



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



MEDNIGHT

V Edition



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**The
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from
MEDNIGHT**

V Edition

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The TALES from MEDNIGHT

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The regatta of *El Perro* and *La Tortuga*

by *Alejandro Ruiz Picazo* (Spain)

Notes in the margins ("The one that follows")

by *Anabel Garcia Mace* (Spain)

The sea that whispers discoveries

by *Miguel Rafael Pérez Hernández* (Cuba)

The secrets of the Costa Viola

by *Domenico Carelli* (Italy)

The Monk of Ithaca

by *Joséphine Cristol* (France)

Clams together

by *Sylvie Lapègue* (France)

Lucas and the Lattara legend

by *Caroline Delaire* (France)

Pipo, a different grain

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Sofia and the secret of Archimedes

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The blue rose

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Where is the right answer?

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Memory Sphere

by *Pelin Battal* (Türkiye)

A Tale of Trash Island

by *H. Esra Kara* (Türkiye)

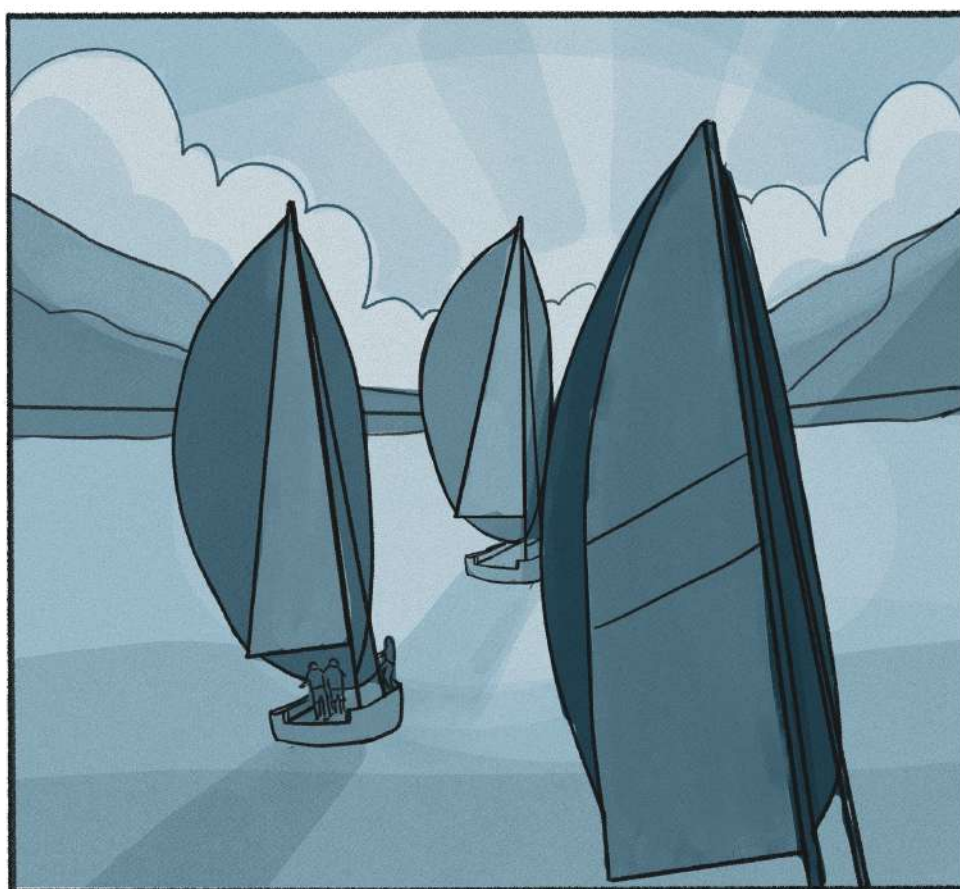
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1

The regatta of *El Perro* and *La Tortuga*

Alejandro Ruiz Picazo



“Now I understand why you love the sea so much, son,” said Carlos' father as the boy leaned on the bow of the boat, his arm in a cast. They had gone out for a boat ride, at his father's insistence, hoping to cheer him up.

The sea was calm, and sailboats could be seen here and there. Carlos spotted several of the ones that would be competing in the regatta the following day. His cast was the reason he and his friends wouldn't be taking part. He felt both sad and angry.

“It's better when you're on a sailboat, Dad. The propellers' noise doesn't let you hear the sea.”

His father switched off the engine, while he sighed and looked out toward the two islands offshore. The islets were called El Perro and La Tortuga. The big regatta consisted of sailing out to them and back to the harbour. He and his friends, Blanca, Alberto and Lucía, had practised this route many times. That year they were determined to win, and now, because of him and his broken arm, that dream had vanished. A silly fall from a swing had been the culprit.

He turned his eyes from the teams practising the turn around El Perro's tail to discover his father surrounded by all sorts of gadgets on the boat's deck.

“What are all those things, Dad?”, Carlos asked, a little confused.

“They are my measuring instruments. You said that, with your arm like that, you couldn't be useful in the competition, that you would be a... What did you call it?”

“Dead weight,” Carlos muttered, sighing and shaking his head. “There is no way around it. If we compete like this, we will lose.”

“Setting aside the fact that winning isn't everything and that I don't like seeing you give up at the first hurdle, I think we might be able to find a solution. Like in any of my experiments, we should gather as much data as possible. You know that the Mediterranean always hides surprises.”

Not in the mood to argue, Carlos nodded. “What harm could there be in spending some time with his father and his odd gadgets?”

Carlos' father explained that "data" is everywhere, in everything we see, touch or hear. Even in the smell of the sea. The key was knowing which data mattered.

“For example, for your race tomorrow, what kind of data do you think might help you win?”

“I'm not sure... That salinity thing you talk about doesn't sound very helpful.”

“Shame. It's fun to calculate. What about wind direction and strength?”



“That could definitely help. And also the direction and speed of the currents.”

Carlos and his father spent several hours sailing to different points along the route, lowering complicated equipment into the water and trying to figure out where the wind blew strongest and the current was at its most powerful. It turned out to be a fun afternoon.

They transferred all the information onto the map that his father had printed out over several sheets of paper taped together. It showed the coastline, the port, and the two islands. The outlines of La Tortuga and El Perro were clear. The lines they had drawn on the map, red for the wind, blue for the current, looked like nothing more than meaningless scribbles.

“I see”, his father said, smiling at the map.

“You see what? It’s just a bunch of lines.”

“When working with data, it is important to keep a number of things in mind if you want to make good sense of it. First, identify what data is useful. Then interrogate the data – figure out what it’s telling you. That will help you make better decisions.”

“So that’s what you do with your experiments. You help people make decisions. But I don’t know how I can do that with all these lines.”

“You have to look at them all as a whole. They don’t say much individually, but...” his father pointed at a couple of spots on the map – ‘Don’t you see anything interesting here?’

Carlos took a closer look. The blue lines, the ones showing the currents, seemed to outline the two islands. Only the far-right edge had a different

accumulation, which didn't point to the coast. There was a strong current there, pushing the water towards the centre of the two islets. The wind was even more chaotic, but it was clear — it followed the current, blowing strongly between the two islands.

Carlos's eyes widened as he understood. His father smiled and steered the boat towards the meeting point of El Perro and La Tortuga.

When they arrived, Carlos climbed out of the boat onto the shore. Splashing through the water, he moved towards the area of interest between the two islands and shook his head. The connection between the islets was a wide passage, but the sand was visible, linking the head of El Perro to the tail of La Tortuga under the water.

"It's true that the buoy we have to pass is at the head of La Tortuga, there is no problem in passing through here. But if it were possible, everyone would practise this route, Dad."

"You don't know that, Carlos. I suppose you're thinking your sailboat's draft won't fit through here because the water's too shallow. But you have to take all the data into account," his father said, glancing at the rocks that outlined the narrow water passage."

Carlos looked at the rocks, the waterline mark from the tides fixed on their surface, and smiled widely. They were going to do it — they were going to race.

His father handed him his mobile phone with Blanca's mother's number already dialled in.

"Another important point when dealing with data is communicating the results."



Carlos began to map out his plan. The currents, the wind, the sea level, and what had been the key to it all — the time of the race the following day. When they got home, he had already shared his plan with his friends. It was crazy, but they were going to try anyway. He never realised how useful and fun data could be.

The next morning, Carlos woke up excited. He had breakfast and went straight to the harbour to meet Blanca, Alberto, and Lucía. The four of them prepped their sailboat, named *El Delfín veloz* and got ready for the race. Other teams sneered, saying they wouldn't be able to win with a "dead weight" like Carlos on board. He had checked, and in order to qualify for the prize, all team members had to be on the boat at all times.

"Do we have to leave the sandwiches here?" Alberto asked.

"We need to lighten the load as much as possible, otherwise, we could run aground. Come on, the race is starting."

The race began with no real surprises. It was hard for Carlos to stay in the boat, still, while his friends worked so hard handling the lines and the sail. He helped as much as he could without getting in the way of those who had both hands free. His contribution that day would come in a different form, as a winning route.

All the sailing vessels lined up as they approached the islands, they were the only ones to veer right, riding the wind and current that Carlos and his father had discovered the day before. That gave them a huge speed boost as they aimed straight for the narrow passage between the islets.

The delicate moment came when they had to cross paths with a slower sailboat. Blanca did an excellent job with the helm, steering to avoid them without losing speed.

Carlos looked at his watch, it was the exact time, the high tide. In the Mediterranean, tides did not rise and fall as steeply as in other seas, but it was enough to make the passage navigable for their small boat.

They sped towards the narrow opening. Everyone was focused, working as a team, and showing their trust in each other. Carlos smiled. His father was right - when you make decisions with data, there is no room for doubt. He had full confidence in his plan and his friends had full confidence in him.

They crossed like an arrow between the two islands and took the lead. They had gained a significant distance over the group still struggling to round the tail of *El Perro*. The race wasn't over yet. The friends, smiling with each effort, manoeuvred the sailboat and used the great speed they had built up to maintain the distance from the others until they reached the finish line.



That day they learned that every problem must be analysed, and every small detail must be taken into account. Even in sports, his father's science managed to shine.

Carlos raised the trophy with his good hand. He scanned the crowd for his father and spotted him clapping the hardest. They had done it, with the data in hand, they had made the right decisions. They had achieved their dream of winning the Regatta of *El Perro* and *La Tortuga*.

2

Notes in the margins **("The one that follows")**

Anabel Garcia Mace



Wasifa walks the corridors of the palace while holding carefully a small astrolabe in her hands. She is engrossed in the precious gift given to her by Abū'l-Qasim Sulayman, wishing it was night, again, so she could use it to search for his trace in the starlight.

Her steps take her unconsciously from the great library to the administrative offices, her usual route in which she almost changes her name, even her eyes leave the heights to go down humbly to the ground. At the offices, she is just another slave, a copyist for Alhakam II, admired for her elegant and swift calligraphy. In the library, however, she is praised for her knowledge of grammar and poetry. And yet, when she is alone, studying one book or another, she becomes something else entirely. She is like a river that fills with more and more water. The secrets of mathematics and the stars enchant her senses more and more and she extends the nighttime hours to understand them.

Wasifa walks through the gardens of Medina Azahara, nods slightly to greet the gardeners, and conceals several yawns by lowering her head even more. In the office, she carries her quiet presence with her and diligently organises, checks and copies the new orders to supply the palace complex with vegetables and fruit.

In mid-afternoon, she is sent back to the library to update the catalogue with the latest volumes that have just arrived.

Sulayman appears and approaches her. On a small piece of paper, he shows her an algebraic problem. She knows what it means, they won't be able to see each other and unravel numerical mysteries that night, but she still won't let her head just drift off to sleep. He tempts her with this little enigma so that she solves it and shows it to him next time.



Wasifa enjoys the taste of cool water, bread dipped in oil and a ripe plum about to be bitten. The sunset tints the arcades surrounding the garden and the wall she sits on with a mixture of pale to deep reds, pinks and browns that create translucent wreaths on the fruit trees. It is easy for her to imagine that the whole world is covered by a pearl-coloured veil before melting into the dark blue of the night.

Al-dabarān. She has it pinpointed in the night sky; she can even block out that pinprick of light with one of his fingers. She picks up the astrolabe and gently runs her hand over its surface. She turns it over to draw, with its ruler, the angle the chosen star makes with the horizon line, thirty degrees. She turns the astrolabe and on the other side, she locates the point representing Al-dabarān, makes it coincide with the angle marked with the ruler and simultaneously turns the disc representing the summer solstice. With all the coordinates, Wasifa slides his fingers over the time marked on the metal margin: it is now past midnight.

She still feels the wonder of matching the time with the position of the stars and vice versa. It seems almost like a spell to her to follow the path they travel once and again, and that it is always the same and what that can mean. It makes sense, at least to her, somehow the same thing happens to her. 'Doesn't she move from the library to the office, from the gardens to her little room?' Her own habits and routes through Medina Azahara are a series of repeated steps, going and returning. With an exclamation, a possibility occurs to her. Her pen falls, and one of the books she is reading slips to the floor as well.



She laughs quietly as she picks them up, including Sulayman's mathematical problem solved, and uses a piece of paper to write down star names, numbers, brightness levels and magnitudes she has learnt by heart on a table before using the space and the back to sketch Ptolemy's cosmic model. She places the tip of the brush on the central point she has drawn, on the Earth, and once again thinks of the absurd idea: what if she were standing in Al-dabarān? How would she use the astrolabe from there? The reference point would have to be different. The outline of the sky depicted would look different. She would then look for the sun and the angle it forms with the horizon line. Would it show the same time? Were they all, perhaps, leaning out different windows... looking at the very same star?

The oil lamp remains lit, and even though she is sleepy, her eyelids are hopelessly heavy, the stars tempt and beckon her to keep playing with them for a while longer. So much so that Wasifa lets herself be fooled and, without noticing, she begins writing in the margins of several astronomy books. She jots down ideas, distances and a curve where a wandering body orbits around a star called "A". And, most curiously, instead of being a perfect sphere, it resembles more like an elongated ellipse in search of the infinite.

In the days that follow, the administrative work becomes very demanding, forcing Wasifa to set aside her love for science in order to focus on the meticulous provisioning of the palace, which now extends to the troops amassing in Cordoba. She returns the scrolls she borrowed from the library, and exchanges calculations and possibilities with Sulayman during the brief moments when they coincide. The weeks pass at a staggering speed, with news of Berber presence, attacks on trade routes and irritated feudal lords becoming more and more aggressive after the death of Alhakam II and the arrival of a son too young to restrain the ambitions emerging from within the very court of the new and feeble caliph.

The umbilical cord of Medina Azahara ceases to be that of a mother who enriches an extraordinary life. Laughter, music, recitals and fountains, stop flowing in an attempt to pass as unnoticed as possible in the face of the increasingly present warlike tension. Despite this, the little jewel of the Umayyads continues to illuminate from the library. The shelves hold knowledge, the copyists and the learned people are still within these walls trying to unravel formulas and theories like exotic gifts. Sulayman asks Wasifa to help him select several volumes. Political logic and bad feelings make her fear a very uncertain future for the little paradise she has created for herself. The last night they meet, with Al-dabarān's waking eye through the window, they choose volumes on medicine, philosophy, agriculture, drama, mathematics, poetry and astronomy.



An incalculable and small treasure to be sent to the library in Toledo. They say goodbye with an embrace and an astrolabe hidden under their tunics. They wish to meet again, be it far from Medina Azahara, from the kingdom they know, but time and fire will take a heavy toll and they will not meet again. At least as far as it is known, after those days, her track disappears. There is not much more of Wasifa. There is almost nothing really. One possibility. An idea. A lost astrolabe that she often used when she was alone and wanted to find her place among the stars.

