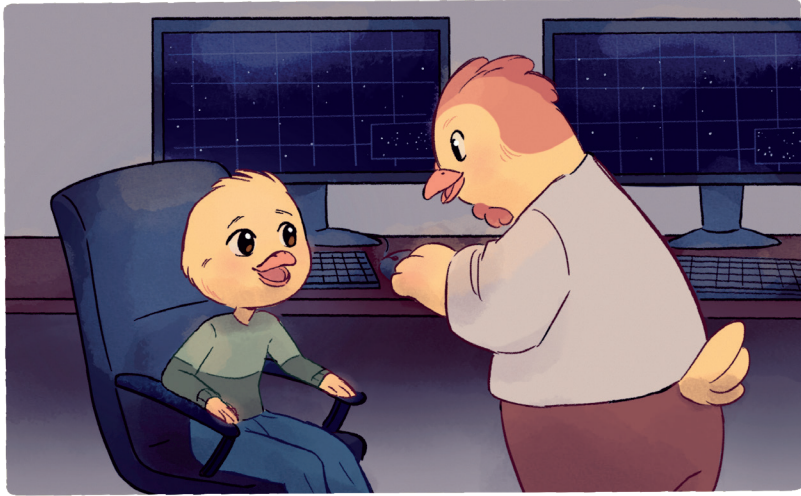
Inside the observatory, Papa Rooster showed the facilities to Chick Poh. "This telescope is connected to that computer," explained Papa Rooster. "The computer takes several pictures of the same part of the sky every so often. If there is a comet or any moving object, the computer detects that something has moved between those pictures. Can you see anything different between these two pictures?" asked Papa Rooster as he handed Chick Poh a couple of pictures.

"Ouch," exclaimed Chick Poh. "There are a lot of stars. There are so many stars. How can I recognise such a tiny difference among so many little lights?"

"It needs a lot of patience," replied Papa Rooster with a smile. "And the help of technology. The computer highlights where it detected movement. Then you check if it is an object; and if it is indeed an object, you must also verify whether it is new or it is something that is already catalogued."

"Catalogued?" asked Chick Poh.

"Catalogued means that it has already been discovered and is in our records," explained Papa Rooster.



“How can I discover a comet?” asked Chick Poh as he looked closely at the screen showing a series of photographs taken by the telescope that night.

“Most comets are discovered by professional surveys like the ones done at this observatory,” answered Papa Rooster. “Amateur astronomers tend to find objects in areas close to the Sun, where researchers don’t look.”

“I want to discover a comet!” exclaimed Chick Poh, flapping his wings in excitement.

“Of course you can!” assured Papa Rooster. “You and I can make observations every night. But remember that you will have to be patient and dedicated. Discovering a comet is difficult and can take years.”

“Yes!” shouted Chick Poh, jumping up and down with a smile as big as the moon.

“Very good!” replied Papa Rooster with a wide grin that was infected by Chick Poh’s happiness. “Let’s go home and start our observations today.”

“Dad, before we leave, why didn’t the computer detect this object moving in these photographs?” asked Chick Poh, pointing to the computer screen he had been looking at closely.

“Let me check,” said Papa Rooster as he sat down in front of the computer. Chick Poh watched curiously as his dad looked over and over the images on the computer and took notes in a notebook. After a moment, Papa Rooster sighed, turned to look at Chicken Poh and, with a smile, said: “Poh, you’ve discovered a comet.”

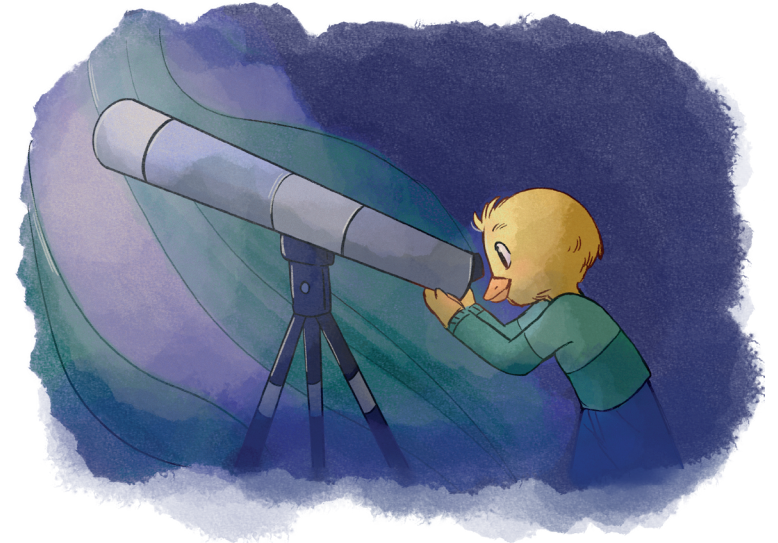
“Really?!” replied Chick Poh with his eyes wide open now in surprise.

“Yes,” answered Papa Rooster. Comets are usually named after their discoverer. So this comet is now called ‘Comet Poh’.

“What a thrill!” exclaimed Chick Poh as he jumped up and down with happiness. “I can’t wait to tell my friends and explain to my class all about comets. Thank you so much daddy for bringing me to the observatory,” said Chick Poh as he gave Papa Rooster a big hug.

From that night on, before going to sleep, Chick Poh would go out and look through his telescope at Comet Poh. As time went by, the closer it got to the Earth and the Sun, the comet went from being a small dot in the sky to a beautiful chick’s feather. A ball with two tails, one bright and the other a bit fuzzy.

Chick Poh enjoyed this cosmic show until Comet Poh disappeared on its journey to the far reaches of the Solar System.



My jonbar point

Francisco Blázquez Paniagua



Jonbar Point: From John Barr, character of the novel The Legion of Time [...] The moment when an event or a choice changes the historical course of a process, creating a temporal divergence. Cooper, S. (2087). Jonbar Point. In Worldpedia, Link: THX: 961-230B

Two men wait at the water's edge for the arrival of the fishing boats that are slowly approaching across a pure blue, luminous sea. Behind them, several young men wait beside a wagon. When the fishermen arrive, a conversation begins in a strange language. The men are interested in some fish and ask the fishermen questions. After a while, the young men load some baskets with the chosen fish into the cart. As they cross the beach, the younger of the two men notices some thorny bushes, they both examine the flowers carefully, talk and take some branches.

Then everything turns black. It is a cave or a dark, dank basement with a musty smell. Light again. Carts full of papyrus leave a city from which columns of smoke rise. People reading, mumbling and writing in strange tongues.

The dream had awakened Elsa. She knew she would forget it, so she focused on the details, the plain clothes of the men, the shapes of the fishing boats' keels, the sound of those tongues.... All this took her back to a very ancient time. It was very early, the sun had not yet risen, but she knew that she would not go to sleep thinking about her last worry: the decision of what to do with her life when the school year was over. Maybe the dream had something to do with it. Despite the hour, she got up, enticed by the idea of walking to school through the southern quadrant of the city. She was enjoying her plan when an annoying non-human voice flooded the room.

"Good morning, Elsa. It is still very early. I have perceived that your sleep has been somewhat agitated. You have dreamed, haven't you?"

Elsa murmured something, fortunately unintelligible to the non-human ear.

"If you would care to share your dream? Perhaps I can help you make sense of it."

Obviously, she wasn't going to do it. She knew that if she did, her dream would be included in a global database and the AI would give it a

supposedly scientific meaning. That little game was hooking millions of teenagers around the world, but not Elsa.

"No, thanks," she replied tersely.

As she was having breakfast, images of fish in the cereal box kept the dream fluttering in her mind. A while later, she grabbed her backpack and hurried out of the house.

* * *



I remember that I woke up very early that day after the strange dream, so I decided to walk to school and wander the streets of the south quadrant that I had never walked before. It was then that I stumbled upon that bookshop, strangely open at that time of the morning. At the end of the 21st century, bookshops were already a rarity in our cities. Global digitalisation had relegated books to objects that could only be found in those mysterious places and in libraries, which had extremely restricted access.

Although I had seen others, this bookshop was different, and the smell of old paper, dust and mould contributed to that feeling.

At the back, lit by a lamp, was the owner of the bookshop, a white-haired lady with somewhat dark glasses (hardly anyone wore glasses anymore) that barely showed her eyes. The woman raised her head from her reading when she saw me.

“Good morning, young lady, no school today?”



“No, we’re doing telematic work today,” I smiled, amazed at the lie I had just told.

“You don’t see many young people in a bookshop. What brings you here?”

“I’ve never been in a bookshop before... like this one.”

“Yes, we deal in old books, those that nobody reads any more. Browse at your leisure, and if you have any questions, don’t hesitate to ask.”

I wandered through the aisles looking at the shelves, fascinated by those bone-coloured spines and old typefaces. I noticed one that stood out a little.

“Ah. Aristotle’s wonderful *Historia Animalium*. A jewel,” said the bookseller, who kept looking at me.”

“It may be a gem, but I know something about Aristotle, and he supported misconceptions... that the earth was at the centre of the universe, that bodies fell faster the heavier they were. Even the biology teacher told us that he didn’t believe in evolution. He didn’t get a single one right.”

I noticed the surprise in the bookseller’s eyes. I didn’t know if it was because of what I was saying or because she was surprised that I knew anything about Aristotle.

“Oh, you young people always so...,” I know she meant to say ‘arrogant’, but then she changed her mind, “straightforward and explicit. You see, all that you said is true, but, if you compare every ancient work with our present knowledge and reduce it to a selection of errors, you are far from the truth. The book you hold in your hands was written almost twenty-five centuries ago, can you imagine what we humans knew about the animal world at that time? That work is the greatest compendium of animal observations extant in antiquity and was a basic text for more than two thousand years. Not only that: it also contains ideas and methods that are fully valid today.”

“But is it true that he was an anti-evolutionist?”

“Of course he was. You don’t see living beings change over a lifetime, you don’t even see it over thousands of years; but Aristotle initiated comparative anatomy and a way of looking so minutely that it bore fruit for centuries to come. No wonder Darwin admired him. Often, ideas that end up being crucial in our explanations of the world are accompanied by other misconceptions and misinterpretations, and some-

times irrational ones. Linnaeus, a creationist, did not believe that species change either, but in ordering nature as he did, he provided a key clue to evolution.”

“But in physics, Aristotle got it completely wrong.”

“You’re right again, but you’re simplifying.”

Then the bookseller began an explanation in which she spoke of coherence, finalism, sublunar region, and some anti-mathematics that I didn’t quite understand.

“What about this one?” I pointed to the book beside the other one.

“Ah, that’s *De Historia Plantarum* by Theophrastus. This treatise contained all the knowledge about plants in antiquity. Theophrastus was younger than Aristotle, he was his favourite disciple and friend; they worked together collecting animals and plants on which they later wrote their treatises. Some of the information in their works came from fishermen and shepherds, hence some of the errors in these books are not entirely attributable to these Greeks.”

At that moment I got paralyzed. I remembered my dream of those two men talking to the fishermen. The bookseller kept on talking: “He inherited his library and was left in charge of the Lyceum...”

“How did these books come to us?” I asked somewhat disturbed.

“That is a long story of intricate paths, but all these works have survived for centuries; they have been copied, translated, bought, stolen... They were even war booties. They had to be saved from countless misfortunes such as prohibitions, fires and something much worse: human indifference towards knowledge.”

Again: my dream.

I don’t remember how much time I spent talking to her. That morning I missed class. Luckily, the school’s computer system had collapsed and my parents were unaware of my absence. As I said goodbye, the bookseller gave me a pen. She told me that someone had used it in the past to copy or write a book.

After a few weeks I wanted to revisit the bookstore, but it had disappeared; its place had been taken by one of those recreational-gastronomic spaces that proliferated so much in those days. Today, every time I look at this pen I remember that day that changed my life. My fascination for old books directed my studies towards extinct languages



and preservation techniques for old documents. New processes turn the copies of each papyrus, of each parchment, of each book, into an almost indestructible object, we call it “fossilization”. We can have molecular facsimiles that, with the right materials, are hardly distinguishable from the originals.

I have thought about that day many times. Had I not had that dream, I would never have entered that bookstore, and I would not be here today.

Sometimes, when I look out of the huge window of my office at the World Book Center, I see the silhouette of a woman looking at me from the building across the street. There is something familiar about her. It makes me uneasy to think that this person could be myself in an alternative future, in which I did not have that dream and did not enter that bookstore. As she moves, I see the glint of glasses.

And that makes me feel even more uneasy.

Song of Pummayaton: Odyssey of the Shrinking Titans

M^a del Pilar Martín Ramos



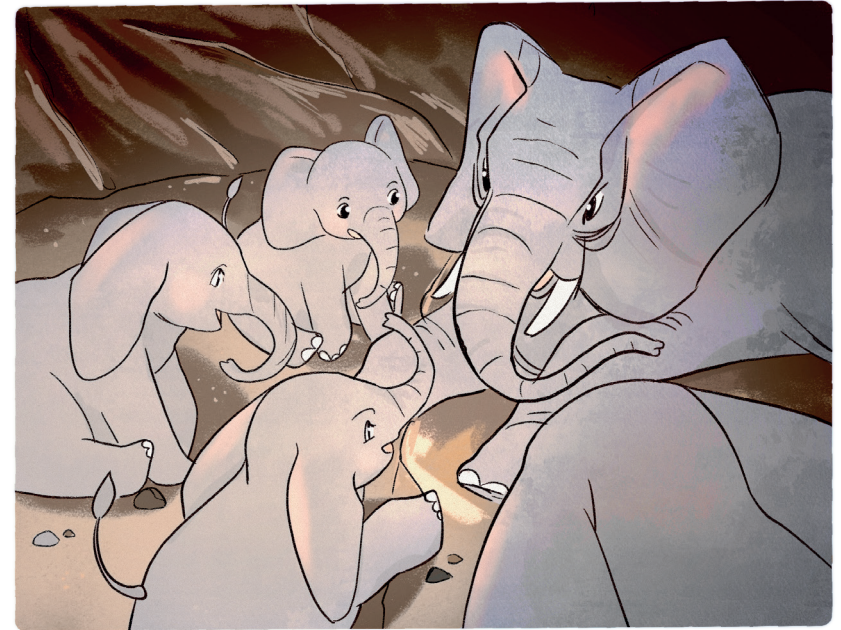
The pink-fingered sunset was beginning to dawn on the horizon of the island of Cyprus. Of course, it was not yet called Cyprus: neither had the Romans called it Cyprus, nor the Greeks had even called it Κύπρος; in fact, it had never had a human name.

First, the slender black pines of the summits were tinged with burgundy. Somewhat below, the golden oak forests blushed. In the lower elevations, the shrubs and small trees of the maquis (junipers, olive trees and mastic trees) seemed to fall asleep like a flock of small, fluffy sheep. The small patches of grass characteristic of the phrygana swayed from side to side, swaying in the breeze. The silence of the hour began to creep over the mountains, an invitation to slumber.

Satisfied that it had caught a frog, a snake retreated to its hiding place and a particularly sharp-toothed genet stretched out, ready for the night's hunt. As the wheatears and warblers gradually dampened their songs, a scops owl brushed its feathers. In the midst of the new soundscape that was making its way into the night, a huge, metallic, golden, specific, hidden sound flooded the evening air. Immediately, a chorus of similar and scattered sounds answered the call under a willow grove with small reeds. And if we were to follow the origin of the first sound, hidden in a cave, we would find the old woman Pummayaton.

Elder Pummayaton's brow was furrowed with effort, filling her gray skin with countless wrinkles. Lying at the entrance of the cave, she flapped her ears to fan herself and scare away the mosquitoes as she awaited the arrival of the others. She waited calmly, without haste. The years had taught her that time would pass whether she fanned herself, remained motionless or worked. Nevertheless, she had a feeling that something was going to happen that night. Pummayaton, with his trunk, picked up an accumulation of crystals from the cave wall and licked it, in search of saline minerals and answers. A bitter taste climbed up his taste buds, indicating that, without a doubt, something was coming.

Responding to her call, the other members of the herd began to gather around her. By the speed of the footsteps she discovered Agapéñor; eight footsteps in unison indicated to her the arrival of the sisters Propétides; then came Matharmé, Cinyras, Sandocos and Pharnaké. At their entrance into the cave, they barked softly and stroked her back as a sign of good eve.



“Where is little Paphos?” asked Pummayaton.

As if summoned, a high-pitched trilling of a piccolo followed by tiny footsteps approached the circle of the herd. Pummayaton would never confess it, but little Paphos was her favorite because after story time he would bring her a gift: a description of the most amazing thing he had seen during the day. And she, who had been blind for years, felt as if she had regained her sight for an instant.

“Pummayaton, Pummayaton!” Pafos shouted as he arrived. “Tell us again the tale of the war of mice and frogs!”

“Noo, the *Batrachomyomachia* was told yesterday,” complained the Propétides sisters.

“Tell us again which plants to eat and which ones cause indigestion,” asked Agapéñor, who thought he was smarter for looking for the usefulness of things.

“No, tonight is a special night,” Pummayaton replied quietly. “I feel something strange in the sea.” A cautious silence spread among the elephants. “The swell murmurs that tonight another tale is to be recalled. It

is the most important one, which no one in the herd has yet heard, and it was handed down to me by Clímene before she left.”

“What story is that?” asked Agapénor. “No doubt I must know it.”

“It is our story. The one that tells where we come from, who we are and where our brothers are. It is the most important story, the one we must pass on to our progeny until the end of time, until the coming of Prometheus, until the end of the age of the elephant.”

Agapénor fell silent because he was truly unaware of the enigmatic story and, of course, he did not believe in the coming of Prometheus. The others wiggled their ears in the excitement of hearing a new story. Paphos even began to do a little dance.

Pummayaton’s trumpeting reverberated softly in the cave. It was laden with the sounds of the island before the ponds dried up. Before the cold, before the heat. Sounds of other forests.

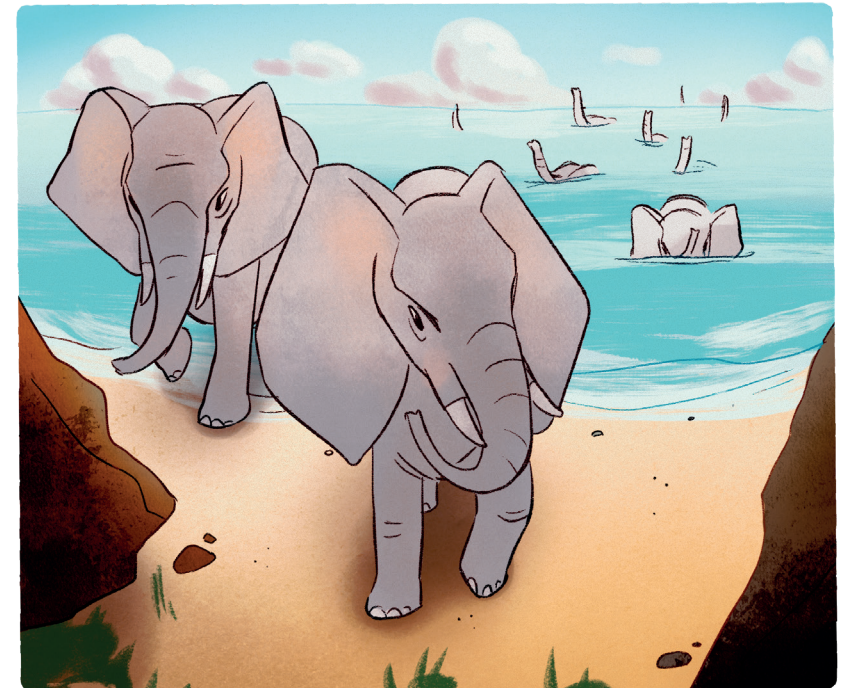
“While we may be small now and can hide in the grasses of the phrygana, and plants may flourish above our heads, and caves may provide shelter, it was not always so. In the old days, we used to be huge. Giants. Titans. We were as tall as the trees that grow in the maquis. And so were our hippo brothers. We had tusks as long as an adult of our own. There would have been no cave big enough for us.”