It only remains to say that, years later, a certain Azarquiel, an enthusiast of the sky and its secrets, a brilliant astronomer and geographer, still had time for that, and' among his many forays into the Toledo library, discovered notes in the margins of several astronomy books. And these comments?' Interesting ideas, known facts too, and a fascinating drawing. He searched as many books, scrolls and parchments as he could, but found no such elegant handwriting in any of them. Maybe it was a budding disciple or a magnificent sage who had left several breadcrumbs for someone else, him, for example, to follow and know how to fit them together. It doesn't matter. At least there they were.

Pity Azarquiel did not look up and see Al-dabarān winking, with some enthusiasm, its red eye from the vault that night.

3

The sea that whispers discoveries

Miguel Rafael Pérez Hernández



Night falls over the Mediterranean like a blanket of blue velvet dotted with stars. I walk along the beach, feeling the warm sand under my bare feet, while the salty scent of the sea envelops me. Tonight, it is a special night, the Mediterranean Researchers' Night, MEDNIGHT, and the air trembles with the excitement of scientific advances to come.

I stop near a group of young people surrounding a grey-haired, bright-eyed woman. Her voice, meek but firm, draws me in like a siren's song.

"Children, did you know that this sea you see here has witnessed the birth of civilization?" she asks, pointing to the waves lapping onto the shore.

A boy no more than ten years old raises his hand timidly.

"More than the Nile River, madam?"

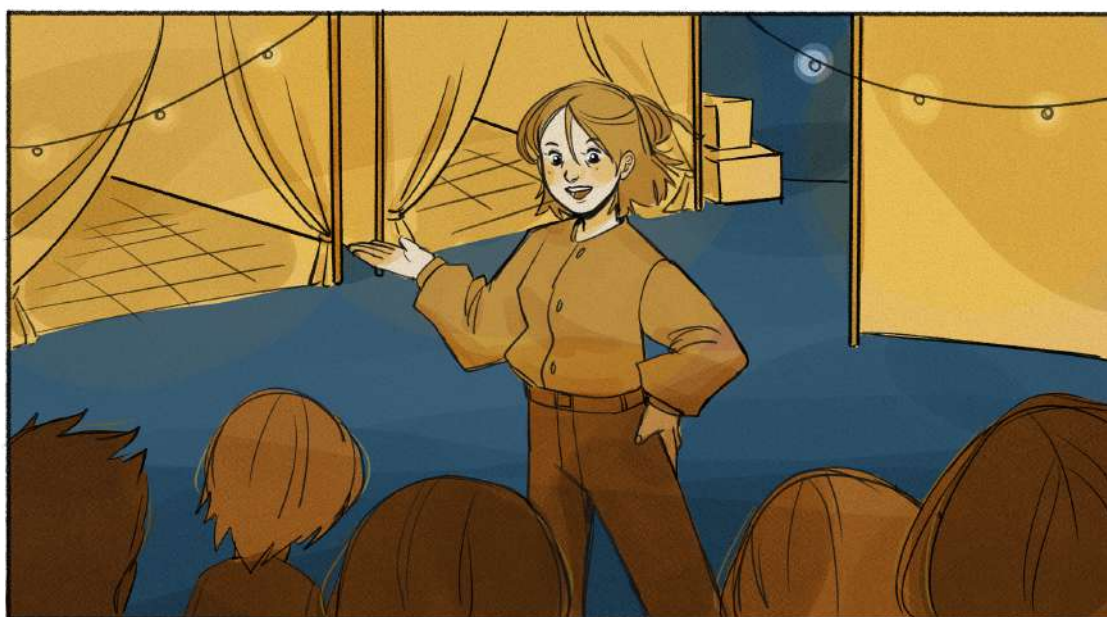
"As important as the Nile, Adrián. The Mediterranean has been called many things: Our Sea, the White Sea, the Great Sea... But what matters most is that it has been a bridge between cultures, a melting pot of wisdom."

I step closer, fascinated by the improvised lesson. The scientist looks at me and nods, inviting me to join the group.

"Come with me," she says, setting off along the beach. "I will show you how this sea has been the scene for great discoveries."

We follow in her footsteps, leaving footprints in the sand that the sea will erase with the next tide, just as time fades the traces of history. But tonight, we are here to remember and to celebrate.

We arrive at a small cove where several tents have been set up. Colourful lights illuminate the scene and create a magical atmosphere. In each tent, a researcher presents their work. I am amazed by the diversity of topics: from underwater archaeology to marine biotechnology.



"See that tent over there?" our guide says, pointing. "They're studying how ancient Phoenician sailors used the stars to navigate."

A murmur of amazement ripples through the group. We approach the tent, where a young researcher is handling an astrolabe.

"Good evening, knowledge adventures," the researcher greets us with a smile. "Would you like to learn how to navigate the way they did over two thousand years ago?"

The children are thrilled. I watch as the researcher teaches them how to use the instrument, explaining concepts of astronomy and navigation in such a simple way that even I, who was never good at mathematics, can understand.

"The Mediterranean doesn't just connect lands," he explains, "it also connects ideas. Knowledge travels from port to port, from mind to mind."

While the children are practising with the astrolabe, I wander off a little and find myself in front of another tent. A middle-aged woman is surrounded by test tubes and microscopes.

"Come closer," she invites me. "I'm studying bacteria that could help us clean up the sea of plastic."

I lean over the microscope and look at a miniature world, full of life and possibilities.

"It's amazing," I murmur... "How did you discover these bacteria?"

"It was by accident," she replies, her eyes sparkling with passion. "I was studying material degradation on the seabed and noticed something unusual. The scientific method did the rest: observation, hypothesis, experimentation?"

I remember my science classes at school. But here, facing the sea and surrounded by researchers, science comes alive in a way that no textbook could ever match.



As the night draws on, I move from tent to tent, absorbed in each discovery.

I learn about the history of Mediterranean universities, about how Al-Karaouine University in Morocco, founded in 859, is considered the oldest university in the world still in operation.

"Learning knows no borders," a history professor tells me. "Ideas flow like ocean currents, carrying science from shore to shore."

In the next tent, an archaeologist displays pottery fragments recovered from the seabed.

"Each piece tells a story," she explains, reverently caressing a shard of amphora. "They tell us about trade, culture, and how our ancestors lived."

Suddenly, a shout shatters the atmosphere of discovery and wonder. I run to the source of the sound, and a team of researchers surrounds a computer screen.

"What's happening?" I ask, feeling the tension in the air.

A woman in a lab coat looks up at me, her face pale in the screen light.

"We've been monitoring the sea temperature," she explains in a trembling voice. "Tonight's data shows a sudden and alarming rise. If this continues..."

She doesn't need to finish the sentence. We all know the consequences of global warming: coral reef bleaching, alteration of ecosystems, extinction of species...

The silence that follows is charged with concern. I see the fear in the eyes of the children around us, the weight of an uncertain future resting on their young shoulders.

But then, something extraordinary happens. The scientist who guided us at the beginning of the night steps forward; her voice, clear and determined, cuts through the silence like a lantern in the darkness.

"This is precisely why we are here tonight," she says. "Science shows us the problems, and it also gives us the tools to solve them."

As if her words were a signal, the researchers begin to move, to talk to each other, to exchange ideas.

"We could use plastic-degrading bacteria to help reduce pollution," someone suggests...

"And the studies on ocean currents could help predict and mitigate the effects of rising temperatures," adds another.

But then, something extraordinary happens. The scientist who guided us at the beginning of the night steps forward; her voice, clear and resolute, cuts through the silence like a lantern in the dark.

I watch in amazement as, within minutes, fear turns into determination, the problem into a challenge to overcome.



"Children," says the scientist, turning to the young people around us, "this is what science does. We face the unknown, the terrifying, and turn it into knowledge, into solutions."

I see the children's eyes light up, the spark of curiosity and courage igniting within them.

"Can we help?" asks a little girl, her voice small but determined.

"Of course you can," the scientist replies. "In fact, we need your help. The future of the Mediterranean, the future of our planet, is in your hands."

On a night that began as a celebration and almost ended in tragedy, I witness the birth of a new generation of Mediterranean scientists. I see researchers guiding young people, sharing their knowledge and their passions.

The sky begins to clear in the east. But nobody seems to notice. In every tent, in each corner of the beach, groups of people of all ages are discussing, planning, dreaming. I step away for a moment — I need time to process what I have experienced. The sea is calm, its surface a mirror reflecting the last stars. I think of the civilisations that once flourished on its shores, of the discoveries that have been born from its waters.

The sun begins to peek over the horizon, tinging the sky with pink and gold. It is a new day, full of possibilities and challenges. And thanks to the Mediterranean Researchers' Night, I know that we will face the challenges with curiosity, determination and, above all, with hope. Because the Mediterranean, this sea between lands, is a body of water and a bridge between cultures, a crucible of knowledge, a reminder that, by working together, we solve problems. The new day dawns, and I realise I am part of something colossal because I have

seen the past, the present and the future of Mediterranean science intertwine in a single night.

The sun rises over the Mediterranean, illuminating the tents and the tired but enthusiastic faces of the scientists and children. I reflect on the sea, silent declarer of millennia of discoveries, which seems to whisper promises of future breakthroughs. In the eyes of the young people, I see the same spark of curiosity that once drove Thales, Ibn al-Haytham, Hypatia, in the search for knowledge as a powerful force that transcends time and space, as MEDNIGHT is a beacon of hope, it is a bridge between generations and cultures.

I keep my notes, carrying with me the memories and the certainty that, as long as curious minds and brave hearts exist, the scientific spirit of the Mediterranean will continue to flourish, face challenges, and forge the future.

4

The secrets of the Costa Viola

Domenico Carelli



The sun was setting over the Mediterranean Sea, painting the horizon gold, while the waves lapped the rugged coast of Scylla. Here, among the hidden folds of the rocky seabed of the Purple Coast, sheltered from prying eyes, lies a unique wonder in the world: a forest of black coral, jealously guarded by the sea, where time seems suspended and the shells whisper forgotten stories.

Phoebe, a sea turtle whose age no one knows, glided silently over those waters, as a sacred guardian of a submerged and invisible kingdom. She had witnessed countless sunrises, watching over the delicate balance of that secret world she loved so much. Every current, sweet or saline, that crosses the Strait of Messina, brings with it life and nourishment, supporting an extraordinary and fragile biodiversity. However, in recent years, the Bay of Scilla has begun to show signs of suffering, hurt by the growing pollution generated by progress.

One day, as the sun dipped into the horizon, Phoebe approached the black coral forest, feeling the weight of devastation weighing on her ancient heart. Plastic had started to creep in there too, among the intricate coral formations, suffocating the life that thrived there. As she delved deeper into the barrier, a sudden movement caught his attention. Among the vaults and embroideries of black coral, she spotted Stella, a young, vibrantly coloured starfish, trapped in a tangle of transparent plastic. Stella struggled desperately, trying to free herself, but every attempt only seemed to make the situation worse.

"Stella!" Phoebe exclaimed in alarm. She approached quickly, delicately wrapping his fin around the starfish, and with one expert movement tore off the plastic, freeing her friend.



“Phoebe, you saved me!” gasped Stella, still trembling with fear, once again gracefully moving her five fluorescent arms. «I was exploring the forest searching for food, when this invisible trap captured me. I thought I couldn't do it...”

Phoebe looked at her gently, but a new determination burned in her gaze. The sight of Stella in danger had strengthened her awareness of the urgency of the situation. It wasn't just the Purple Coast. She knew she could no longer put it off: the time to act had come, and the mission to save the sea and its inhabitants had become even more personal. Yet, a doubt crept into her soul: would she really be able to save the bay alone?

Determined to seek help, she swam towards the rocks where, during the summer, Karl von Mar stayed, the eminent squid professor, appreciated at the equator and beyond for his unparalleled knowledge.

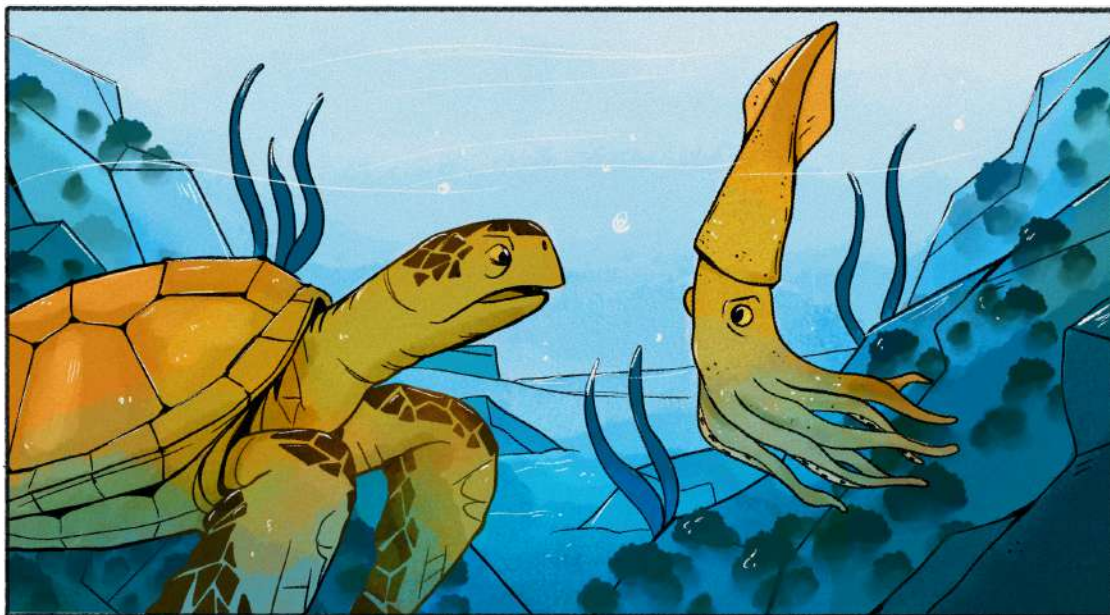
“Karl,” Phoebe began in a grave, solemn voice, “our home is in danger. This forest, this miracle of the Mediterranean, is dying. We must act, and we must do it now, before it is too late.”

Karl, who knew every hidden corner of the sea, nodded with a thoughtful expression. “My illustrious friend, your concern is well founded. Our future is at stake. I heard about a place in the Gulf of Lamezia, a little further north, where new colonies of black coral, *Antipathes dichotoma*, a very rare species believed to be almost extinct, were discovered. Maybe there we can find an answer, a solution. But know that the path will be arduous.”

Phoebe understood that their mission would not be easy at all, but a timid hope raised in her heart. “I guess, but we can't hesitate. We have to leave as soon as possible! » she exclaimed, her voice full of renewed energy.

At dawn, the two friends set off, entering icy and unfathomable waters, advancing through abyssal canyons, and deftly escaping the fearsome predators of the sea. Along the way, they faced furious underwater storms and unpredictable currents that threatened to sweep them away. On more than one occasion Phoebe had to fight the urge to stop, discouraged by the impetuous force of the sea and her fears. Karl, with his experience, was beside her, guiding her through dangerous labyrinths and relying on his age-old instincts.

The turtle never stopped thinking about the uncertain future of her kingdom: during the moonless nights, when the sea was cloaked in silence and became even more mysterious, she remembered the moments spent listening to its breathing and contemplating that pristine beauty, wondering if the future generations would be able to enjoy the same wonders. And every difficulty she overcame, further strengthened his unshakable will.