“At that time, the world was different. We hadn’t crossed the sea and we didn’t know this island existed. The world was always changing. There were times when it was so cold that the plants were saddened to death. There were times of warmth when we sought the north, chased Vega relentlessly, until the cold returned and we had to go back south, resisting around the sea. It was a huge cycle. Always moving from one place to another, looking for new pools, new greens, new food, just like now. Sometimes we would come to other regions, meet other elephants and they would tell us their stories. There were even other elephants completely covered with hair.”

“On one occasion, however, when we reached the sea, we found it changed, practically dry. The hairy elephants said that in the north, further north than we have ever seen, so much water had accumulated in the form of ice that all the seas were emptied. Thus, in our sea, many islands were connected to the land. Sister herds to ours set sail for these islands: Kýchnos, Naxos, Delos, Astypálaia, Crete, Kasos, Tilos... Prac-

tically every island hosted a group of elephants that managed to walk across the dry sea.”

“But this is not our story. Our island is too far away from the others and there has always been water isolating it from all lands. It is so far away that it is often invisible from the mainland. But the green was receding, and we didn’t know where to turn for food; we had nowhere to go. We prayed to the gods to tell us where to find a new land. And Zeus answered. He sent a huge storm, the sky roared and lightning struck in the middle of the sea. The infrasound rumbled, telling us of a land hidden in the waves. We decided to take to the water following the roar of the storm and for two days and nights we swam towards the hidden territory. We were like a rumba of snakes, sticking out our trunks to breathe among the waves. And on the third day, with the dawn of pink fingers, we reached our island.”



“It was a land such as we had never seen before. None of the sister animals that used to accompany us on the continent had made it across the vast sea. There were no bears, no hyenas, no horses, no rhinoceros, no elk, no roe deer, no fallow deer, no bison. And we, who had been giants all our lives, discovered that perhaps surviving as little ones wasn't that bad. With each generation, smaller elephants were born and survived, while the larger ones, needing more food, found it harder to adapt. Generation after generation grew smaller as the winds, waters and heat changed. Forests climbed and descended mountains countless times. We became so tiny that only by gathering fifty of us could we be like one of the ancients. We began to hide in caves, we altered our way of life, we changed our diet, we became tame. That's how we are today.”

“Somewhere in the rest of the world, our giant brothers and sisters are waiting for us, still living as they did in the old days.”



At that moment, the elderly Pummayaton's story was interrupted by a shrill noise coming from outside. It was like nothing they had ever heard before. It sounded like the mingled cry of a bird and the shriek of an elephant. A group of footsteps and cries echoed from the cave entrance. A huge dog, as big as the elephants, made its way into the cave, followed by two others. And behind it, the cave lit up as if it had become daylight and a group of strange beings on two legs came into view.

Little Paphos shrieked in fright at the old woman: “In their paws they carry fires, stones and strangely shaped sticks!”

Grandmother Pummayaton whispered: “The age of Prometheus begins. The age of the elephant is over.”

Dedicated to Dorothy M. A. Bate, who discovered the first pigmy elephant in Cyprus and taught us that paleo is more mythical than imagination.

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Lucas and the mysterious moly plant

Laura Camón Lucas



The fog had rolled into the valley, but Lucas didn't care. He laced up his boots, zipped up his coat, put on his rucksack and set off into the forest. He had long wanted to explore this area of the Western Valleys Natural Park.

With every step he took, he kept his eyes on the ground so as not to stray from the path. He was already twenty years old and used to walking in the mountains, so he knew how easy it is to get lost when visibility is not good. One little mistake, and he could end up having to call the Guardia Civil to come and rescue him.

Suddenly, he noticed something that caught his eye.

"A flower at this time of year", he thought.

He bent down to get a better look.

It was indeed a beautiful flower, as white as milk. It looked delicate, but there it was, surviving the cold of a February morning in the Pyrenees.

A familiar sensation invaded his body.

Could that flower be... the mysterious moly plant?

The past of Lucas had not been an easy one. When he was only ten years old, he was orphaned and had to move in with his grandmother Pilar, in Jaca. At night, he always had trouble falling asleep, so his grandmother would take a book and read him a chapter. Lucas almost always asked for his favourite story.

"Tonight, I want the one with the moly plant, please," he said to his grandmother, as he snuggled down under the warmth of the duvet.

"All right, I think the book on Greek mythology is in the office, I'll be right back."

"But it's here, on the bedside table! We read it yesterday too, don't you remember?"

"It's true," said Pilar, laughing. "My head must be in the clouds today."

Pilar got into bed with her grandson, turned on the lamp on the bedside table and began her reading:

The hero Odysseus and his crew had overcome countless adversities on their way home, but there were still more challenges ahead of them. The most dangerous was to face the sorceress Circe.



When they arrived with the ships at the island of Aeaëa, they did not get the impression that there was anything threatening, but decided that it was better to explore the island first and unravel its mysteries. A group of men, led by Eurycholus, went into the island, while Odysseus rested on the ship.

After crossing a forest, they came to a majestic palace, where the sorceress Circe lived. She was very hospitable and treated them to a lavish feast, from which they ate and drank their fill. However, this was a trap, for Circe had bewitched one of the concoctions. Before long, all the men were turned into filthy, foul-smelling swine. But there was one exception: Eurylochus, who had suspected the sorceress from the beginning, managed to escape and warn Odysseus of what had happened.

Ulysses did not think twice and set out in search of his men. As he was passing through a damp forest in a valley, the god of war, Hermes, appeared to him and gave him a plant whose flower was as white as milk.

"Take this moly plant and add it to whatever brew Circe offers you," said Hermes. "Only thus will you be able to escape her spells."

Our hero took Hermes' sage advice to heart. When he arrived at the palace, Circe tried to cast a spell on him, just as she had done on his crew; but thanks to the moly plant, it had no effect. Being such a good warrior, Odysseus managed to rescue his crew, cure them of the spell and return safely to the ships.

Snip, snap, snout, this tale's told out.

"Good night," said Pilar, kissing Lucas on his forehead. "Go to sleep."

"Wait, grandma, I have a question... Myths didn't really happen, did they? It's impossible for someone to turn you into a pig."

"Of course it's impossible, but not everything that myths tell is fantasy. They often collect the great knowledge of mankind. Thanks to myths, this knowledge is not lost and is passed on from generation to generation. Stories have the power to remain in people's memories forever."

Lucas hurriedly took his smartphone out of his pocket and took a picture of the flower. Then he stood up and turned around. His doubt needed a quick answer, and if anyone could help him, it was his aunt Concha.

Concha had spent half her life working at the Pyrenees Institute of Ecology in Jaca, and her speciality was botany. When Lucas called her to ask if he could come and see her at the Institute, because he had a question about a flower, she was surprised. Until then, her nephew had never shown any interest in her work.

"I've just seen a plant and I need you to tell me which one it is," said Lucas as he reached her and put his hand in his pocket. "Now I'll show you a photo of its flower, which is white."

"I don't need to see it, I already know what it is," replied Concha, smiling. "Come, do come with me."

Concha led Luis through the long corridors of the Institute. At the end there was a staircase down which they descended to the basement. They went through a door and entered a room full of giant mobile shelves. Each one had blades at one end that, if you turned them like a ship's rudder, would move the entire shelf to one side. Concha had to push aside three or four of them to find what she was looking for.

"If I'm not mistaken, this must be your flower," she said, pulling a huge cardboard box from one of the shelves.



She put the box on a table, opened it and carefully took out some semi-transparent sheets. Among the sheets were several dried flowers.

"Yes, that's the one!" Lucas exclaimed. "How did you know?"

"Not many plants bloom in winter."

Lucas read the label next to the flower: *Galanthus nivalis*.

"Funny, *Galanthus*... I'm sure I've read that word somewhere else."

"Hey auntie, is this flower also found on the Greek islands?"

"Yes; in Spain it's almost only in the Pyrenees, but it is widespread in the south of France, Italy, Greece and some other European countries."

"And you wouldn't happen to know if it's used as a cure for spells, would you?"

"Where did you get that from?" said Concha laughing. "Not spells precisely, but poisons like stramonium, a plant that can cause memory loss and hallucinations if you take it."

Lucas frowned thoughtfully. Maybe Circe used stramonium to poison the crew, and that gave them the hallucination that they'd turned into pigs.

“A substance called galantamine is extracted from *Galanthus nivalis* that helps neutralise the effects of stramonium,” Concha continued. “In fact, it is now also used to slow the symptoms of some diseases that cause memory loss... such as Alzheimer’s disease.”

Lucas felt his blood run cold. He thanked his aunt and left the Institute in a hurry.

“Unbelievable! I think I just found the mysterious moly plant!” Lucas exclaimed as soon as he walked through his front door.

Pilar was sitting in the armchair by the window. When she saw Lucas, she looked at him in confusion: she wasn’t having one of her good days.

Lucas opened the drawer where he kept his grandmother’s medicines and reached for the box of galantamine. He took out one of the pills and approached his grandmother.

“I am the god Hermes and I have come to bring you the moly plant to take,” he said as he brought her the glass of water she had on the bedside table.



“You should have one too,” Pilar replied mischievously, “lest you turn into a pig.”

Lucas smiled. No matter how lost his grandmother was, he always found her in their tales.

Lights and shadows

Vittorio Sossi



They stepped fearfully into the darkened room and the door slammed shut behind them, with a clang that made them shudder. Alexander pushed it several times, but there was no way to move it.

“We’re trapped!”

Danilo lowered his arms in surrender. “Now how do we get out?”

“That’s part of the game”. Lilia looked amused. “We found the solution and regained our freedom.” “How fun!”

Danilo frantically tapped the mobile screen. “And there’s no network either. Where do we find the answers?”

“Put down that useless mobile and let’s see what’s in store for us.” Alexander fumbled blindly at the wall, until he found a switch that was meekly activated at the press of a finger.

A side wall lit up and flooded the room with an even light. The three teenagers could not contain their amazement.



In the centre of the room was a huge, finely detailed globe that could rotate on a stand as tall as they were. They approached it with curiosity. The outlines of the lands and seas were well defined, but there was no geographical information: nations, cities, rivers, mountains... nothing. Only the parallels and meridians of the geographical grid were indicated. The globe was oddly dotted with small obelisks planted on the surface alternating with exquisite miniature circular wells carved into it. At the bottom of the shafts, a small mirror shone dazzlingly when the light hit it directly.

“A geography exam... Good stuff.” Danilo had tucked his mobile phone in the large pocket of his jeans. “I never studied geography, I’m in your hands!”

Lilia pointed to the back wall, lit by the other one. “I don’t think it’s a geography exam, look!”

The wall was covered with large grey tiles from which obelisks and wells emerged, rather like those on the globe. The wells glittered like rhinestones in an evening gown. “It’s not a geography test at all,” Lilia went back to examining the globe with her eyes and fingertips, pausing at the strange ornaments that shouldn’t be there. They did not obey any geometrical design, but seemed to alternate randomly.

“They remind me of something...”

Danilo was not amused by the enigma, but he was intrigued by something the others had not noticed. He wandered away for a moment and came back transfixed and excited as if he had unearthed a pirate’s treasure...

“Look what I found!” Danilo held up an artfully aged parchment. “It’s some kind of nursery rhyme.”

The two of them read it aloud with enthusiasm.

5000 Stadiums is a great distance

To travel on foot or on camelback.

But it’s a short journey compared to the round-the-world trip, which is not short at all. You ask me how I made such an accurate calculation?

The Earth is not flat, even you will understand that.

If you look at the shadows as well as at the reflected rays of the sun, when you have found your reference, an angle you will read, the key and the fulfilment.

“You don’t understand anything... What do stadiums have to do with anything? Are you talking about football?” Danilo played in a juvenile football team and was a fast and instinctive striker.

Lilia and Alessandro exchanged amused glances.

“Stop it, smart-ass!” Danilo had taken it the wrong way. “In my opinion, you haven’t understood anything either.”

“The shadows.” Lilia fiddled with the miniatures of the obelisks, turning the large globe on its stand. “Sunlight casts shadows on the surface depending on the angle of incidence of the rays.”

“The reflections.” Alexander spun the globe in turn. Each time a well was illuminated perpendicularly by the sun, it emitted a reflection so dazzling that it hurt the eyes. “Only when the light enters the well perpendicularly does it illuminate the mirror”.

As if in agreement, they both exclaimed: “Eratosthenes’ experiment!” And they clapped their palms together as if they had scored a stratospheric goal.

Their joy was interrupted by Danilo’s sardonic applause.

“I do recall Eratosthenes, but I can only remember that there were a lot of calculations and angles...” He turned again to the wall behind the globe. “And, if we’re talking angles, here they are!” Partially hidden by the shadow the globe cast on the wall was an exit door that also had no handle. On the surface was a gigantic 360° circular protractor eclipsed by the direct light of the globe, so that only the outline was illuminated. A knob allowed a pointer to be turned. On the knob was a button waiting to be pressed.

“To get out we have to find an angle, but what angle?”

They began to fiddle with the dial, turning the needle to different positions. The protractor displayed not only degrees, but also primes. They tried the basic angles and then others at random, but every time they pressed the button a red light came on and the air vibrated with a sound that echoed like a fart.

“If we do trial and error, it will take forever. How much time do we have left?” asked Alexander.

“We had half an hour to complete the test,” replied Lilia.

“And we’ve been here ten minutes already. So, geniuses, it seems clear to me that we must find an angle like Eratosthenes did. Get on with it,

you’re the geeks, aren’t you? I don’t even remember what he was trying to demonstrate”. Danilo challenged them.

“The sphericity of the Earth,” Lilia replied.

“Why? Were there terraplanists even in the time of Eratosthenes?” Danilo laughed like a madman. “Don’t tell me they were already posting videos on YouTube!”

“Those were always there, although Aristotle had already deduced that the Earth was spherical; however, Eratosthenes was the first to prove it scientifically...”, Alexander explained. “Suppose the Sun rays hit the earth as a beam of parallel lines, hitting both the obelisks and the wells. If the rays were perpendicular, the water in the wells would reflect the Sun, while the obelisk would cast no shadow at all. If the surface of the Earth was spherical, they would fall perpendicularly on the well, but not on the obelisk, which is in a distant location. Thus, the obelisk is, as it were, on the prolongation of a transverse semiline that starts from the centre of the Earth’s circumference and cuts the parallel lines of the sun rays. The angle formed by the obelisk with the rays has the same ampli-



tude as the angle at the centre of the circumference. Therefore, if you know the angle and the distance between the two points -the arc of the circumference, that is, 5000 steps-, you can, with a simple proportion, measure the circumference of the entire planet. Brilliant, isn't it?"

"I didn't understand," exclaimed Danilo, dejected.

"I'll show you," Lilia proposed decisively.

She pointed to the globe: "Here we have the spherical Earth. Then she pointed her finger at the wall: "And here we have the flat Earth. Come on, what's the difference?"

"The mirrors on the wall are all lit up and the sticks don't cast shadows," Danilo replied, scratching his chin.

"Because the light comes uniformly from the opposite wall. As if it simulated a gigantic distant sun radiating us with its parallel rays. And the wall is flat."

"Look here, instead!" continued Alexander. "The shadows of the obelisks on the globe are all different and we can measure the angle with the protractor on the wall!"

"But there are dozens, which one do we choose?" The revelation had not placated Danilo's despondency.

"We need unambiguous references!", Lilia suggested. "So where on Earth do the rays of the fictitious sun fall perpendicularly?"

"Where the wells are illuminated and where the obelisks cast no shadow," replied Alejandro pointing to various spots on the globe, which was slowly spinning propelled by Danilo's hand.

Danilo observed: "And all of them are aligned along this parallel, with coordinates 23° 27'."

"The Tropic of Cancer!"

"Correct! During the summer solstice, all points of the Earth above the tropics receive perpendicular sunlight at the zenith!"

"But what do we choose: a well or an obelisk? And then, what do we take as a second reference?" Danilo was hesitant.

"I would say a well. The only one is this one here, in the Egyptian desert."

"The location seems right, but there are at least four obelisks nearby, each with a different shade. Which one should we choose?" Now it was Alexander's turn to be uncertain.



"The meridians!" Danilo's voice broke the silence and the other two turned in surprise. "The sun must reach the zenith at the same time and that only happens in places that are on the same meridian; I know because I have a lot of fun with the time zones on my phone."

Alexander stopped the globe. There was an obelisk on the same meridian as the well, on the shores of the Mediterranean.

"Perfect!" Lilia couldn't take it any longer, "Now let's turn it so that the shadow overlaps the little lines on the protractor."

Danilo ran to check: "Seven degrees and twelve minutes!"

The three of them turned the pointer to the indicated angle and pressed the button: it lit up green and the door flew open.

"We've made it and there's still a quarter of an hour left!"

They expected to be greeted by the science teacher who had designed the quirky educational Escape Room, but instead they found a second room and a giant pendulum swinging in the air...

Riddle of Gilindre

Bengül Birođlu Şahbaz



On the last day of school, our teacher handed out our pass degrees by saying “Look, children; you have completed the 3rd grade and passed to the 4th grade. I advise you to spend this summer break in the most productive way. Remember to do both, have fun and do research. Get to know the environment you live in. Keep your eyes open. Because this beautiful village that we live in, is one of the nicest places in the Mediterranean coast. Remember, in September I want to see you as having learned new things.” While I was running home with the pass degree in my hand, my teacher’s words didn’t leave my head. Our village was on top of a hill which embraced the Mediterranean’s eternal blueness. Our grand grandfathers couldn’t have chosen this place to settle for nothing. With its mountains, rocks, creeks and various flowers, I also think that it was the most beautiful place in the world. Also, the people there were always smiling and kind. I knew everyone who lived in this village, young, old, and they knew me. Since our house was at the end of the village, I was drenched in sweat before I arrived. I encountered my grandmother who was watering the basil at the garden gate. I handed my pass degree to her, quickly went inside and changed out of my school uniform. I took a cheese filled pastry under the tablecloth that my mother had made in the morning and ran straight to my goats. Now that the summer break had started, I could spend all day on the hills and slopes, herding my goats. I had also named them. The one that had slightly bigger ears was called “Küpeli (With earrings)”, the one that had red fur “Kınalı (Hennaed)”, and the little goat that was born last spring who kept jumping from one rock to another was called “Korkusuz (Fearless)”. Moreover, even they knew their names. With a whistle, a little shout, they would start chasing me. Us four close friends, went to the bushes at the seashore towards the end of July. While walking around the bushes, Korkusuz suddenly disappeared. No matter how much I called for it, Korkusuz never responded. I, hopelessly, went after the little goat. It was like a path between the bushes that led to a footpath which went down into the depths of the rocks. I was calling for Korkusuz and was also constantly turning around to see the sun that was about to set. The sky was going to get dark. We should have returned home at this hour. But, I didn’t want to go home without Korkusuz. I had anger mixed with anxiety inside me. “Where did this little goat go?” I asked myself.