When they finally reached their destination, they didn't just find a new colony of black coral. A team of marine biologists was present, studying and taking care of those precious ecosystems. Phoebe and Professor Squid explained to the biologists the somewhat compromised situation in which Scylla Bay was, and the need for urgent interventions. The researchers, animated by the same spirit of protection, listened carefully and together began to work to develop a bold and innovative plan. The proposal was to introduce into the bay some bioremediating bacteria, microorganisms capable of degrading plastic and neutralizing the toxic substances that were poisoning the sea. But this would not have been enough: the delicate balance also depended on local plankton. Phytoplankton, essential for photosynthesis and maintaining oxygen in the water, would work in synergy with bacteria to purify the sea and bring life back. It was an ambitious project that required a lot of courage, but Phoebe, Karl, and the biologists were ready to make the impossible possible.

The marine community joined the adventure, aware that the survival of their ecosystem depended on the success of the plan. Every creature, from the smallest crustacean to the majestic cetacean, knew that the sea was their home and that, together, they could make a difference.

Upon their return to Scylla the battle against that dark evil called pollution began. The bacteria were released at the most critical points, while biologists carefully monitored every step of the process, ready to intervene if necessary. At the same time, the sea creatures, under the guidance of the indomitable Phoebe and prof. von Mar, began to clean the waters from visible plastic, each contributing according to their possibilities. The fish and other creatures worked

together with the biologists in an unprecedented alliance between the two kingdoms.

Slowly the combined effect of bacteria and plankton began to work: the waters became clear again and marine life flourished like a garden after a long winter. The corals, previously suffocated by plastic, were covered in vivid shades of blue, red, and purple, and fish of all shapes and sizes crowded the bay, dancing among the waves.

One night, under a shower of shooting stars, Phoebe proudly addressed her wise friend:

«Look, Karl. Our bay is shining again." In response, the squid professor smiled, his tentacles waving in delight. «Yes, Phoebe. The sea is like a great orchestra: every note, every creature has its role; if even just one of them were missing, the symphony would be incomplete. But together we are invincible. And together, we can face any challenge."

Phoebe nodded, but she knew the battle would never truly end. She turned towards the horizon, imagining the new challenges that awaited them. Protecting the black coral forest required constant vigilance and commitment. Together with researchers and the marine community, she would continue to fight, day by day, to ensure that the sea could continue to sing its ancient melody. An endless poem, of life and death, written by the waves and the sun.

As night fell gently on Scylla Bay, enveloping Phoebe and Karl in a warm and reassuring embrace, the sea turtle closed her eyes, letting herself be lulled by the tide. Hope continued to shine in the depths of the sea

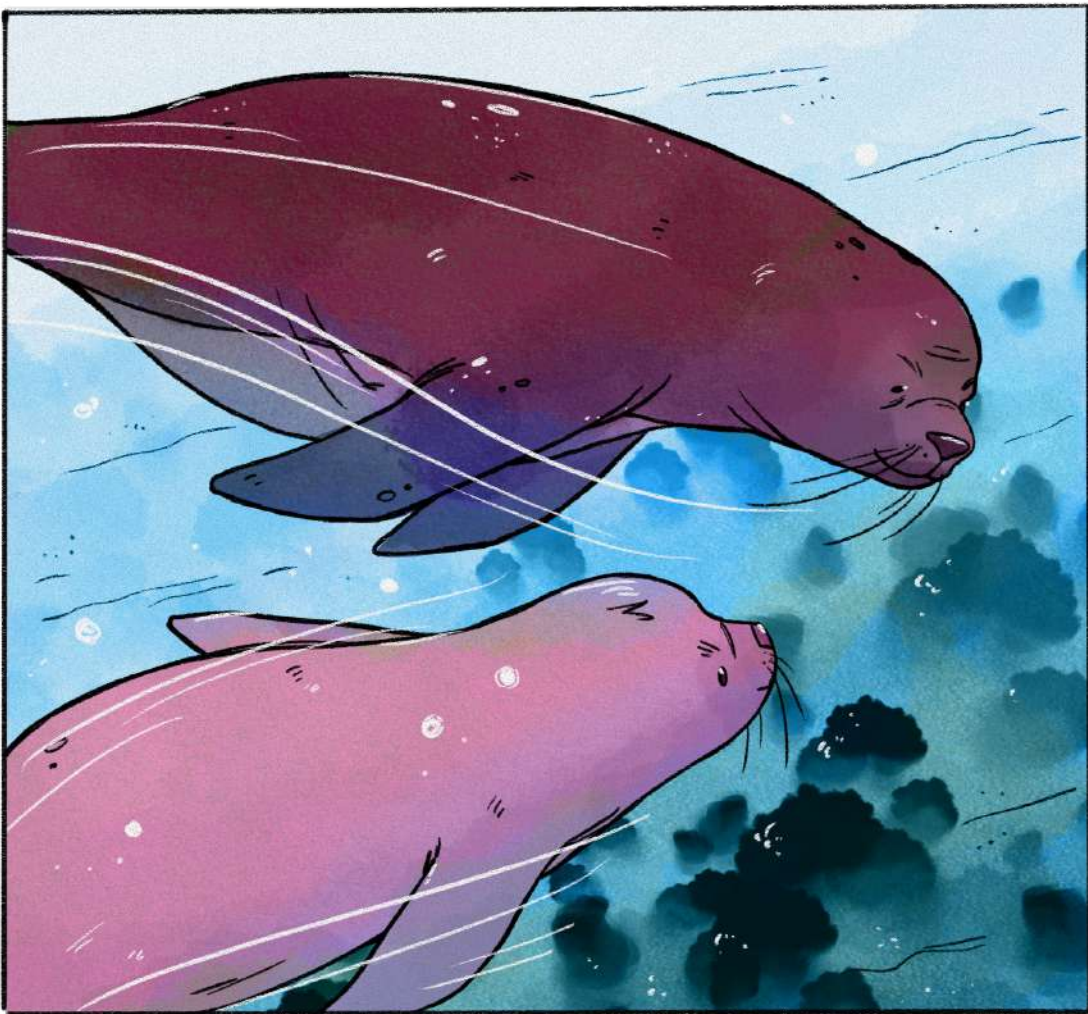
The waters of the bay had not been this bright in a long time, and the reflections of the coral radiated magic, defying the darkness.



5

The Monk of Ithaca

Joséphine Cristol



Three fish undulate in the sea, their golden scales glinting in the sunlight. Suddenly, the waves stir and the fish scatter, swimming furiously to escape the super predator swooping down on them. Too late. One of the fish disappears into the seal's mouth, and the seal hisses in frustration at the other two as they swim away. The harvest is not good for Lina. The young seal shakes her head, wagging her whiskers, and heads off in search of new prey. Using her flippers to project herself, her skin glistens with a silvery sheen as she flies through water like an arrow. The water parts around her and she feels the currents hit her sides as she accelerates. Exhilarated, she fails to notice the dark shape in front of her and collides with an old seal. He growls and pushes her away ruthlessly with the flat of his flipper.

"This new generation, no manners!"

"I'm sorry, I didn't see you... I've just become independent, I left my mother two hours ago. I may have been careless and made a mistake, but it won't happen again."

"What a klutz... what's your name? "

"Lina."

"Very well, Lina. I'm Jean. Come with me, and I'll show you how to find your way around these waters and teach you why we don't just rush in like cannonballs, for God's sake!"

"Sorry, I'm having trouble channeling my energy...murmurs Lina."

Before she could finish her sentence, Jean kicked her in the flanks and plunged into the sea. After an initial acceleration to catch up, Lina adapts to the old seal's speed and is frankly bored. Even the turtles pass them with their leisurely swim. After a while, Jean points out a bundle of ropes trapping small fish.

"This is a fishing net. You'll hurt yourself if you go near it. That's why you have to be careful where you're going..."

"I know, Mum told me never to go looking for prey in there, even if there's a lot of it. One of my brothers died like that, he got stuck and couldn't get back to the surface to breathe."

"To console her, Jean pats Lina's back with his flipper."

"I'm really sorry for you. If it makes you feel any better, humans don't hunt us on purpose anymore."

"Did they hunt us before?"

"Yes, mainly to eat us, but also a long, long time ago, in ancient times, they used to collect our fat to make candles."

"Candles?"

"See those golden dots you see on the coast at night?"



“Yes, those are the lights of human cities.”

“Humans don't like the darkness. In the past, they didn't have the technology they have today, so they used animal grease, including seal and whale blubber, to create candles that lit them as they burned. Lina's mouth hangs open for a moment, unsure of what to say, but Jean is already swimming away.”

“The fishermen are stealing our prey, can't we really do something?”

“Go away and find some elsewhere,” grumbles Jean.”

“But they fish everywhere!”

“The more you complain, the less prey you'll find!”

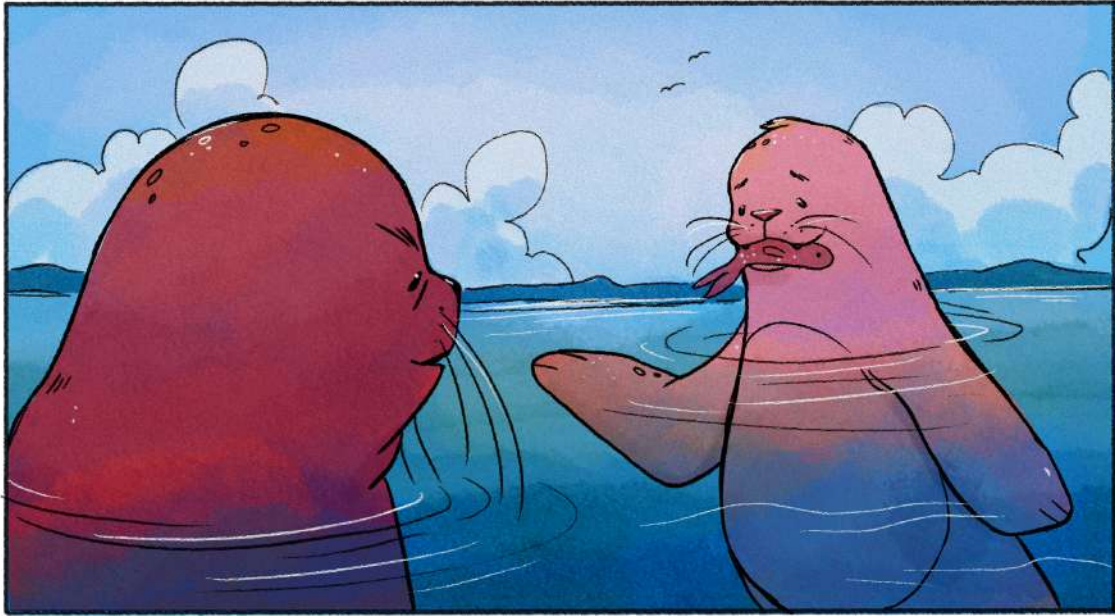
Lina shakes her head, sounds her annoyance, then wiggles her fins to follow the old seal, without much conviction. Their journey continues, and twice she strays from Jean's trajectory to munch on small fish. Faced with Jean's glum look, she can't help exclaiming:

“What, do I need permission to eat these preys too?”

“No, but I hope you're aware that you're swallowing PCBs, DDTs and pesticides?”

“What's that? I'm hungry.”

“Pollutants. Humans used them as materials; some, like PCBs, have since been banned, but they are still found in the sea. In our bodies, it's even worse. We eat animals that have themselves eaten contaminated species, pollutants accumulate in our bodies. As you climb the food chain, each link contains more pollutants than the next. The concentration of PCBs in our bodies is several dozen times higher than in the sea. In particular, PCBs reduce your resistance to disease.”



The fish skeleton falls from Lina's lips.

"Where can I find non-toxic prey?"

"You can't. The whole sea is contaminated."

"So why do you tell me that if I can't do anything?"

"So that you know. It's always useful to know."

"No, it's just scary and there's nothing I can do about it, so it's terrifying! I may never be able to eat again, I'll be too scared."

"Jean bursts out laughing, shaking his body and making the pale spot on his belly tremble in the midst of his black skin. His voice has the depth of a cave and the power of a thousand echoes against the rocks. When he throws back his head, the skin of his neck wrinkles like a monk's hood."

"You'll die faster without eating than with chemical poisoning! Come on, follow me, I'll show you where to rest."

"In a cave? My mother showed me lots of them around the island!"

"All right, then, we'll see if you know this one."

A few meters further on, Lina and Jean enter an underwater tunnel spaced out with air pockets in which they could breathe before continuing on their way. Soon, they surface in a cave with a high ceiling and a small pebble beach, where other seals are already lounging and where a baby has just been born and is suckling its mother, lying on its side. The pup still wears its birth coat and melts Lina's heart. Together with Jean, she joins the others, but doesn't lie down just yet, as her eldest still has things to tell.

"This cave is really very special. See that black wire right there? It's a cable

installed by humans, connected to cameras with which they observe us. They do this to protect us and monitor the state of our population, in the hope that it will increase.”

“I don't understand... aren't humans the reason we're disappearing?”

“Yes, but some of them, because they understand that their survival depends on ours or because they are generous, act to protect us. In particular, they have forbidden fishermen to approach us and are making tourists and local residents aware of our presence. Our population has diminished dramatically. We used to populate the entire Mediterranean Sea, basking the coasts from Spain to those of Turkey. Today, there are less than a thousand of us and we can only live here. I think there are still a few of us left in Turkey and then that's it. This island, Ithaca, where we live, is home to the story of a hero, Ulysses, who traveled all over the Mediterranean and beyond to find his home. Our home is the whole sea, and I believe that one day we will repopulate it. We'll get there. I've long hoped to see that day and discover the beaches of France and Italy, the beauty of which my father used to vaunt to me, but I'm afraid that only you or your children, or even your grandchildren, will be able to experience that moment. Perhaps soon we'll be able to go back to sleeping on the beaches in the open air, if we're granted a space unencumbered by tourists.”

Jean turned wet eyes to Lina.

“We are the monk seals of the Mediterranean, the whole sea is our homeland and I think the world is beginning to remember that.”



When Lina falls asleep, she dreams of sun-drenched beaches with blindingly white pebbles, beaches in countries whose names she barely knows, places she can only imagine, but which are beautiful, so beautiful in her dream. All she'd have to do is dive into the sea, to find plenty of prey, from fish to octopus, and meet up with her peers. Then they wouldn't be able to stand each other and they'd bicker incessantly, but they'd be numerous again and they'd have everything they needed.

6

Clams together

Sylvie Lapègue



Paloma woke up one morning on the sand by the seashore. The sun was shining, the water was warm and everything was fine. It was going to be another wonderful day.

"No, everything's not all right,' she said to herself as she took her first sip of water, laden with the warm sand from the bottom of her native Mediterranean lagoon. She looked around and saw nothing, well yes, only this sand, but not Mum, Dad, nor her many brothers and sisters, cousins."

"Where did everyone go? That's it, I remember, there was this huge storm. I tucked my siphons away between my two shells and clutched them very tightly. I was so scared, and I felt myself rolling, rolling, rolling..."

"Paloma, the little clam barely 3 months old, was all alone!"

"Was she really?" Behind her, another shell, enormous, was staring at her. Paloma called out to it:

"Oh, tell me, dear Granny, where are all the others?"

"I am not your Granny, my name is Claudine and I am a big mother-of-pearl!"

"Well, as you're so very tall, I thought you were one of the grandmothers of my family clan."

"But absolutely not! I'm a seashell, of course, but I ain't got a siphon. I'm quite tall though young, and people find me very beautiful. We are not the same species. You see, there are so many of us and we are all quite different in our lagoon."