I could guess that my parents were also getting quite worried now. While I kept looking for Korkusuz, I sent Küpeli and Kınalı home with some tuneful whistles. If my father saw them go home without me, he would understand that we had a problem. When it was completely dark, I still couldn’t have found Korkusuz. I was struggling to see around. I was at somewhere like the mouth of a cave. There, I found a rock with the help of my hands and sat on it. I clearly couldn’t comprehend how time passed, lost the way, and got lost. There was no wind at all. The sky and the stars also couldn’t be seen. For a while, I shouted with all my might with the hope that someone could hear. I called for my dad, mom, and Korkusuz. There was not a single sound around, I could only hear the echo of my own voice. My words were coming back to me from the depths. And I cried silently for a long time. I didn’t know what to do. My curls that fell on my forehead were all wet from my sweat. But where did Korkusuz go? It couldn’t have disappeared out of nowhere! I was still sitting on the same rock without moving. At that moment, my ears were filled with Korkusuz’s weak bleating. At first I thought my mind was playing some games. No, it was really its voice. But, it

was coming from far away, somewhere deep down. I gathered all my courage and walked towards the voice. On the other hand, I was calling for my friend: "Korkusuz, Korkusuz where are you my girl?" My steps were taking me downwards. The footpath was rough. I was tripping on the rocks from time to time, slipping and falling. I wasn't in a situation where I could care about my wounded palms or knees. My eyes had gotten used to the dark. I must have been in quite of a big cave, I could understand that the rocks were humid since I was constantly touching them while trying to find my way and move my arms around. There were times when I struggled to breathe. But, the hardest part was the dead ends at the end of tiny halls that I literally crawled in like a baby. In these unfortunate moments, which happened to me a few times, I crawled back the distance I had travelled. Listening to Korkusuz's voice that I heard intermittently, I finally reached an area like a lounge. I could see that it was a wide place from the way my own voice was echoing. At that moment, I felt something soft, fluffy around my legs. It was Korkusuz. We were both so happy that I was constantly hugging the goat and shouting "I finally found you..." Later, I realized that Korkusuz was soaking wet. It was like it went through a river. This meant that there was a deep water around here. I heard loud water sounds. I tried to check my surroundings in the dark. This possibility, which had never occurred to me before, scared me. What if I fell into the water, how would I come out? I hugged Korkusuz and whispered, "We have to get out of here, Korkusuz, we should get away no matter what." I was so tired that I had no strength left in my body. We collapsed at where we were. I felt fear take over my heart, then I hugged my friend tightly. I fell asleep at where I was sitting. In my dream, I was in this large hall again, but it was as bright as day. There was a huge, dark blue lake in the middle of the area I was at. The lights reflected from the lake create mirrors on the walls of the cave. Suddenly, I heard a tender voice:

—Welcome, Mehmet. My name is Gilindire. I've never met someone as brave as you before.

I was very excited. I tried to figure out where the voice was coming from, but there was no one around.

—Welcome, I replied.

The soothing voice, like the sound of cool water, continued:



—Most people would have left their friend and gone back by now. But you didn't give up. I admire your friendship.

—How could I leave my friend here? I asked. It's my best friend. But who are you, and where are you? I can't see you.

I am, in fact, the cave itself. I am an ancient cave named Gilindire. I've been here for millions of years. I've always wanted someone to come and see this lake. But people always turned back at the entrance, either afraid of the darkness or getting lost. But you didn't fear it. You walked bravely. In the end, you found your friend and discovered this place.

—Will I be able to get out of here? I asked hopefully.

—Of course, you will. I will tell you the way out. But first, you must answer a riddle.

—A riddle? I chuckled. I love riddles. Go ahead and ask.

—"I don't know how old it is,

It's a home to various creatures,

It's blue, green, and turquoise,

There's foam on the shore, waves in the open sea."

Tell me, what is this? Remember, you only have one guess.



I thought for a moment. Blue, green, foam, waves... Various answers came to mind, but then I remembered what our teacher had said. "The beautiful village we live in is one of the nicest places on the Mediterranean coast. This sea, millions of years old, has always brought beauty to its shores." Yes, I had the answer. Without hesitation, I loudly exclaimed, "The Mediterranean, the answer is the Mediterranean."

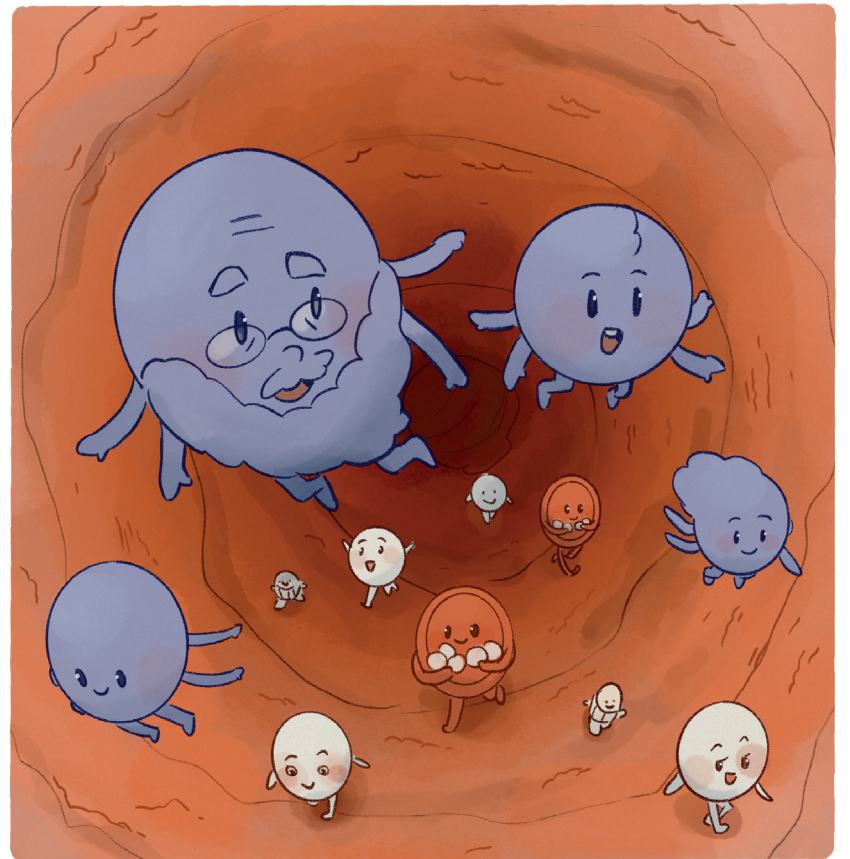
—Well done, Gilindire said. You found the correct answer quickly. Now, I will keep my promise. Listen carefully to me. Nothing in life happens suddenly. It takes time, effort, and patience. What you see here didn't happen in a day. It formed slowly, drop by drop. First, rainwater began to seep through cracks underground. Sometimes, it eroded the rocks it passed through. Other times, it deposited minerals it carried. Look at the stalactites, stalagmites, and columns around the lake; they are still changing. Water continues to do its work. The deep channels in the lake lead to the sea. However, no fish or living creatures can survive here because the water is salty. The air here may make it difficult to breathe at times, but it's a remedy for many illnesses. Right next to the lake, there's a narrow passage. If you go through that passage and

keep going straight without turning, you will find a door that leads to the sea. When you reach that exit, don't hurry; savor the view. Because the Mediterranean, with its breathtaking, unique beauty, will greet you.

When I woke up from my dream and opened my eyes, it was still dark around me, but the anxiety in my heart had vanished, replaced by a sense of peace. Korkusuz hadn't left my side and was waiting for me. I got up from where I was sitting, and I easily found the narrow passage that Gilindire had described. Taking Korkusuz with me, I began to walk confidently. When we reached the exit, it was almost dawn. The Mediterranean stretched out before us, deep blue and as vast as the eye could see. In the distance, we could hear the voices of people calling for us: "Mehmet, where are you, my son?" With my last strength, I called out from among the bushes, "We're here, we're here!" Korkusuz was also bleating non-stop. The villagers ran towards us, my mother, father, neighbors, and even the gendarmes. When my father saw us, his face lit up with joy. He rushed forward, hugged me, and carried me all the way home. Along the way, I tightly wrapped my arms around my father's neck. We walked ahead, with our neighbors in front and Küpeli and Kınalı bringing up the rear, with Korkusuz in between. We walked back to the village in silence. I had so much to tell them from now on.

A deep dive into red

Argyro Bratsiotis



The megakaryoblast slowly began to enlarge, making room for the organs that were dividing. They wouldn't stay inside the bones for much longer. However, first, the seven divisions had to be completed, while the cell remained undivided. When the seventh cycle was finished, the megakaryocyte with its many nuclei began to spread extensions around it, within the bone marrow. Pieces of these extensions began to break off, and thousands of platelets found themselves swimming in the bloodstream.

One of them didn't follow the rest of the group. It found a platelet that was already swimming and looked around as if patrolling. It approached.

—Hey, psst. Have you been here for a while? it asked.

—Yes, I have. A little longer than you, it replied with an air of importance.

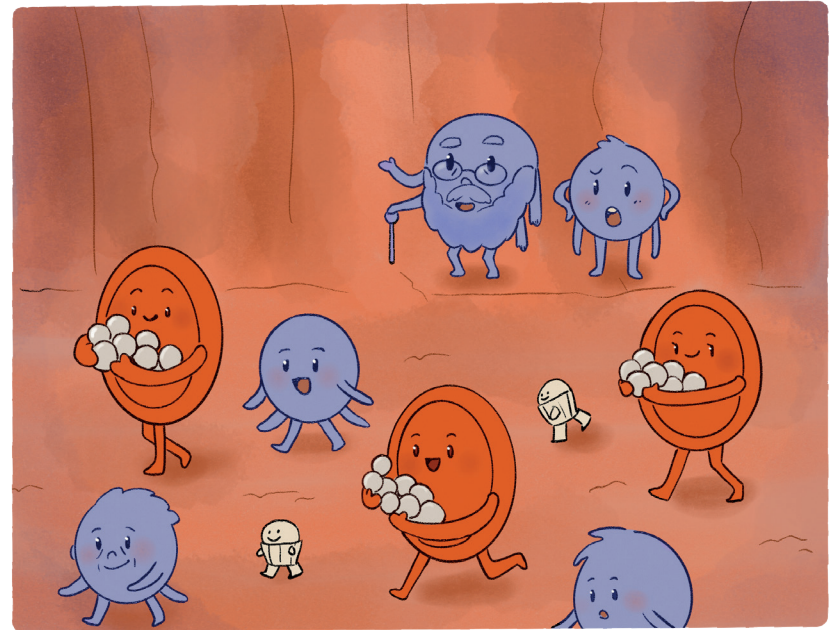
—Oh, so you're an old one then. How does time pass around here?

"Old," it thought. It remembered a few days ago when it detached from the megakaryocyte and left behind the bone marrow to roam inside the arteries. It had learned a lot by observing the warrior's body that hosted them. Perhaps it was time to share what it knew with someone. Why not? After all, it had time. The warrior didn't need its platelets very often. Only some minor injuries needed to be healed at times, and for that, other nearby platelets took care of it. So, it might as well make use of its time.

—How does time pass? Patience, patrols, and occasionally, blood stasis. In this body, bleeding is rare.

—I figured as much. That's why the rest of us are assigned to the macrophages because we have nothing to do. We might spend our whole lives without doing anything useful, it said with a hint of complaint, while watching amino acids, calcium salts, and molecules of glucose and inositol pass by. Why are they so busy? it asked, pointing at the red blood cells continuously carrying oxygen to the tissues without stopping.

—Those are different. Those little discs are red because they contain hemoglobin. If it weren't for them transporting oxygen to the cells to be used by the mitochondria along with glucose, continuously providing us with energy, neither you nor I would exist. And we wouldn't have the opportunity to go on the journeys we're embarking on now.



"When the little blood platelet calmed down, the old one realized that it was probably a good teacher. So, it was an opportunity to show him what it had discovered in the previous days, either on its own or with the help of other cells.

'Hemoglobin,' you say, little one, has four amino acid chains and iron in each of its molecules,' it continued to explain as they swam. Not all chains are the same; there are two alpha chains and two beta chains. Of course, here the red blood cells are somewhat less than normal because our warrior friend has a small hidden problem in his cells that he doesn't know about. Each cell has two genes in its nucleus that give the command for the synthesis of the beta chain of hemoglobin. The genes exist in all cells, but they only give the command to red blood cells. In our friend's red blood cells, only one of the two genes gives the command; the other one cannot.

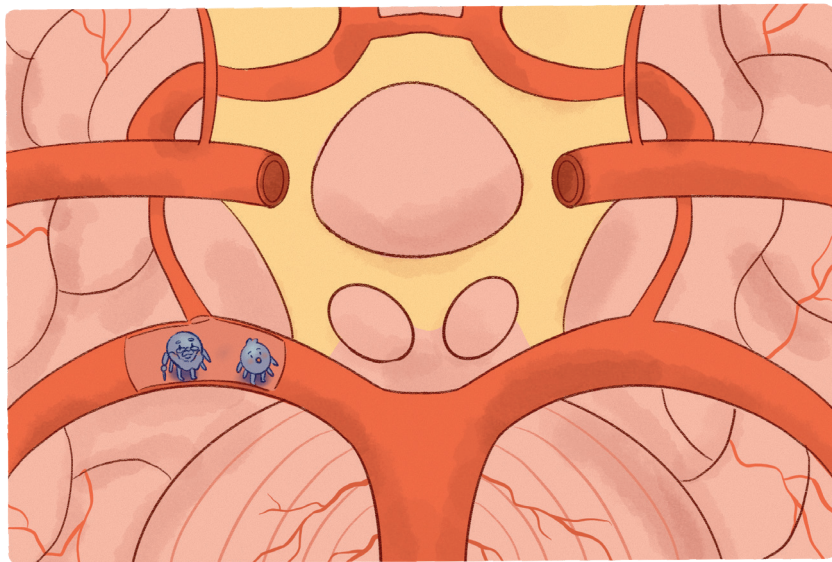
'And what happens then?' asked the little blood platelet.

'Then we have fewer beta chains, while the alpha ones are made normally. And that's because their own genes work as they should.'

'So the alpha and beta ones combine to make hemoglobin, but some alpha ones are left over. Is that right?'

'Well done, little one. But the extra alpha chains are the ones that cause damage to the cells, and in the end, we have fewer red blood cells. Our friend is lucky because he has enough hemoglobin to supply oxygen to all the tissues. However, he is unlucky because he may pass on the 'lazy' gene to his children. And if they also inherit a second 'lazy' gene from their mother, the problem won't remain hidden. The children will have many problems. In their blood, in their heart, in their bones, in their face, in their liver. And nothing will be easy for them.'

The little blood platelet listened carefully as they swam through the veins and arteries. It didn't regret leaving the rest of the group behind when it left the bone marrow. It found itself in better company and embarked on an even better journey. From the left ventricle of the heart and the aorta to the right atrium, where the upper and lower vena cava met, and from the right ventricle and the pulmonary artery to the left atrium, where the pulmonary veins converged, the journey was exciting.



Of course, it didn't understand why the problem with the 'lazy' genes was so common in people living in Mediterranean regions and so rare in other areas, but it enjoyed the adventure it was living. It enjoyed traveling through the arteries, passing through narrower and narrower tubes, and then through the capillaries that became larger as they approached the heart, with valves that opened and closed.

The most beautiful part of the journey was the passage through the spinal arteries, the internal carotid arteries, and their branches. When they reached the base of the brain, they entered the hexagon of Willis, where these arteries originated. This network was very important because the brain could suffer irreversible damage if it lacked oxygen for more than a few minutes. In each area they passed through, the old blood platelet explained to the little one which functions were controlled by it. It seemed that this was its favorite part of the warrior's body because it described it with such attention to detail, in its attempt to explain to the little blood platelet that it was the leader who governed even the last cell.

The little blood platelet listened carefully to everything. It was impressed by the amygdala and how it influenced the warrior's emotions. Anger that some of its siblings had died young, fear for the warrior's health and for its siblings who were still alive but suffering, panic at the thought that a healthy parent could give birth to children with fragile health, anxiety about the battle that would take place on the plain of Marathon against a numerous enemy army, fear of death that should not overpower him.

But the climax was the frontal lobe of the brain and, above all, the areas of complex thoughts."

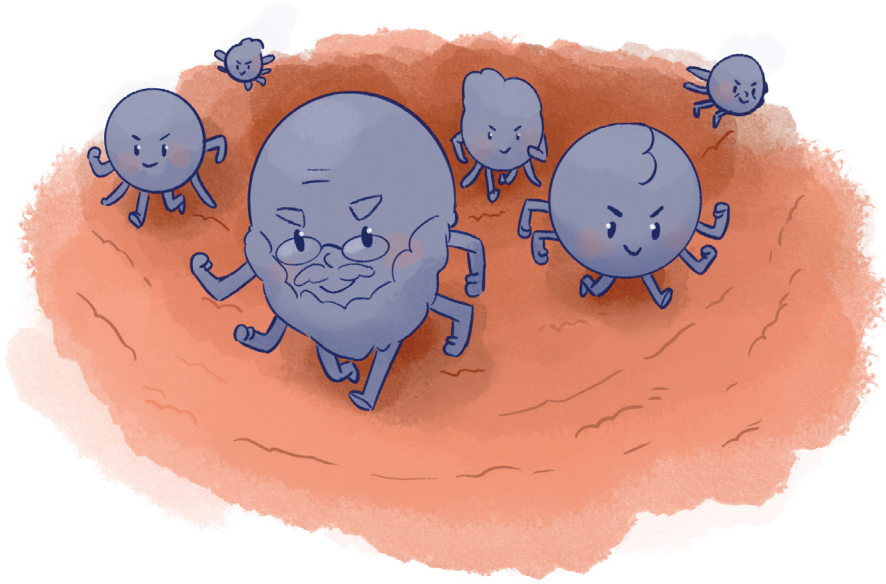
"Here lie all the hopes for the future," said the old blood platelet. "From here, the solutions that will be found sooner or later will begin. All the answers are hidden within the cells, and some people will bring them to light."

The warrior was lucky. He inherited a "lazy" gene from his father, and that was all. Some of his siblings got a "confused" gene from their mother. This gene caused damage to the beta chains, but not severe. The red discs were not fewer this time, but the hemoglobin produced from this gene was not like the normal one. Someday, people will understand why this hemoglobin, in small doses, keeps malaria away, and in large doses,

transforms the discs into sickles that block the body's tubes, veins, and arteries. As for his less fortunate siblings, they suffered without fault, as they inherited the hidden problem of each parent, and it followed them throughout their lives. A "lazy" gene and a "confused" one are a very bad combination.