"You're very tall, can you see any members of my clan? I want to find them."

"No! but go under that beautiful green plant, there are often little clams sheltering there. But there are fewer by the day."

Paloma took her advice and began to slowly move towards the plant. It was about 10 cm away, the end of the world for a clam!

High above them, on their boat, Pierre and Marie were looking at the few clams they had just caught. There were 8, 9...10! It was really not a lot. Even less than last month!

"Don't you think they're terribly small?" Marie asked Pierre, beginning to measure them."

"Yes, you are right. And they're a little different in shape and colour from the ones by the seashore. Are they perhaps not the same species?"

"If we want to understand what's going on, we need to know more, and that starts with identifying which species of clam live here. Otherwise, how can we advise the lagoon's clam farmers, who are so worried about their future? Thanks to last month's water samples, we'll soon know for sure."



Marie meticulously noted the measurements on her tablet while Pierre started the boat to head for the next sampling point. She was already imagining the curve on her graph getting smaller by the month, while Pierre was thinking that it would soon be time to head back to the research station as the battery was almost empty.

Paloma finally made it to the shelter of the green plant and indeed spotted a group of little clams.

"Hey, girls, where are all the others?"

"How dare you talk to us like that, young lady? We are old enough to be your mother," retorted one of the little clams.

"But that can't be right, you're as small as I am.

"Age and size have nothing to do with it. We're butter clams and you're a European clam. We're not the same species!

Paloma, disappointed at not having found her clan, still wanted to know more: 'But we look so much alike, it's amazing.

"You know, with us shellfish, there are thousands of species, maybe more, and even here, in Thau, I've come across countless of them. Even humans have trouble distinguishing us. They often confuse us and give us lots of different names. Here, we're also called 'clovisses'. Isn't that lovely?"

Paloma's concern turned to anguish when the yellow clam added:

"If you want to find your clan, head for the beach, I believe there are a few left. But be careful, you'll get as big as them as you get older, and the humans prefer you to us little yellow clams! They'll end up eating you all and wiping you out.



Pierre and Marie had talked a lot with the fishermen and no one really understood why there were fewer and fewer of these big, beautiful European clams. Marie had shown them the plots and Pierre lots of photos of their samples. Perhaps they had harvested too many, and the adult clams no longer had time to raise enough children? And yet they were capable of producing a lot every year! Perhaps they didn't have enough to eat, or diseases or pollutants were killing them? And what about those terribly hot summers and dry springs that occurred more and more frequently? And the harvested clams were so small. So tiny that Pierre had doubts about the species. So, to be sure, they decided to use a new tool to identify the species of clam. This tool is environmental DNA. DNA is the molecule that codes for the characteristics (size, shape, organs, etc.) of every living being. A very precise plan, just as complicated as those at Ikea! It's a little like a how-to guide for building a tree, a human, or even a clam. And as clams leave traces of their passage in the water, the environment in which they live, all that the researchers need to do is read the DNA in the water. The results were in: we would finally discover which species of clam still lived in the Thau lagoon!

A new day had dawned for Paloma, who had succeeded in reaching the edge of the beach after a short night. And there she recognised her:

‘Mum, you're here! I was so scared without you!’

"Me too, my little Paloma. We've taken refuge here with your father and your brothers and sisters, but we don't know where the others are. We have to be careful and quickly hide so that they don't spot us. But we're so easy to locate with these two little holes in the sand above our two siphons.



"Mum, the mother-of-pearl and the butter clams told me that we might be the last of our kind. Is that true?"

"I'm afraid so, my child. But you know, the great mother-of-pearl almost disappeared and now they're back too. So there's hope. If people take care of us, maybe they won't have to replace us with our Japanese cousin, who's growing up faster than we do!"

That summer, Pierre and Marie met the local fishermen in the lagoon. The news was not good. Indeed, the tiny clams that were still in the lagoon were not going to grow. They were not European clams, but yellow clams, which really don't taste the same. 'We're going to have to protect our European clams,' said Maurice. 'And maybe help them to develop here,' Jean-Marc added, 'otherwise we'll soon have nothing left to fish for! We'll be on the brink of extinction too. Pierre and Marie agreed the risk was real, but together they would try to understand what was happening and be able to monitor the results of the combined efforts of the men using their tool.

The sun was already dipping below the horizon, and winter had been setting in for several weeks. It's cold, but fortunately, there's no wind and even less of a storm like last year. Pierre and Marie look at the few clams they've caught in the late afternoon. There still aren't many: 5, 6, 7! 'Ah, but look, one is a bit bigger than the others! Marie looks at it more closely in the palm of her hand. 'It's still just as difficult to tell the European ones from the yellow ones. Fortunately, thanks to the DNA taken from the water, there's no need to take them back to the laboratory for analysis. Marie releases the clams and smiles. Maybe it's a European among the yellows. Perhaps the restocking is beginning to bear fruit.

‘Oh no, this is not going to happen again!’ shouts Paloma. She rolls and rolls, but everything calms down very quickly. She has just landed on the sand and is looking around at her family, growing and growing in the shelter of the tall grass.

7

Lucas and the Lattara legend

Caroline Delaire



Waterways form the kingdoms of many creatures, if one only pays attention. On the banks of the Lez, a burrow shelters one of these creatures. In front of an entrance hidden by the lush vegetation stands a young otter. It's the den of little Lucas and his family! Lucas' parents arrived on the Lez a few years ago, and built a charming little shelter by the water to start a family. Little Lucas was born in this den last spring, and already, his eyes wandered toward the outside world. Seeing him pensive, his mother asked him what was troubling his mind.

"Mom", said Lucas seriously, "did my grandparents come from here?"

Surprised by her son's question, the mother took a moment to respond.

"My little Lucas", she replied, "your grandparents, your father, and I were not born on the Lez. We come from the mountains in the center of France and a valley north of the Lez, where a river much larger than this one flows. We made a long journey, sliding through the water and over soft grass, before arriving at this river."

"But have other otters lived here before us?" Lucas then asked.

"Mmmmmm... if we believe the legend that your grandmother used to tell me, our kind already inhabited the Lez and its lagoon a long time ago."

Intrigued, Lucas asked his mother about this legend.

"Long time ago, when this river took a different path to meet the sea, it flowed through a lagoon near a town now called Lattes. In those days, it was known as Lattara, and the inhabitants traveled on the waters in wooden vessels. They had built a city near the water, where fish abounded in the surrounding waters. The land and the river ensured a well-stocked pantry for these humans. However, it was not their hunting or fishing skills that kept them from ever going hungry, but rather the help of an otter."



“An otter? But Mom, otters hunt the same animals as humans do. How can an otter and humans live together?”

“Listen carefully to what happens next, my little one”, said the mother otter. “The otter and the humans of that city had reached an agreement. The otter's hunting skills had attracted the attention of the men who fished on the Lez. They had seen how easily the otter found fish underwater. So, they decided to capture her and take her home. Although the otter was locked in a cage, the fish didn't appear in the days that followed. Therefore, the fishermen decided to ask the otter for help. They came to see her and promised that she would no longer have to worry about finding shelter and food if she helped them hunt. Curious to see where this could lead and, above all, to be able to get out of her cage, the otter agreed. Held by a leash made of rope and leather, she followed them down to the Lez to fish. While the men stayed on the banks, the otter suddenly plunged into the water. Swiftly, she swam upstream, sneaked up behind the fish that had been hiding, and pushed them towards the fishermen. Seeing a huge black mass moving rapidly toward them in the water with a deafening noise, the men quickly cast their nets into the water. In an instant, the nets were full. They were so heavy that the fishermen struggled to pull them back onto the banks. Proud of their catch, they returned to Lattara with the otter. Once in the city, they divided the day's catch. Each had their share, men and otter alike. As evening fell, the otter fell asleep next to the men. That night, warm and safe from danger, the otter began to think. If these men continued to feed her, she would hunt with them.”



At these words, Lucas's father, who was listening from the back of the den, intervened:

"That's curious! I know a similar story, but in mine, the relationship with the people of Lattara is quite different." Surprised, the young otter and his mother turned toward him. Lucas was determined to hear the story, or rather the stories, about the otter that once swam in the Lez. He was the first to say something:

"Dad!" he exclaimed. "Have you also heard about an otter that lived here before us? Tell us your story!"

"Calm down, Lucas!" said the father otter, amused by his son's enthusiasm. "I'm going to tell you the version of this legend that your grandparents used to tell me. This one begins like the last, with an otter whose hunting skills were unmatched. But as the city grew, its inhabitants demanded more and more from the Lez. They caught so many fish that, despite her talents, the otter struggled to find enough to eat. Driven by hunger, she decided to sneak into the city by night. When the moon was high in the starry sky, she took advantage of the darkness to slip through the city walls and into a house. Trusting her sense of smell, she found the pantry and devoured the fish caught during the day. With a full belly, she returned to her den. In the days that followed, unable to find enough fish in the river, she continued to look for them in the city. However, the men had noticed that their fish had been stolen and decided to catch the culprit. To do this, they came up with a plan. When the moon was full, everyone hid in his kitchen to unmask the invisible eater."



“Unaware of the danger, the otter crept into the city and, following her sense of smell, entered a kitchen to feast on the fish caught during the day. Her webbed feet made no noise on the packed earth floor of the house, but its inhabitants were on high alert. As soon as they saw her gobble up a fish, they threw a net over her. She was caught in the same way as her dinner.”

“And then what happened?” asked Lucas.

“The story doesn't say”, replied his father.

“Are men still hunting us?” worried the young otter.

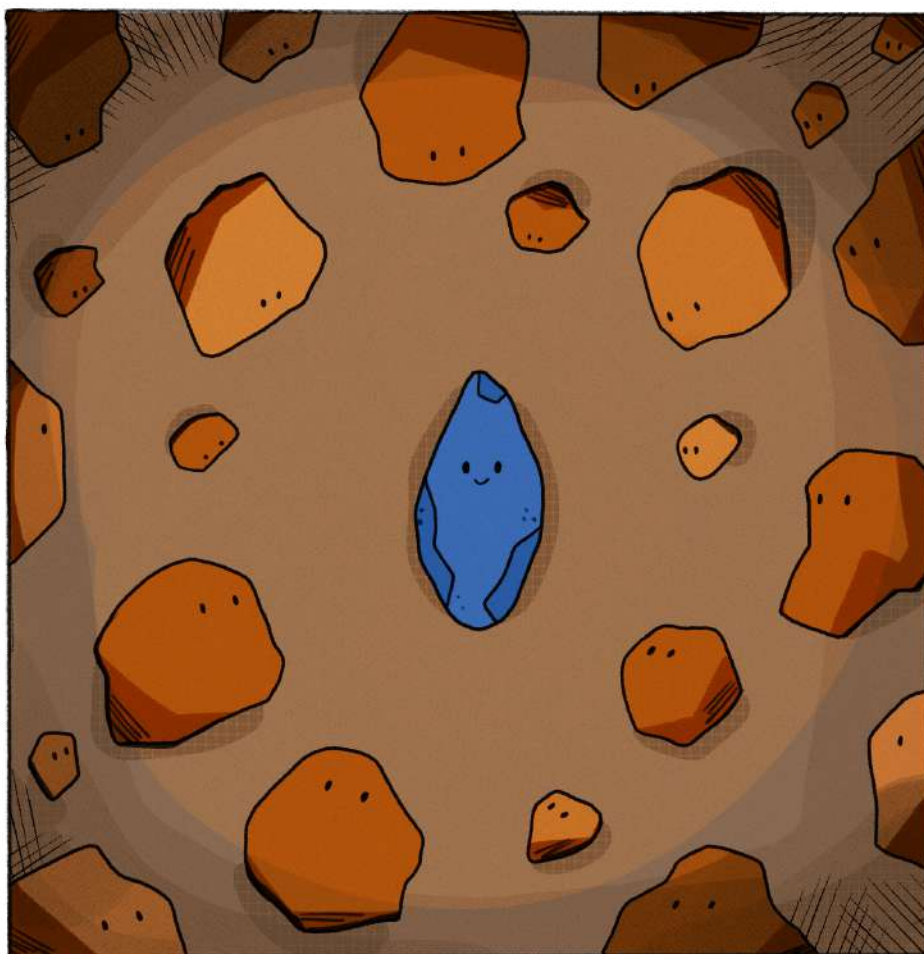
“No, don't be afraid”, intervened the mother otter. “They haven't hunted us for a few generations now. Besides, there is enough food in the Lez and along its banks, so we don't have to venture into their homes.”

Reassured by these words, Lucas calmed down. He loved this river, the gentle lapping of the water, and the birdsong he could hear from the den. Turning his gaze back outside, the young otter was more than determined ever to explore the Lez, just like the otter of yesteryear.

8

Pipo, a different grain

Ester Moreno García



Pipo was not just any grain, but he did not know it. Just as he didn't know how he had ended up in that place. He was surrounded by a bunch of grains of sand, all of different sizes and different shades. And, like Pipo, none of them had any idea how he had gotten there.

The problem was that they had taken it out on poor Pipo and kept teasing him every chance they got.

“But look at him, he's the strangest thing. He looks like a grain of sand but he's not, he doesn't look anything like anyone else, he shouldn't be here!”, shouted the largest grain of sand very angrily.

“What difference does it make if it's different? The important thing is that it's a good, nice, friendly bean?”

Pipo's best friend could not finish, that angry big bean interrupted him.

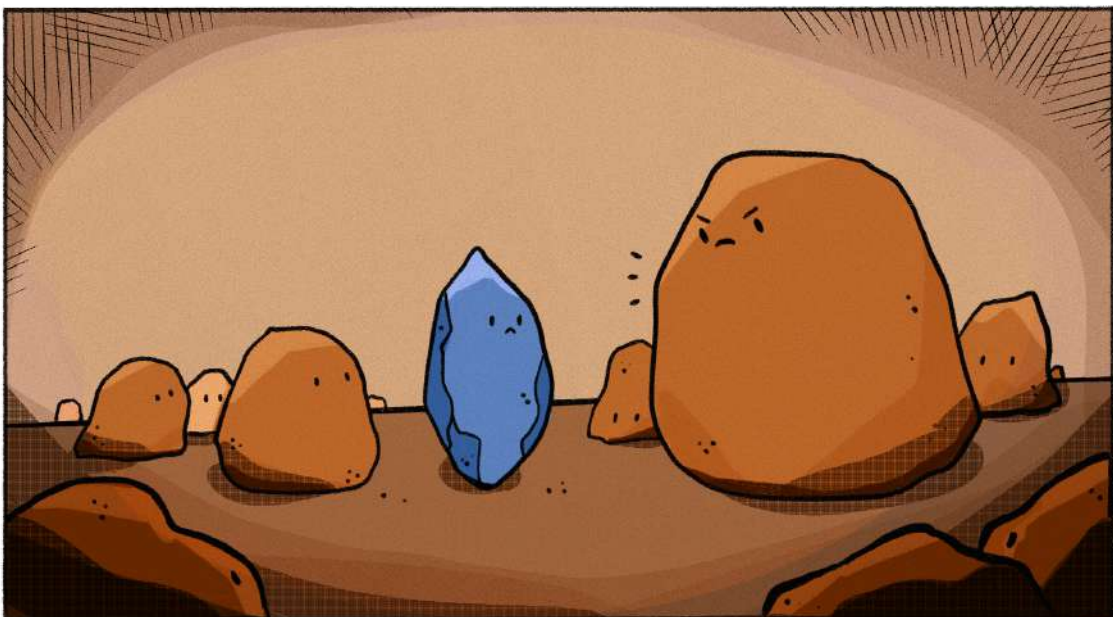
“Of course you defend him because you have him next to you and you can't move from there. You have no choice but to put up with him.”

It was true that since they could remember, none of them had been able to move, they had been in that place for too long, but it was also true that Pipo was everything her friend said about him.

“Don't worry, my friend. It doesn't matter what people who don't know me at all think of me”, said Pipo.

And so the days went by, until suddenly something strange started to happen.

“What's that noise? We're under attack,” said the grumpy man nervously.



It was a very strange sound, or rather, noises. At first they sounded very far away and nothing could be distinguished, but little by little they began to be heard more clearly, closer and closer. Suddenly a very intense light appeared out of nowhere, leaving them all half blind.

“Do you really think this is going to work,” asked a sweet and melodious voice.

Pipo and the rest of the beans didn't know it, but they found themselves in a bag. It turns out that a long time ago a group of archaeologists were excavating and investigating the remains of an ancient settlement and, at that time, they decided to collect soil from different points of the archaeological site.

different points of the archaeological site so that in the future, when new studies or devices had been invented, more information could be obtained from those places.

That moment had arrived.

The voice they had heard was none other than that of a young researcher who, together with another colleague, was going to test a new method and neither of them knew if it was going to work. They had never tried that new system until now.

“It makes sense that it will work”, said Ines with more fear than anything else, and in the last meeting we had, all the scientific groups that had tested it had obtained results.

“It will work! Besides, that's what science is all about, you have to try and make mistakes until you find the solution.”

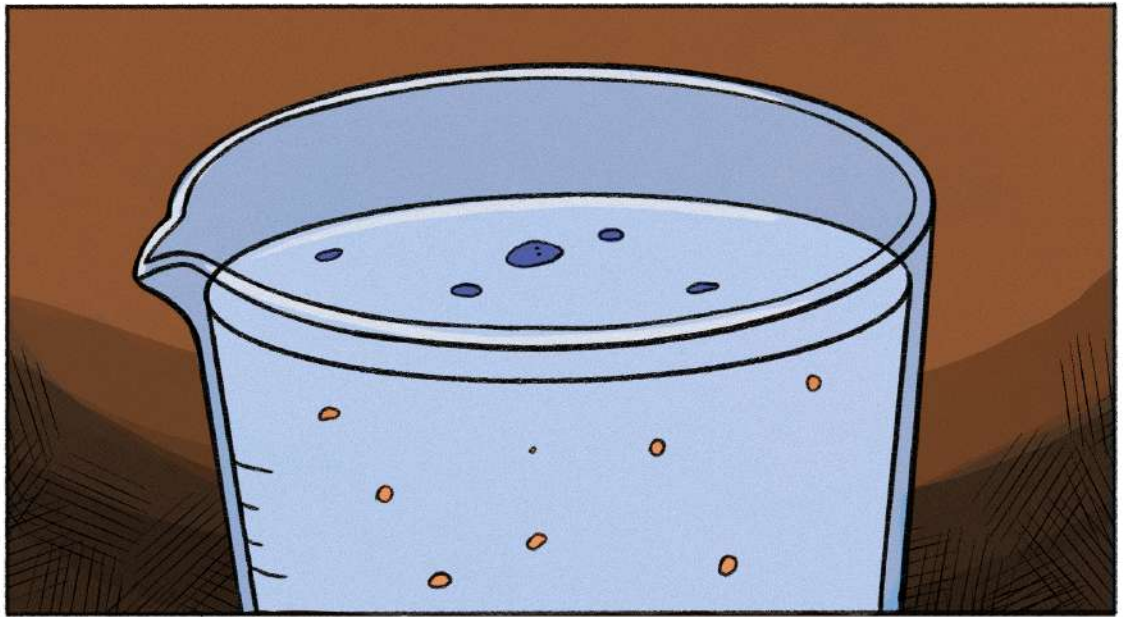
Ines was enthusiastic about the idea. When that archaeological site was excavated a long time ago, it had been possible to recover some botanical materials, such as pine nut shells, olive pits, acorns, etc. The thing is that Ines was convinced that with the system that had been used, they had only been able to find the solution to the problem.

The fact is that Ines was convinced that with the system that had been used, only the largest remains could be collected and she was sure that there were smaller parts of the plants that could provide a lot of data.

“So far we have always sieved every sediment sample that has come to the laboratory with water; then we have checked what was left in the mesh, either with the naked eye or using a microscope. We have to test if this new method works and we can document data that until now were going unnoticed, this is very exciting, don't you think?”, he said to his partner Mario.

“Of course it is! I'm looking forward to it,” exclaimed Ines excitedly.

Meanwhile, Pipo and the rest of the beans were scared to death. They didn't understand anything that was happening.



“Where is all this light coming from?”, said several in unison.

“I can't see anything, so much light blinds me”, said another while covering her eyes with her hands. Ines and Mario had opened the bag where Pipo and the rest of the grains were.

“They're throwing us into a bucket of water!”, exclaimed one bean, scared to death.

“Ahhhhh!”, they all shouted as they fell.

Chaos reigned among all the beans, and then, suddenly, calm. Once they were all in the water, something strange happened. While some were diving straight to the bottom of the bucket, others were floating on the surface.

“What's going on? I'm trying to sink like the rest of them but I can't, I'm floating too much, the current is taking me away,” shouted Pipo, very scared.

Ines and Mario had placed a hose in the bucket, so that everything that floated went straight into a net with a very, very tiny net. Pipo was there.

“I don't understand anything of what is happening. Why have they measured us in that bucket with water? Why have they separated us from the rest? and Pipo was not the only one who ended up in that net.”

“What are we doing here?”, said another grain that was there. “Let's try to be calm, it's the best thing to do.”

Soon the faces of both researchers appeared above them.

“Ines, it worked, there are remains in the mesh,” exclaimed Mario excitedly, “Take out the magnifying glass and the microscope, let's analyze everything that has floated!”

They carefully placed all the debris on a kind of small plate and placed it under a microscope.

“Let's see what we have here,” said Mario as he placed his eyes under the microscope.

“Do you see anything interesting,” said Ines nervously.

After a long time carefully checking the resulting sample, Mario looked up.

“You're going to love this,” he said to Ines, “you have to see it with your own eyes.

“Don't tell me that the sample is positive and we have found botanical remains of smaller size?”

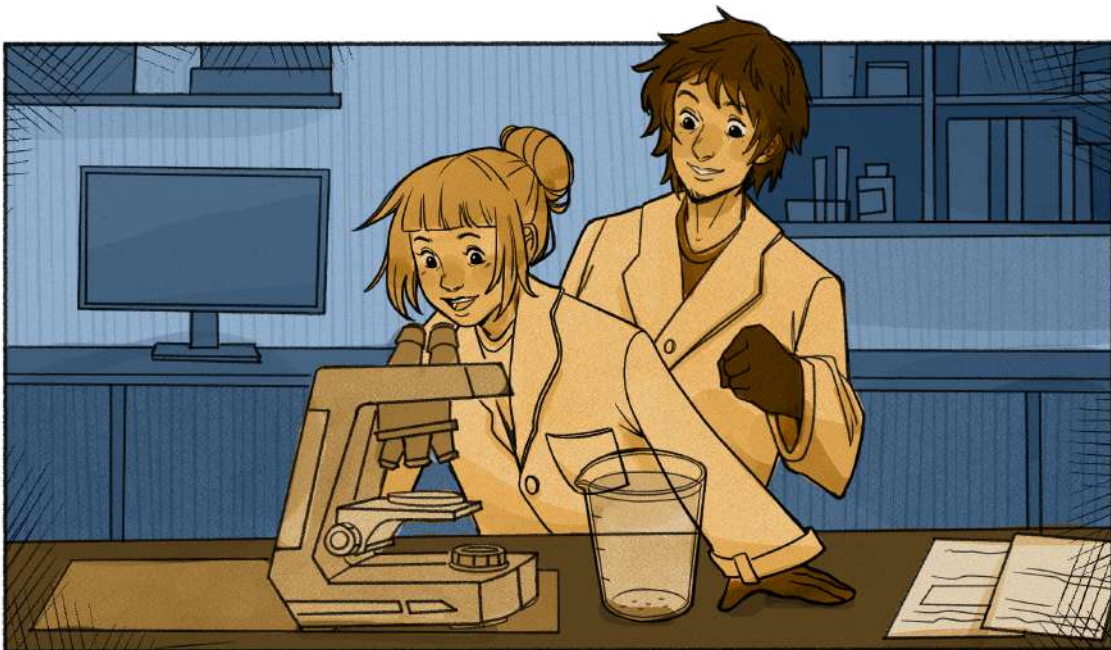
“Stop asking questions and look at the sample yourself,” said Mario to Ines.

Ines made a gesture of affirmation with her head and placed her head over the microscope.

“But there's a grain of wheat here! We have traces of agriculture! We must continue processing more samples. This has only just begun,” exclaimed Ines excitedly.

The flotation technique that Ines and Mario had used had allowed them to separate the carbonized plant material from the sand and thanks to this they had obtained a lot of data that, until now, they had been completely unaware of.

Pipo, along with the rest of his friends who had floated and ended up in that very fine mesh, was very puzzled but, after a long time listening to everything that Ines and Mario were talking about, he dared to say:



“Are you listening to the same thing I am? If everything these humans are saying is true, it turns out that we are not grains of sand, we are carbonized vegetable remains of trees, plants and crops! That's why we were nothing like the rest of the grains where we lived before falling into this bucket”, said Pipo very excited.

“We've never been weird!”, exclaimed Pipo's best friend with a grin from ear to ear, “just a little different. Besides, these two humans seem to be very happy about it.”

And so it was that thanks to the use of this scientific technique, Pipo discovered that he was not just any grain but a grain of wheat, proving that there was already agriculture in that field bathed by the Mediterranean.

9

Sofia and the secret of Archimedes

Carlos Chungata Loja



In a small library in the heart of the Mediterranean, Sofia, a 9-year-old girl, used to spend her afternoons exploring old books. One day, while browsing through dusty shelves, she found a mysterious book with a golden cover that seemed to glow in the sunlight.

Intrigued, Sofia opened the book and found a poem inscribed on its pages:

*In ancient times and shining seas
where sages explored longing secrets
recite these verses with a sincere heart
and you will travel to the past, to a true world.*

With emotion throbbing in her chest, Sophia recited the poem aloud. As she finished, she felt a swirl of wind around her, and in the blink of an eye, she found herself in a workshop filled with strange artifacts and scrolls.

“Welcome!”, a deep voice echoed behind her. Turning around, Sophia found herself facing a man in a white robe with a friendly smile. “I’m Archimedes, who are you?”

Sofia explained her situation, and Archimedes, fascinated by her story, decided to show her his findings. First, he took her to a large tank of water.

“This is the principle of buoyancy”, Archimedes said as he dipped a golden crown into the water. “Watch how the water moves. This helps us determine if the crown is made of pure gold.”

Sofia, wide-eyed, took in every word. Then Archimedes led her to a series of levers and pulleys.



“Levers are powerful tools”, he explained. “With the right fulcrum, we can move very heavy objects with little effort.”

Archimedes demonstrated how a small force could lift a huge stone using a lever. Sophia enthusiastically tried it herself and was surprised at how easy it was.

Throughout the day, Archimedes taught Sophia how to use the scientific method to solve problems. He showed her how he developed an idea, formulated hypotheses, designed and conducted experiments to test them, and then analyzed the results to understand what had happened.

He also explained the importance of recording each step and observation accurately. Sofia was amazed to see how each discovery connected to the next, like pieces of a big puzzle. As they progressed, she felt everything become clearer and more exciting, realizing how the scientific method was a powerful tool for unraveling the mysteries of the world.

As night fell, Archimedes took Sophia to the workshop garden, where the starry sky shone brightly. They sat together and Archimedes told her about the universe and the stars.

“Science is like a guiding star”, he said softly. “It lights our way and helps us understand the world around us.”



Sophia felt a strong connection to the past and a new admiration for scientific knowledge. Archimedes, with a smile, handed her a small scroll as a souvenir of their exciting adventure and the wonderful world of science.

“Take it with you”, said Archimedes, as he passed the scroll between Sophia's hands. “It is a reminder of your journey and the importance of continuing to explore and learn.”

Sofia looked at the scroll curiously, noting the ancient symbols and notations written on it.

“What does it say, what does it mean?”, she asked.

Archimedes smiled, pleased with her interest. “This scroll contains a special message for you. It is written in the ancient language of the sages, and each symbol represents a fundamental idea about knowledge and curiosity. By translating it, you will find valuable advice on how to keep exploring and discovering new things.”

Sofia, feeling excited and a little overwhelmed, nodded. “I will translate it carefully. I promise I will continue to explore and learn as you have taught me.”

Archimedes looked at her proudly. “Remember, Sophia, that true knowledge is not only found in books, but in curiosity and the desire to understand the world around you. Every question you ask is an open door to new discoveries.”

Sofia smiled, feeling a surge of inspiration. “Thank you, Archimedes. This has been the best day of my life. I can't wait to share what I've learned.”

Archimedes looked at her with a twinkle in his eye. “Then go shine your own light, Sofia. Science is a never-ending adventure, and you have the power to discover its wonders.”



With one last glance at Archimedes, Sophia felt a warm swirl of wind surround her. Archimedes' laboratory began to fade, and in the blink of an eye, she found herself back in the library, surrounded by the books she had always loved.

Back in her familiar corner, with the parchment in her hands and her heart full of inspiration, Sophia knew that her life had changed forever. Like Archimedes, she would dedicate her life to the pursuit of knowledge and science.

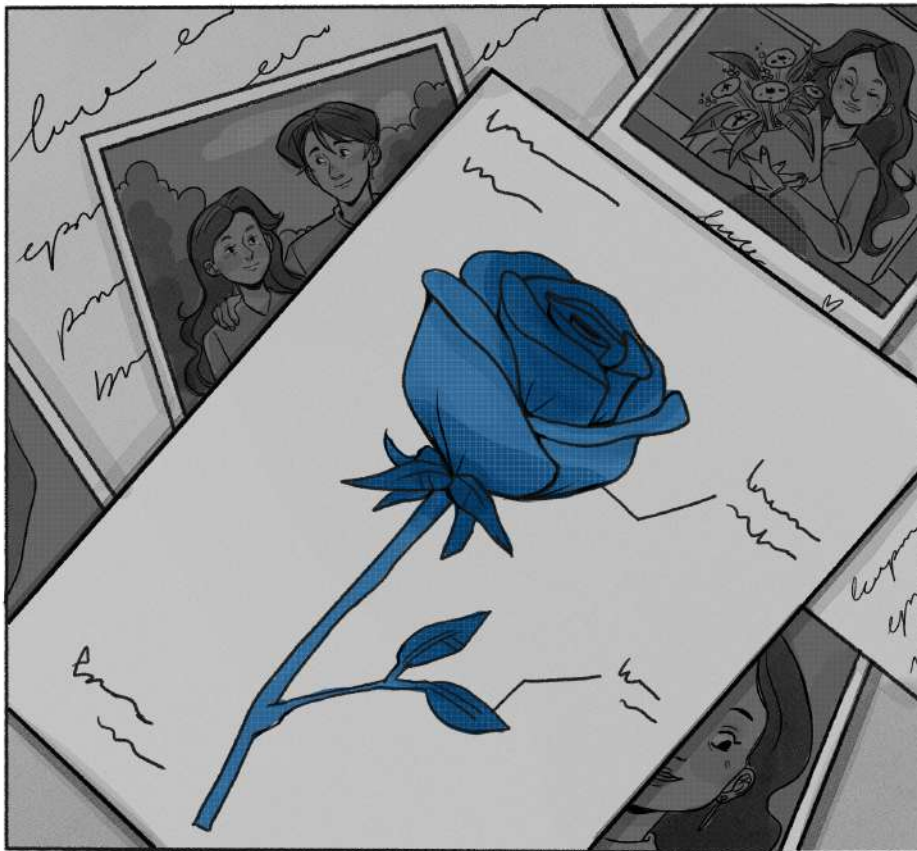
From that day forward, Sophia would not only read about science, but she would live out the wonder and curiosity she had experienced with Archimedes. The scroll became a symbol of her commitment to knowledge, and every time she looked at it, she was reminded that science is an ongoing adventure, full of mysteries to be discovered and questions to be answered.