Just as the little blood platelet was about to ask how two diseases hidden in two different bodies stop hiding when they come together in the same body, a swarm of platelets passed between them and descended toward the deltoid, a muscle in the shoulder that helped move the arm. An arrow had lodged there, and the warrior removed it with the help of his fellow soldiers.

"It seems that the battle our friend feared has begun," said the old blood platelet. "Shall we go help him survive?" The little one asked, following his teacher without a second thought into the arteries.



Periklis and Aspasia

Dimitra Koutsiumba



"Periklis and Aspasia, 'No... Don't... Don't take the water... Bring me more... I'm thirsty... I'm thirsty... thirs...'" Periklis woke up in a panic, and to his great relief, he found himself in his mother's arms. "Calm down, my dear, everything is fine! It was just a bad dream... It's over now," his mother said, giving him a sweet kiss on the cheek. "Come on, get up and tell me what you saw as you get ready for school."

It took several minutes for Periklis to recover from his fright. He jumped out of bed abruptly, throwing the covers on the floor, hastily put on whatever clothes he found in front of him, wore two different socks, overturned a chair, quickly washed his face and teeth, and in exactly seven minutes, he was standing at the front door of his house, loaded with his bag and holding a half-eaten apple in his hand.

"Mom, I'm in a hurry. I don't have time to tell you the dream now. We'll talk about it at noon."

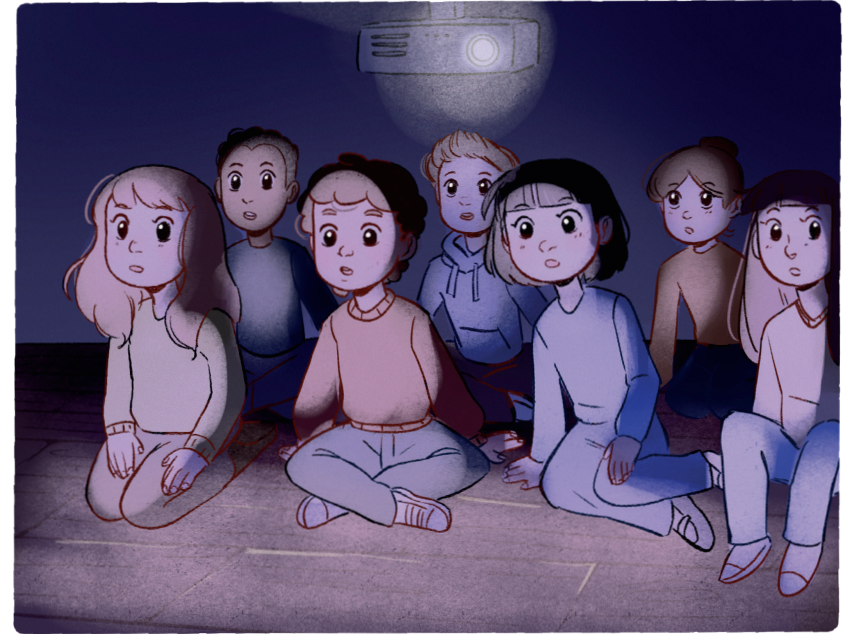
"Good morning, Mrs. Aspasia. I'm very excited to go to the library today," Periklis said eagerly as soon as he saw the teacher who taught them history.

"Good morning, Peri. You can call me 'Mrs. Aspa.' You know I don't like 'Aspasia,'" the teacher scolded, as she had the habit of using nicknames for everyone.

Periklis, hopping and humming, went to meet his best friend, Danae. He couldn't wait to tell her about his dream. He was so excited that he didn't stop talking until they reached the public library. Complete silence prevailed only when the film started. Their teacher liked to teach history interactively. This time, the subject was the Peloponnesian War and the 'Plague of Athens.' She had assigned each student to research a different aspect of the war and the 'plague.' Someone found information about the Spartans and their way of training children, another gathered information about the Athenians and their culture. A third student would make a comparison between the two civilizations. Danae took on the task of finding out what the 'plague' was and how it started. Periklis would be the one to connect it to the present and present a similar situation in modern times.

They spent an hour watching the film and another hour discussing the war.

"So, we can distinguish two phases of the Peloponnesian War. The



first phase from 460 to 446 BC, and the second phase – the one that concerned us today – from 431 BC to 404 BC. In this phase, the two major alliances of ancient Greece clashed: the Athenian or Delian League led by Athens and the Peloponnesian League led by Sparta. In reality, due to the large number of members in each alliance, conflicts took place in regions of present-day mainland Greece, Macedonia, Thrace, Asia Minor, the islands of the Aegean and Ionian Seas, and Sicily. The war ended with the defeat of Athens and the signing of peace with Sparta," summarized Mrs. Aspa.

"Thank you all very much for the information you gathered..." "Mrs. Aspa, did you forget Danae and me? Did we spend the whole weekend in front of a computer screen for nothing?" Periklis exclaimed.

"As always, you're rushing ahead, Peri. I didn't even finish my sentence, and... 'Periklis' famous complaining," the teacher scolded him. Periklis, embarrassed and blushing with shame, sat silently in his seat.

"So, today, we're going to do something... unusual. We're going to combine history with health," Mrs. Aspa continued, trying to hide a smile. A murmur filled the room, and the children looked at each other strangely. They knew that their teacher was a "trailblazer" in many subjects, but this was something else. Only Danae and Periklis understood what Mrs. Aspa meant and waited in silence.

"Danae, tell us about the 'plague'."

"Mrs. What is the 'plague'?" came a voice from the back of the room.

"Don't rush; listen to what your classmate has to say, and then I'll answer all your questions," Mrs. Aspa urged them.

"In 430 BC, while Athens was besieged by the Spartans, a deadly epidemic reached the port of Piraeus and spread within the city of Athens," Danae began. "But how did this happen?"

"Ships were carrying goods from various regions of the known world at that time, and people were traveling to different states. Many scientists believe that the epidemic started in the area of Africa south of Ethiopia and, passing through Egypt and Libya, reached Persia (modern-day Iran) and Greece. When it reached Athens, the microbe found the right conditions to spread, namely, overcrowding and miserable hygiene conditions due to the city's siege by the Spartans and insufficient preventive measures. People suddenly fell ill, developed high fevers, were very thirsty but unable to quench their thirst, their eyes 'burned' and turned red, their mouths smelled bad, they had hallucinations, coughed, their gastrointestinal system was affected, their skin developed blisters. Scientists talk about typhus, smallpox, erysipelas, or some other diseases, without certainty," Danae continued.

"Couldn't they do anything about it?" the children asked.

"They didn't know what was happening to them. Medicine wasn't as advanced as it is today. Besides, they believed that diseases were punishments from the gods or some omen," added Mrs. Aspa.

"What does this story remind you of?" "Coronavirus... COVID..." could be heard from various parts of the room.

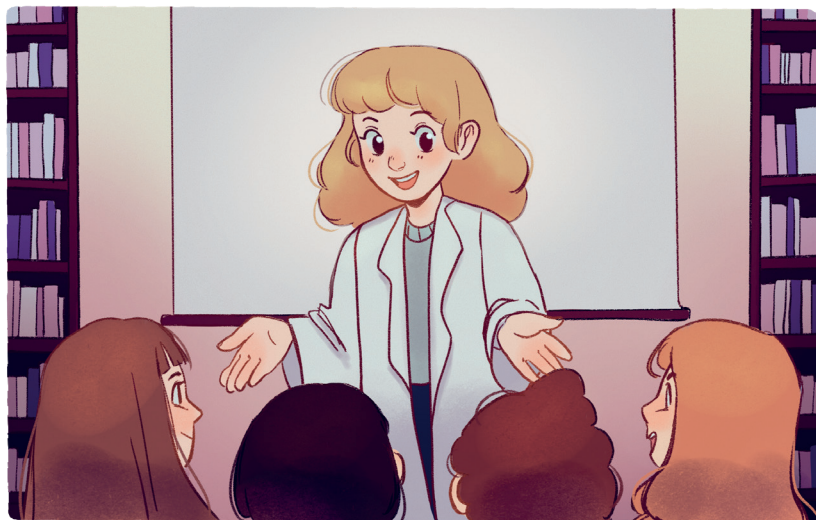
"Ma'am, ma'am... Can I speak now? Is it finally my turn?" Periklis exclaimed enthusiastically. "Come on, Peri... Tell us what you found," Mrs. Aspa encouraged him.

"Dear friends and classmates," Periklis began with an official tone.



"You are right. The epidemic that broke out in Athens in the 5th century BC is not very different from the pandemic that has troubled us in recent years. The one that forced us to isolate ourselves, not be able to embrace our loved ones, and fear getting sick ourselves. However, we are lucky. We have science and the knowledge required to address such a situation on our side. The use of masks, handwashing, and vaccination were crucial preventive measures. For treatment, scientists recommended various drugs and combinations, focusing on the symptoms presented by each patient under treatment."

"Very well, Periklis. Of course, the pandemic had its ups and downs, and there were reactions from some regarding the way it was handled. However, we are not here to judge this specific matter. I want to remind you that prevention is the best cure, and let's recall important hygiene rules. You all know Mrs. Thera (from Therapy, a characteristic name for Lesbos). She is our school nurse. She will talk to us about microbes and the hygiene rules we should follow."



"Hello from me too! How are my darlings? As you can see, you can't escape from Thera! Hahaha!" Mrs. Thera laughed heartily, as always. "What are microbes? You've met them, as far as I know. They are microscopic organisms that are everywhere around us. We can only see them under a microscope. But don't worry; they are not all bad. Most of them are beneficial. They are precious helpers in making yogurt, cheese, wine... But there are also harmful microorganisms that can enter the human body in various ways, even though our bodies have mechanisms to repel them. If they manage to enter our bodies, we get sick. How do they enter our bodies?" Mrs. Thera asked.