And so, with a heart full of inspiration, Sophia began to explore her own world with the same passion and curiosity she had learned from the great sage.

10

The blue rose

Dicra El Ouahabi Andaloussi



After wandering through that maze of white corridors for several minutes, Zalj eventually found room five thousand one hundred and two. He approached the door and, as soon as he opened it, he met the lively gaze of a girl with tanned skin and long jet hair sitting on the stretcher in the center of the room. At the sight of him, the young woman put a radiant smile on her face and said:

“Wow, you didn't take so long after all, little brother.”

“I'd better not tell you how many times I got lost before I found the room,” said Zalj as he closed the door behind him and took a seat on the couch in front of the stretcher. “How are you feeling today, Khadija?”

“Fine, thank God. This has cheered me up,” she replied, pointing to the bouquet of prickly rockrose flowers that glowed like little suns from the small table next to her gurney.

“Do these things really help you get better?”, Zalj wanted to know.

“Yes, these details really lift your spirits. Every time I see them I remember that I have a little brother out there, a bit stubborn and selfish, but who cares about me and waits for me to get well. And on top of that, they make your eyes brighten up and smell good.”

“But is there a flower you like better? I brought you these because one day you saw them in a field and said you liked them. But they are very common flowers here in the Mediterranean, maybe you like something more exotic.”



“Mmm... I've always thought blue roses are beautiful. But then you spoiled my taste when you told me that there are no natural blue roses, because roses don't have the gene to produce the blue pigment naturally; and I don't like the idea of having white roses painted blue either.”

“But there are blue roses obtained through genetic engineering and biotechnology techniques.”

“But those are not even blue, they are closer to lilac or lavender.”

“And if you had truly natural blue roses, would that help you get better?”

“Yes, I think it would help me a lot.”

Khadija didn't realize it at the time, but those words made her brother leave the hospital that afternoon with a clear idea in his mind: he had to succeed in getting natural blue roses. The next morning, Zalj visited Mikail, one of his former classmates who specialized in plant genetic engineering and was currently working in the plant biotechnology department of the same faculty from which he had graduated years before. Zalj visited him in his

Zalj visited him in his department and explained his purpose, and Mikail summarized to his friend the process by which blue roses are obtained through genetic engineering:

“Once the pigment responsible for the blue color in other flowers has been identified, which in this case is an anthocyanin called delphinidin, we proceed to clone the gene responsible for the production of this pigment and then insert it into the genome of the rose.”



“This can be done using the bacterium *Agrobacterium tumefaciens* or a ‘gene gun’ that inserts DNA into the plant cells. Subsequently, the gene has to be expressed in the rose, for this the genetic environment has to be modified, adjusting factors such as pH, the presence of other chemical compounds and other genes involved in the metabolism of anthocyanins, so that the inserted gene produces delphinidin effectively. Finally, it remains to cultivate and select them to perfect and stabilize the color.”

“But why haven't you been able to get a true blue rose so far? - Zalj asked, “I need it to be blue, not lilac.”

“It's a lot more complicated than it sounds,” said Mikail. “Despite advances in biotechnology, you still can't produce a rose that is a true deep blue like other flowers because of the complexity of the flower pigments and the interaction of different genes and chemical compounds in roses.”

“All this just to have a blue rose?”, said Nadir, a roommate of Mikail's who also knew Zalj. Nadir had been listening to them from the beginning from his desk, “Well, what a waste of time, I really don't know how you spend your time on something so useless. If you want blue flowers you have blue iris, flax, hydrangeas and a million others. Instead of trying so hard for a little flower, someone as brilliant as you should devote one hundred percent of your time to research against the different cancers that exist.”

“Science not only serves to increase the survival of human beings, you know,” Zalj replied. “It is also there to improve people's lives, to make them happier, to make them smile.”

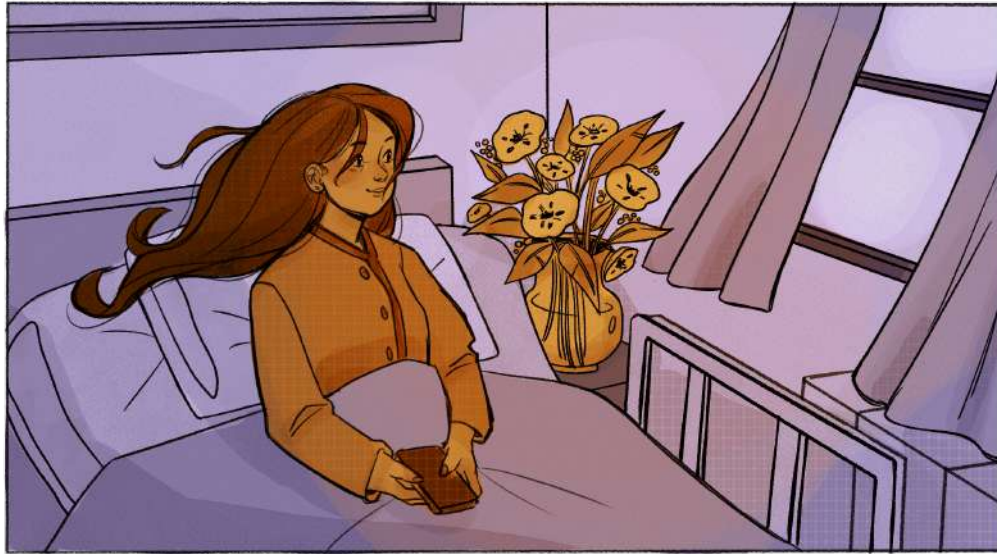
“So is that what you want?”, Mikail asked, “Do you want to make someone happy?”

“It's not just someone,” answered Zalj, “it's the most important person for me. Mikail, teach me everything you know, I have to get that blue rose any way I can.”

“Nonsense! Someone with a mind like yours could even conquer the world if you set your mind to it!”

“I have no time for absurd conquests,” answered Zalj, “I am busy trying to create a world in which my sister will be healthy and happy.”

At that very moment, a few kilometers away from where they were, a nurse came into Khadija's room to change her sheets. She gently helped the young woman to sit on the couch next to the gurney and changed the sheets on the gurney while having a pleasant conversation with the girl. He even went so far as to ask her if she wanted him to water the flowers for her, and Khadija replied that her brother had already done that.



After finishing his work and helping her back to the stretcher, he left the room, leaving the young woman in awe of his delicacy and courtesy and the kindness with which he treated the patients in order to make their stay in the hospital more bearable. Khadija thought it was gestures like that that made all the difference in a person's day. She wondered how many people there were in the world like that nurse and scientists like her brother who dedicated their day to serving others, showing the best version of themselves. Those people were not famous nor would their work be widely recognized; however, if they were to put their daily effort to help others next to the effort that many celebrities invested in donations and famous projects, in most cases, the two efforts could not compare.

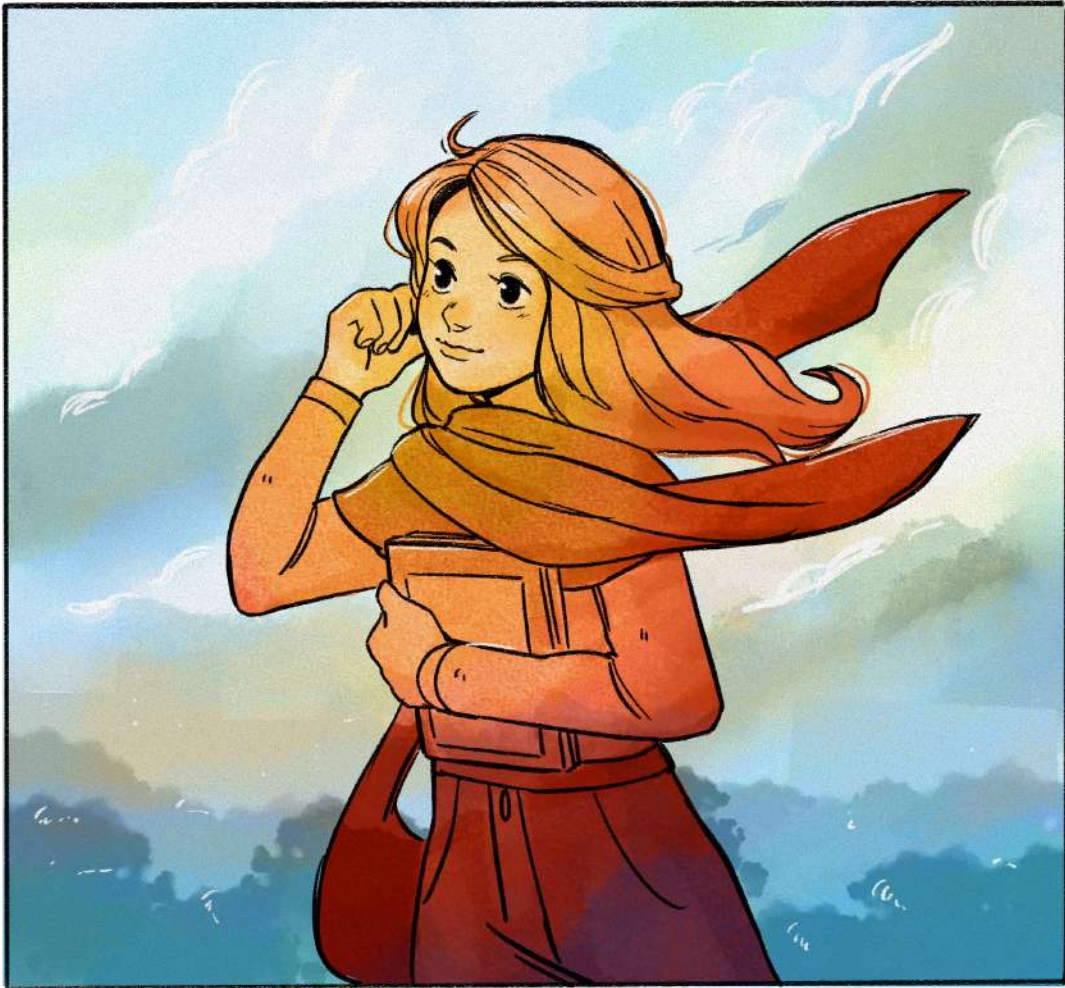
That thought motivated her to want to be someone who helped many, many people on a daily basis without others noticing. She grabbed her cell phone and texted her brother that lunch was coming in a few minutes; since Zalj didn't answer immediately, she deduced that he would be concentrating on his work. She had a hunch and knew immediately that what Zalj was spending his time on had to do with the comment she made about the blue roses during her brother's last visit. He put the cell phone down on the coffee table and gazed at the rockroses tenderly as he smiled. She knew that people would consider her brother's work a waste of time, resources and energy; but she saw it in a totally different way. Khadija was convinced that her brother's work, regardless of the result, would be useful to other scientists who could use that new information as a basis for developing their own research projects. In this way, the work of each scientist, however insignificant it may seem, serves as a stepping stone for other scientists who strive daily to achieve results in the various fields of research that not only increase our life expectancy, but also improve the lives of all of us.

And isn't that the very definition of progress?

11

Parallel Worlds Can Cross

Mays Aqrouq



"December 31, 23:59:59—this very last fraction of the last second of the year. Do you know what it represents?" my biology teacher asked.

I hesitated, my mind racing through possibilities. A blink? A fleeting glance before the fireworks?

"You know Sarah, if Earth's entire history were condensed into a single year, today would represent the entirety of modern human civilization, all of it crammed into that final second."

Back home, I set to work, preparing for my home-schooling class. It was one of the many ways I tried to meet my parents' satisfactions, especially after we immigrated from our country of origin. They wanted to keep me connected to my roots, to hold onto something familiar in this new, vast world.

As I reviewed my lessons, my teacher's voice echoed in my mind, "You know, Sarah, long ago, God sent his miracle to humankind—the soul—making them the ultimate creation of his magic."

I paused, contemplating the significance of her words. "How long ago?" I asked, genuinely curious. "Since the earliest days of human civilization," she replied.

The next day, I attended my first biology lab class at the university, my heart filled with passion, inspired by my high school lessons and the spiritual growth I had experienced at home, I was convinced that specializing in biology would bring me closer to understanding the divine. I believed that uncovering the secrets of life would deepen my connection to God.



But that conviction was short-lived. It only took two biology classes—just two encounters with the clear, undeniable evidence of how our bodies evolved over millions of years through natural selection, rather than being formed from dust or clay. We studied the intricate design of the human eye, not as a miraculous creation but as a result of countless adaptations over time. We explored the fossil record, tracing the gradual transformation of species, and examined the structure of DNA, revealing the shared genetic code that links all living organisms. The miraculous aspects of existence I once attributed to divine intervention began to unravel as science provided explanations that were both logical and inspiring. The more I learned, the more the world of miracles seemed to shift into the reality of reason.

I went home, holding my excellent grades from my final year at the university. As I walked in, I saw my mom deep in prayer, and I couldn't help but stand there, watching her. My mind swirled with questions—what truly mattered more, the comfort and peace of belief or the stark reality I had come to understand? I remembered the nights we spent under the stars, her hand in mine, as she told me stories of our ancestors, stories full of miracles and wonders. Those moments felt like they were from another life, yet they were the foundation of everything I once believed. How could I take the vast knowledge I had gained during my degree and use it to raise awareness among my family, my community, my mom? But then I saw the joy in her eyes as she finished her prayers. She embraced me, smiling, and I told her, "Mom, I passed." Tears of happiness welled up in her eyes as she cried with joy, repeatedly saying, "Thank God, thank God." And in that moment, silence felt like the easiest thing in the world.



The next day, I finally succeeded in genetically engineering a stable human cell line to help me better study leukemic cancer cells. The process had been so challenging, I thought it was impossible. The moment the cells divided under the microscope, I felt a surge of triumph and wonder. It wasn't just a technical success; it was a glimpse into the building blocks of life, a life that was no longer a mystery but a series of knowable, tangible processes. I reflected on the limitations I once believed were placed on human capability by God, only to realize that those limits were not as fixed as I had imagined. This breakthrough made me appreciate the boundless potential of human ingenuity and the incredible complexity of creation.

I went home, and the nurse informed me that my mom was very tired. I quietly entered her room and sat beside her bed, gently holding her hands. I wanted to confess that I felt torn between two worlds—one of faith and one of reason—but her fragile state made the words catch in my throat. Instead, she looked at me with a tired but warm smile and whispered, "I am proud of all your achievements." That smile lingered even after she closed her eyes for the last time.