"Through the nose..." "Through the mouth..." "Through a wound on our skin..." the children replied.

"Exactly right! Well done, my darlings! That's why it's very important to wash our hands regularly. But don't overdo it! We don't want to do this all day! Hahaha!

We don't put our hands in our mouths, we don't bite our nails. When we cough or sneeze, we always cover our mouth with our elbow. The toothbrush has our name written on it, and no one else touches it, and we don't touch anyone else's toothbrush either. We don't leave exposed

food, and we put as much as we can in the fridge. We avoid contact with people who have a contagious disease for as long as it takes. We cover wounds we might have on our skin.

Pay attention! I repeat! It is very important to wash our hands regularly and in the right way! It takes only 20 seconds or as long as it takes to sing 'Happy Birthday to You.' Yes, I know you know the way. However, repetition is the mother of learning! So, in summary: water and soap - rubbing palms together - rubbing the palm of one hand with the back of the other - the same with the other hand - between the fingers - under the nails. That's it! Simple things!"

"Oh, and one more thing. A big bravo for all your efforts and a big bravo to your teacher for her wonderful way of thinking! It's incredible how she went from a war to... handwashing! Hahaha! You are lucky to have her!"

The Coolest Idea!

Stella Tsigou



Orestes watches his mom's fingers tap the keys of the laptop, and on the screen, strange symbols appear that he can't decipher.

"What are you doing there?" he asks her.

"I'm writing a report for work," she replies without lifting her eyes from the computer.

"What do you mean by 'writing'?"

"Well," his mom hesitates, "it means... she pauses."

"Look now," she thinks, "a whole woman, and I can't explain to a four-year-old what writing is."

"So?" he insists.

"So... it means putting letters in a sequence to create meanings."

"And what are meanings?"

"They're thoughts, ideas... whatever is in your head, basically."

"There are many things in my head. Can I write all of them?"

"Yes," his mom replies, "you can write them. Anything inside you can be turned into words. And just to anticipate your next question, words are made up of letters."

"Why shouldn't I just draw what I'm thinking? Why do we need letters for?"

His mom thinks for a moment about the answer, but Orestes' questions don't leave her room to respond.

"Who invented this writing thing? How did you learn to write?"

"I learned from my parents, my teachers at school..."

"And where did they learn?"

"From their parents and teachers."

"And them?"

When kids start asking questions, they don't stop until they get the answers they want! Fortunately, the ringing of her phone saves his mom. Her boss urgently needs the report within the next hour.

"Orestis, I need to work now, to finish my writing," she said. "But I promise you, after that, we can do whatever you want."

"But why write them down when you already have them in your mind?" Orestis asked.

"Because I'll forget them!" his mom replied, looking frustrated. She had already forgotten some important details she wanted to add.

Orestis lay down on the couch and closed his eyes. All of this seemed very confusing to him. And this Miss Graphi was very, very strange. "Who knows where she keeps her hat?" he wondered. "How much I would like to have her in front of me, Orestis thought, so I could say a few words to her."

He turned around on the couch until he felt his mom's hand touching him.

"Can I tell you a story?" she asked him. But her voice now sounded like it was coming from a deep cave.

He turned around, but he saw a little girl. And the strangest thing was that he wasn't surprised.

"Well," the girl began, "once upon a time, about 3,000 or perhaps

even 4,000 years before the birth of Christ, in ancient Mesopotamia there lived a wise man, Enmerkar. He was the ruler of Uruk-Kulab, a city that honored the Gods with respect, but also with luxury. The great Goddess's festival was still to come, but preparations had already begun. Enmerkar himself went to inspect the temple personally. However, the temple had almost been destroyed! The columns needed to be rebuilt, the decoration to be restored, the statue of the Goddess to be adorned again."

"I didn't expect this," he muttered, "now I need to find materials for restoration, and as economically as possible, as the kingdom's expenses are high." He squeezed his head to come up with the best idea, and then he remembered the ruler of Arrata. He was his friend and ally. So, he called his faithful messenger.

"You will go to Arrata," he instructed the messenger. "You will ask the ruler for materials to rebuild the temple of the great Goddess. But be sure to negotiate well!"

"Certainly," the messenger replied. "What do we need?"

"Mainly gold, silver, timber, and precious stones," Enmerkar said, listing all the necessary items in detail.

So, the messenger set off for Arrata. The journey was not easy - no journey was that easy in those days, to be honest. But what troubled him was how to remember this endless list of materials.

"Well, since he had it in his mind," Orestis interjected.

"Yes, of course," his mom continued. "But in his mind, he also had a thousand other things: his wife, his children, his fields..."

"Okay, continue now," urged Orestis.

"So, he reached Arrata eventually," she resumed. "The ruler welcomed



him and asked the purpose of his visit. 'The work to restore the temple of the great Goddess will begin, and my master, Enmerkar, needs gold, silver, timber...' The messenger stumbled.

"'Enmerkar is a good friend,' replied the ruler of Arrata, 'he will have whatever he needs. In exchange, of course.'"

"Thus, negotiations for the materials that Enmerkar had ordered - or at least what the messenger remembered - began. After a few days, he returned to Uruk-Kulab to convey the message to Enmerkar. 'Great one,' he bowed, and started listing: so much gold, so much silver, so much of one thing, so much of another. He kept talking and talking."

"'And for the timber, what does he want?' the ruler of Arrata asked when he finished. 'I... I don't remember, my lord.'"

"Enmerkar sighed. 'Anyway,' he said again, 'what about the precious stones I asked for? What does he want for them?'"

"I... I didn't ask. I completely forgot."

"Enmerkar felt like banging his head against the wall - the work needed to progress, and he couldn't expose himself to his people. 'You will go back. And this time, you mustn't forget anything!'"

"So, the messenger set off for Arrata again, constantly repeating everything he shouldn't forget. But this time, a new concept had been added to his mind: his mother-in-law, who had come to stay at their house! Exhausted, he arrived at some point. He enumerated what he remembered, and the ruler negotiated, and the messenger made his own bargains, until they reached some agreement and shook hands. Afterward, he found himself again in front of Enmerkar, with his head full of fog."



"Let's not go there again," Orestis said.

"That's exactly what he did. Without going into too much detail, he went so many times that it exhausted the two rulers so much that they were ready to ruin their friendship and declare war on each other! 'I can't take it anymore!' Enmerkar shouted in frustration at his messenger. But then, he had the greatest idea of all time: he would inscribe his message to the ruler of Arrata on a clay tablet! And so it happened. And then everything fell into place: the message was conveyed without missing anything, the friendship of the two rulers was no longer in danger, their trade relations were strengthened, and as for his messenger, not only did he not have to go to Arrata again, but he also received a promotion!"

"Aha!" exclaimed Orestis. "Now I understand. So, that's how people started to write."

"Somewhat like that," replied the girl, who seemed to have grown even older now – she now reminded Orestis of his cousin Eudoxia, who was attending high school. "You see," she continued, "when trade between people increased and became more complex, human memory couldn't retain all the information. So, there arose a need for inventing a tool to solve the problem..."

"Meaning writing," Orestis added.

The girl nodded in agreement.

"So, all those letters on my mom's computer were invented by Enmerkar?"

The girl smiled, "Let's say that he laid the foundation. Enmerkar and his contemporaries used a system of symbols that resembled your drawings more than the letters your mom uses. But writing, like every human invention, improved over the centuries to become as functional as possible. People gradually realized that they could record sounds, which are small pieces of sound that don't mean anything on their own, and combine them to create a vast variety of meaningful words."

"Wow, writing is cooler than I imagined!" exclaimed Orestis. "And my mom was right about letters!"

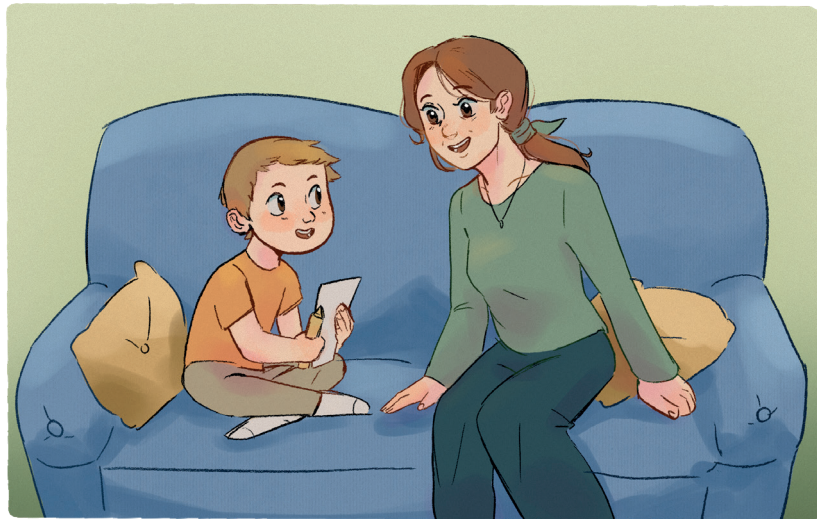
Orestis is excited and has so many more questions to ask the strange woman. However, she has disappeared.

"Orestis, wake up," he hears his mother's voice.

He opens his eyes and sees her smiling at him.

"I'm done with writing," she tells him. "What do you want to do?"

"I think I want you to teach me how to write, Mom!"





MEDNIGHT



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The aim of "The Tales from Mednigh" is to bring Mediterranean scientific activity closer to young people and other sectors of the population, in an entertaining and illustrated way, and to promote the scientific spirit from a critical point of view. The book will also serve to highlight the importance of making visible the existing Mediterranean culture around science, which makes us, who live in the countries of the Mediterranean basin, a little more special and at the same time similar.