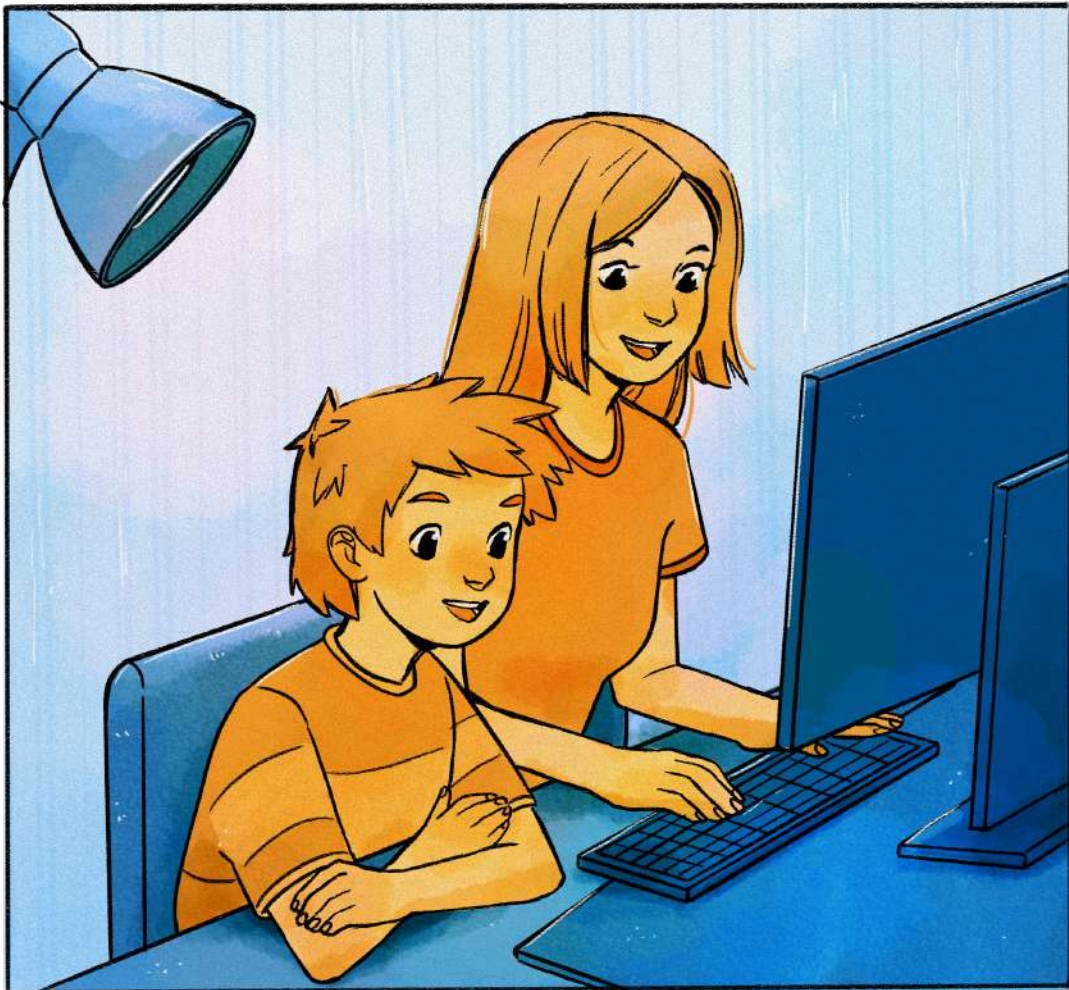
The next year passed, but I still remember the softness of her hand, a reminder that these two worlds—spirit and logic—can perhaps coexist. By bringing peace and reason together, I found a way to keep moving forward in life, achieving and living in harmony. As I stood by the window that evening, watching the sunset, the sky seemed to merge the hues of day and night—just as I had begun to blend the certainty of my mom's faith with the clarity of reason. A full year after that day of holding my mom's hand, it feels as though the last fraction of the last second has yet to pass, as if time itself paused, holding onto that moment forever.



12

Where is the right answer?

Sophia Koinaki



“Mum! Why do monkeys exist?” That was the first thing Nikos asked his mum when she picked him up from school that afternoon.

Nikos, a ten-year-old boy, would always talk about everything that had happened at school on the way home: the games during the break, what he ate, something that happened in class. But today, he had a big question about monkeys.

“Erm, why do they exist? To eat bananas?” his mum replied absentmindedly, as she watched for cars so they could cross the road.

“The teacher said we all came from monkeys,” Nikos continued.

“Mm, yes, Darwin’s Theory,” his mum said. “I’ve heard of it.”

“Yes, that’s what we talked about today.” But his mum was busy greeting other mums and didn’t hear him.

“Mum!” he said more loudly. His mum finally turned towards him, surprised.

“Yes, son, I’m listening.”

“Why are there still monkeys if they all turned into humans?” asked Nikos, and it was clear that this was troubling him a lot. His mum didn’t answer.

“Mum?”

“I’m thinking, Nikos.”

His mum thought and thought, wracking her brain, but she wasn’t sure why monkeys still existed, nor if we actually came from them.

“You know what? We’ll look it up!” she finally said. So, after they’d finished their meal, they sat down together at the computer.

“Do humans come from monkeys?” they typed. Countless pages appeared. Nikos read the titles along with his mum.

Darwin’s theory rejected. New evidence!

Aliens: They live among us.

Watch this before it’s taken down: We descend from giants.

His mum laughed.

“I think we should start by choosing the most reliable pages.”

“Shall we look at the giants one? There might be giants!” Nikos said excitedly.

“I think we should see who’s saying that first, Nikos.”

They opened the website. It had real giant bones! And skeletons, and people who looked very small standing next to them. His mum found the name of the person who had written it and looked it up on the computer. This man claimed to be a researcher of mysteries, and had previously been a singer who

participated in a singing contest on TV. He had also appeared in the first episodes of a cooking competition.

To Nikos, this meant the man would have thought carefully about what he wrote since he was famous. But when he told his mum, she replied that, on the contrary, this man wanted to stay famous and was just looking for ways to impress people.

“Shall we look at this one?” Nikos asked now, pointing to the article about aliens.

This website now had spaceships and aliens like the ones in movies, with big heads and enormous eyes.

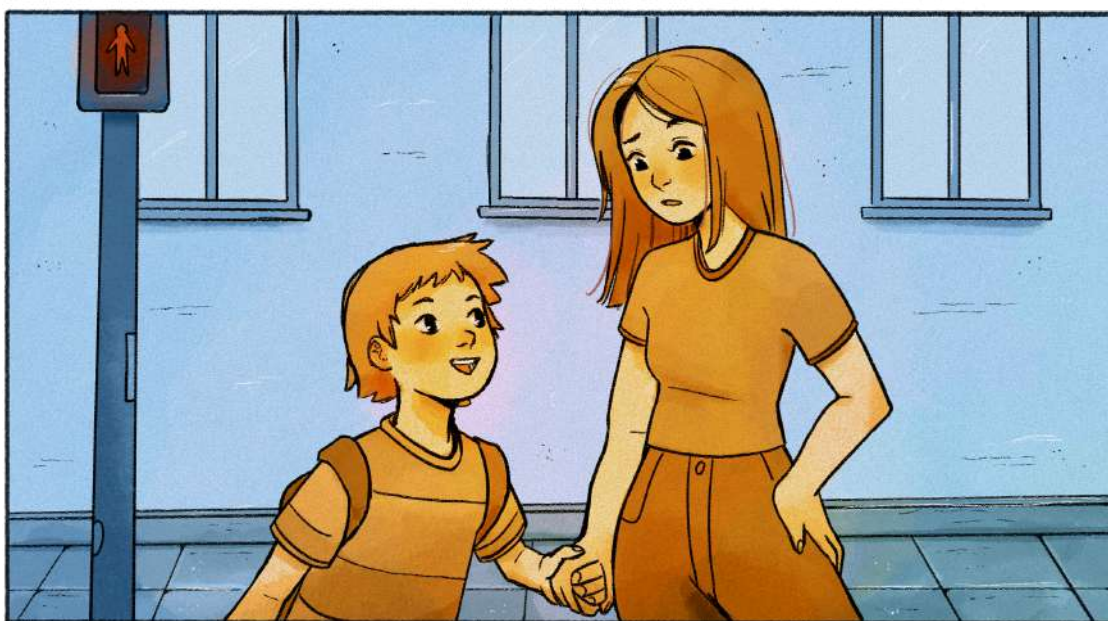
“Let’s see who’s saying this as well,” his mum said, and started looking for information on the website. It had a video, and Nikos was thrilled:

“Play it, play it!” he told his mum. He wanted to see a real alien, not one from a film.

But the video was a complete disappointment. It was just darkness and some lights.

There was another video of someone in a cornfield, but his mum told him that was from a movie she’d seen.

At the bottom of the website, his mum found an email address, but even though the whole website claimed to be from an Institute of Natural Phenomena, the email address was suspicious. It looked like the kind Nikos and all his friends used to sign up for gaming platforms. *Truthwarrior67@yahoo.com*. They searched to see if the Institute of Natural Phenomena actually existed, but aside from this page, she could find nothing else.



You could pay to attend a talk by someone who had seen aliens up close, but his mum didn't pay any attention.

"Scammers," she said simply.

"So there aren't any aliens either?" asked Nikos, feeling very disappointed.

"There might be, but this website isn't very serious," his mum replied.

"Let's try this one!" she added, clicking on the website that claimed Darwin's theory had been rejected.

The website seemed more cheerful than the previous ones, and Nikos liked that. It was full of colours and titles. Scandal! Which famous actor filed for divorce. Exclusive! Death may be lurking in your fridge. Global concern about the climate: Will we turn into a Sahara? An ad started playing in the corner, showing a woman putting cream on her face and smiling.

Further down, they found the article they were looking for. But by now, Nikos was already thinking that every title looked the same.

"I think they like to exaggerate a bit on this website," his mum said, opening the article.

"New data published recently disproves Darwin's theory! 'The Earth isn't more than 4000 years old, and I can prove it,' posted a well-known influencer on her Instagram page. We remind you that archaeologist and model Crackpot has over two million followers and recently announced her intention to run in the next elections." The woman was smiling broadly, and her swimsuit had the American flag on it.

"Hmm," said his mum. "Now, this lady might be an archaeologist, but I don't think the origin of humans is an archaeological matter. The science that studies it is called palaeoanthropology. Also, I'm sure that scientific discoveries are published in scientific journals, not on every researcher's personal account, because they need to be validated."

"What do you mean?" asked Nikos. His mum typed the question, "How are scientific discoveries published?"

"When scientists discover something, they write in great detail about what they did and send it to a journal that deals with that particular science," they read together. "Before the work is published, the journal sends it to other scientists who know a lot about the subject to correct any mistakes. Also, once it's published, other researchers around the world can repeat the experiment and see if they get the same results."

"So can they do experiments and make humans from monkeys?" asked Nikos, his excitement returning. He was already imagining a chimpanzee emerging from a giant pot wearing a hat and sunglasses.



His mum opened a short video on a university website. A man was answering students' questions. "Experiments to simulate how humans were made can't be done because that happened a very long time ago and took millions of years. We have to draw conclusions from fossils, footprints and markings on rocks, and the similarities in the skeletons of various animals. The theory that explains these things best is the one that prevails. If new evidence is found, like a new fossil, the theory is enriched, like a puzzle where every new piece makes the picture clearer."

"Maybe this lady Crackpot found something new," said Nikos.

"From what I gather, if she'd found something really important, she wouldn't have posted it on Instagram, but in a prestigious journal. There would be talks about it at conferences on the university website where she works. But I can't find that she works at any university," his mum said, typing.

Next to the video was a small list of step actions titled The Scientific Method. It explained that when scientists observe something, they form a hypothesis that might explain it. Then they conduct experiments to see if it's true. Their hypothesis will either hold or not. It's then checked by other scientists and published. Other scientists can check it and repeat the experiments. If the results hold, the hypothesis becomes a theory.

"Like yesterday, when we were looking for my jacket," Nikos said unexpectedly.

"Pardon?" his mum asked, surprised.

“Yesterday, we observed that my jacket wasn’t on the coat rack. Then we made a hypothesis that we’d left it in the car. Dad went to see if it was in the car. Then he shouted from the street that he’d found it on the seat.”

His mum burst out laughing.

“Exactly! My hypothesis that it was in the car was correct, and Dad published the results of our research!”

“So, what about the monkeys in the end?” asked Nikos.

“Hmm. Let’s find a really good website,” his mum said, and started sifting through the results. They eventually chose a video from a large museum.

Nikos and his mum listened for a long time. Nikos realised that he hadn’t quite understood what his teacher had said. We don’t come from monkeys. But we are like distant cousins. Both humans and monkeys come from an ancient animal, which in some areas evolved into modern humans, and in other areas evolved into modern monkeys. That’s why both monkeys and humans exist.

“Not as impressive as aliens or giants, but it seems like a more logical explanation,” his mum said. Nikos was disappointed. Not a single chimpanzee in sunglasses and a hat.

But the best part came at the end. Nikos heard that we are also distant cousins with gorillas and orangutans! That was so cool that Nikos thumped his chest and jumped onto the sofa.

Just then, the door to the house opened and his dad walked in. “What are you doing on the sofa? Acting like a gorilla?” he asked, smiling.

“Dad, you made an observation and a hypothesis!” said Nikos, and his mum burst into laughter.



13

Memory Sphere

Pelin Battal



Once upon a time, in a dream long ago, there was a child named Ayça.

One day, Ayça came home from school feeling very tired. She threw her bag on the table and herself onto the bed. She noticed that her mother had finally finished painting the Milky Way Galaxy on her room's raven black ceiling using glow-in-the-dark paints, something she had been working on for about a week. "It's finally done today," Ayça thought. She imagined the entire galaxy in front of her eyes, so close that she could almost touch it by squinting her eyes. "When my telescope arrives, I'll study each one of them," she said to herself. She sat up, smiling mischievously, and called out, "Mooom!" "It's beautiful, I love it! Thank you so much." "You're welcome," her mother called back from the other room, though Ayça was sure her mother was thinking, "I hope she doesn't neglect her studies." Ayça pulled the thick curtain shut to see how the galaxy shone in the dark.

As soon as she did, her room turned into a spaceship, and Ayça herself became an astronaut. The stars and planets glowed brightly... She marked the planets she most wanted to visit with her eyes and tried to plot a course for herself. Her best friend at school, Emre, kept telling her to have more realistic dreams, like planning a "Round the World in 80 Days" trip instead of an outer space journey. That sounded great too, but Ayça was more interested in planets outside of Earth, even galaxies beyond her own. Still, to appease her friend, and to start small, she decided to create a route from her own home galaxy, the Milky Way.

The professional telescope, meant for professionals but just perfect for Ayça, that her family promised to get her for her birthday was likely to arrive the next day. It had 600x magnification power. Moreover, according to her research, two weeks after she set it up on the terrace of her apartment building, the planets in the galaxy will align, and Ayça would be able to observe this alignment with her new, the most wonderful, the sharpest-eyed, state-of-the-art telescope. She was incredibly excited.

She decided to sleep early to make time go faster. Instead of counting sheep like others, she counted the planets according to their distance from the "superstar" of the Milky Way Galaxy, the Sun. She began: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune... and she quickly fell asleep. She never got to Pluto, not because she didn't count it as a planet, but because she always fell asleep before reaching it. During the day, she would always count Pluto, feeling annoyed that they had stripped it of its planetary title.



The next morning, the doorbell rang. The long-awaited package had arrived, ADT.8 had finally entered the house. Ayça had named her telescope ADT.8, which stood for "Ayça's Discovery Telescope," with the number 8 added to represent her age.

It took the whole day for her to set ADT.8 up with some help and by reading the manual. That night, Ayça planned to begin with lunar observations from the small observatory on the rooftop. With this telescope, she would be able to see the craters she had only seen in less detail with her 8x binoculars. She had read in a science magazine last month that if she was lucky, she might even witness a meteor striking the Moon. She decided she needed a code for her lunar observation mission and would write it as a daily report. She named her first mission SO.24.07.01, meaning "The first space observation made in the 7th month of 2024". She also noted that she made this observation with ADT.8. Because she might forget this information in the future, it would be good to take notes. She added this information to the table she prepared just like a real astronomer. She would write the observations she made under this title. In a few lines, she wrote everything she saw, including the Moon's large and small craters, faults, and holes.

Before returning to ADT.8, she decided to examine the planets in order while waiting for the planetary alignment. She thought this would make the experience more memorable. So, she began with Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune...



Suddenly, something extraordinary caught her eye. A glowing light wasn't far away and seemed to be calling to her. She jumped up in excitement and ran downstairs to the garden, where she found a magnificent, transparent sphere. She was speechless with surprise. As she got closer and looked more carefully inside the sphere, she saw that there were other spheres inside. What was this? There were images in the small spheres floating like light feathers inside the big sphere, and she could swear that Little Red Riding Hood and the Wolf were talking in the sphere closest to her. In the sphere that was coming up right next to her, Rapunzel was busy letting her hair hang down from the tower. What was going on? When she looked at the shining sphere a little further away, she saw a white-bearded man riding his donkey backwards waving at her.

"Hey, that's Nasreddin Hoca!" she exclaimed.

In the brightest sphere, a child was flying on the back of a dragon over a forest of shining blue trees.

"Ahhh, but that child is me!" she heard herself shout. Looking ahead, she saw a colorful dragon and a girl riding it under a large blue tree. The dragon was so beautiful... and so was the girl's hair... Her hair was colorful and lovely, and she was singing to the dragon. Also, every time the girl smiled; the dragon sparkled.

Crack!

Ayça turned around, trembling with fear. She came face-to-face with something human-like but not quite human. It had a third eye on its forehead, large ears, and a small, almost comical appearance. Its hands and arms, more

than two of them, were waving wildly, making it even funnier. Ayça couldn't help but burst into laughter. As Ayça began to laugh, the creature made a series of sounds that were almost like laughter too. The whole situation became even more funnier.

When the laughter finally subsided, Ayça heard the creature, which she assumed was some kind of living being, say in a metallic voice, "Don't be afraid of me." "I'm not afraid of you. You seem like a lot of fun," Ayça replied. "But you have to explain what's going on. Who are you? What are these spheres? You have to explain everything one by one," she demanded. "And first, we should introduce ourselves. My name is Ayça," she added.

First a metallic sound, then a cough, and finally a normal human voice said, "I come from the M31 galaxy, which you call the Andromeda galaxy on planet Earth, my name is TALL," replied, extending one of its seven hands from its three arms... Ayça wondered why there were seven hands instead of six, but she didn't hesitate and extended her hand to shake. "Nice to meet you," she said.

"This transparent sphere you see is my Memory Sphere. I travel across planets in the universe, recording fairytales to prevent them from being lost. In other words, I am a fairytale collector. Each small sphere inside this large one contains fairytales from the planet Earth. I will later take these spheres to the Library at the Center of the Universe, and ensure that they are known forever," it said.

Ayça, astonished, replied:



"Hey, I know some of them! Little Red Riding Hood, Rapunzel, Nasreddin Hoca... But what about the boy on the dragon and the girl singing on the other dragon? Are they from Earth too? I've never heard that fairytale before."

"Yes, you might not have heard that fairytale. It's a fairytale of a little girl named Deniz. The fairytale was so beautiful that I couldn't resist recording it. I don't want it to be lost, and I think every child in the universe should learn this fairytale, just like they should know the others. Each one is fun and beautiful in its own way."

"I understand everything now," Ayça replied with a smile. "Will you tell me about that fairytale too? I think I'm in it, right?" she added, still smiling.

Ayça suddenly felt a light flash across her face and realized someone, her mother, was telling her to wake up while opening the curtains.

"I understand everything now," Ayça repeated to herself. "Looks like I didn't make it to Pluto again while planning my observation schedule last night. What a wonderful dream," she said and decided to write it down in her notebook, just in case she ever needed to tell this fairytale to children from another planet in the future.

14

A Tale of Trash Island

H. Esra Kara



The school bell on Trash Island had rung a long time ago. The Mischievous Four from the Plastic Waste Class knocked on the lab door and waited. When there was no answer, the most curious one peeked through the crack and said, "No one's here." With that, all four of them burst inside.

"We couldn't have found a better opportunity to mess around," said Curious.

As he shuffled through the book left on top of the puzzle at the teacher's desk, the most creative one exclaimed, "Fantastic! A free class is for daydreaming."

The most playful one, eager to turn on the computer, said, "And to continue the game where we left off."

As they looked around, the most indecisive one said, "I wonder if I should have chosen the Stars Class this year? Or maybe the Renewable Energy Class? Oh well, what's the difference? It's all just a bunch of mixed-up formulas and a million things to memorize."

Just as he was about to finish his sentence, his attention was diverted. "Is someone behind the supply cabinet?" asked Curious. And just then, their new teacher, dressed like a trash can, appeared beside them.

"Awesome!" whispered Playful. "Just what I need! A new character for my game."

"I think he looks like a giant trash can," said Creative, and they all tried hard not to laugh.

"The name-giver is at it again," whispered Curious.

Their teacher watched the children whisper among themselves with a smile and said cheerfully, "Hello! Your new teacher is Barrel! You can call me 'Barrel' for short."

"I love it!" said Creative. "You look like you're about to participate in a recycling fashion show."

"You hit the nail on the head!" said Barrel. "We're going to have one together! It's been my biggest dream. I've been waiting for this day for years. My next goal is to take the fashion show into the virtual world."

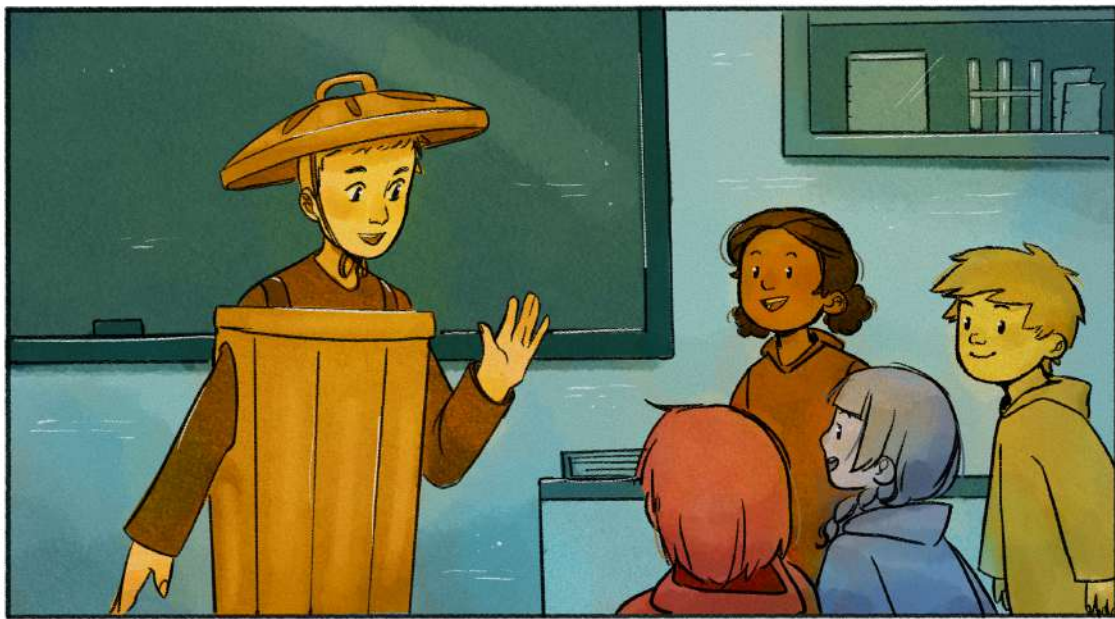
"Don't worry, I'm on it!" said Playful.

"Fantastic!" said Barrel.

"I have a lot of dreams too," said Creative.

"Just dreaming isn't enough," said Barrel. "You have to take action!" Barrel paused for a moment. "Do you like stories?"

"Stories are good," said Creative. "They give you room to dream. We never heard any stories in science class. I think it's very creative."



When the others nodded, Barrel said, "Okay then. Once upon a time, there was a child who found science lessons very boring. Complicated formulas and experiments were not enjoyable at all. A mind was filled with a heap of information that couldn't be related to everyday life. One morning, upon arriving at school, an old book was found on the desk. While wondering, 'What did I do to deserve this?' even more surprise came upon opening the book. On the first page, a message stated, 'Congratulations in advance for the outstanding effort that will be shown to free our island from plastic. When growing up, our island, the Mediterranean, and the Earth will have gained a person with high environmental awareness. Best wishes.'"

"How wonderful! I wish I could arrange words so beautifully,' remarked the Creative one, envious of the note.

"The face turned red with excitement. For some time, rather than catching fish, scraps had been coming from the nets, and the father often returned home empty-handed. There was a realization that something was wrong but knowing that effort was needed to change it was unclear. 'As soon as I get home, I must tell Yosun,' came the thought, bubbling with anticipation. Upon reaching home, a book was taken out from the bag, and the doll was seated across. 'Do you remember the day I named you?' a question was posed. 'On the day you got caught in the nets, my father almost threw you back into the water. How I had grabbed you from his hands! While cleaning the seaweed stuck to your head, a wish must have been made that the sea could hear,' came the voice. Shaking the book in hand, it was said, 'If only you could read what's written here! The sea

only grants the wishes of those who respect its nature, who don't throw garbage into its embrace, and who cleanse it of microplastics.'

Looking into Yosun's one lost blue eye, the Mediterranean's cry for help was not in vain. For the first time since finding the doll, a sense of unhappiness enveloped.

"I must tell my parent about what happened," it was thought. Perhaps they could save the island and this vast sea together. Each time, the parent said, "Empty words do not fill the stomach. We only know how to fish. Who are we to save the island or this enormous sea! Don't strain your mind with such things. If there are fish, we will be full; if not, we will be hungry. You should know this!"

One day, while gazing at the toy store's window in the square, a decision was made not to want a plastic future. "I want to see fragrant carnations and basil instead of plastic flowers in clay pots," was declared, when suddenly someone replied, "Me too!" The voice came from a box labelled 'PUZZLE MEDITERRANEAN' in big letters. "Ah, ah!" it groaned, indicating the speaker was troubled.

"A few days ago, I was pressed into pieces in a toy factory that smelled like dead plastic along with what I was wearing. This island is my last refuge... If I lose it, returning to the past will be difficult. Look at me! Can a motionless meadow, a still wave-less sea, and a sky without moving clouds exist?" the voice lamented to the Child. Sharing that a similar situation had been experienced five or six million years ago, it continued, "I was a significant part of the giant continent Pangaea. But now? Where is the Giant Puzzle, and where is the helpless Puzzle stuck in its box! Apparently, humanity will never stop creating and destroying me. I am about to lose hope... One day, they will sell me for a few bucks, and that's what I'll mourn. Who knows where I'll end up, scattered in someone's hands," expressing deep sadness.

"I don't have money to buy you right now...," said the Child. "I no longer buy anything made of plastic, but I will save you by saving my pocket Money. I will keep the dream of seeing our island and this vast sea perfectly clean alive every time I see you." The decision was firm. First, knowledge would be gained, and when grown, teaching others would follow.

"That's it!" exclaimed the Creative one. "How fortunate that brave people exist!"

The others listened attentively to Barrel, while Playful said, "Things like that only happen in stories." "It seems real but it's not."

"From that day on, the Child always thought, 'What can I do?'"

"Did he find a solution?" asked the curious ones.



“Suddenly, the words spilled out: ‘Don’t throw away plastic, transform it / From now on, the only need is to ‘return to nature.’ To avoid forgetting, the phrase was quickly written on the last page of the book.”

“I knew it!” exclaimed Creative.

“Everyone had to hear this slogan. All the paper, cardboard, and paint available at home were used. The writing, drawing, cutting, and pasting continued all night. When dawn broke, the posters were ready. All that was left was to distribute them.”

“Brilliant!” said Creative.

“But it couldn’t be achieved alone.”

Completely absorbed in the teacher's story, the Mischievous Four found themselves inside the tale. “Don't be late for the fashion show!” shouted Barrel, while the Mischievous Four were focused on the girl with the backpack looking at the toy store window.

Indecisive shouted, “That's her! Or isn't it?” Just as the girl asked, “Who are you?” Playful exclaimed, “That's her! Isn't it?”

“Are you the Child?” asked Curious. “What kind of question is that? Can't you see?” said the girl.

“No way, she can't be the Child! Well, she's not the Child the teacher was talking about. Or is she?” said Indecisive, but before things got too complicated, Creative calmed his friends by saying, “Wait a minute! Even if it seems strange, we can figure it out.”

“I can help you carry your bag, whether it's heavy or not,” said Indecisive.

"There are posters inside," said the girl. "To save our island from plastic waste."

"Will they be useful at this point? Maybe, maybe not," said Indecisive. "You won't know until you try," said Creative.

"I've never seen you before," said the girl.

"We're from Trash Island. It's like a twin of yours," said Curious.

"I've never heard of it," said the girl. "Is there such an island?"

"Once upon a time, and then poof, it was gone," said Indecisive. "So you're from fairyland," said the girl.

"No," said Creative. "We're from the Plastic Waste Class. They call us 'The Mischievous Four'."

"I see," said the girl. "I know you from the book."

"From the book?" they asked in surprise.

"Didn't you say you were seeing us for the first time?" asked Indecisive. "Don't confuse us!" snapped Creative. "She said from the book!"

The girl said, "From the book! Who said, 'Curiosity is the key to science'?"

They all shouted together, including the girl, "Creative ideas always guide the way! Even if it's scary at first, you won't know until you try! Learning without playing is boring! Decision and indecision are siblings!"

Playful said, "The rest is child's play. First, we'll save your island, then we'll create a game in the virtual world. We can play as much as we want."

"Virtual?" asked the girl in surprise.

"It's good to be curious," said Curious. "Science progresses thanks to curious people."

"Can we take the trash and debris from the sea when we return to our island?" asked Creative.

The girl was surprised. "Aren't we talking about the waste we want to get rid of?"

"Yes," said Creative. "Thanks to our scientific methods, we won't have any problems with waste."

Curious was examining the toy store window when he shouted, "There it is! The Puzzle!"

"Don't forget the waste on our island!" said the girl.

"I have another plan for the island ones," said Creative. "I'll offer to trade the Puzzle for the plastic waste with the toy store owner."

The girl was very happy. "But first, explain your scientific methods."

"First! We love innovations, but we don't replace anything that still works. For example, Yosun," said Playful. "You wouldn't throw it away and buy a new one, would you?"



“Never!” said the girl.

“Second! We have factories on our island that convert plastic into fuel. The energy released during combustion is converted into electrical energy. So nobody on our island pays for electricity. The final waste, ash, is collected in ash pools and covered with soil. Our ash fields are very fertile. The gases released from the chimneys are also filtered. We also plant a lot of trees and get plenty of oxygen,” said Creative.

“Third!” said Indecisive. “We don't produce, use, or let others use disposable items. We're determined about that. Even me!” he said with a laugh.

“Fourth! We have plastic-loving worm farms on our island,” said Curious.

“We call them 'Garbage Worms',” added Creative.

The girl asked, “What do they do?”

“They are the super worms of scientists, our island's tiny recyclers! They love to feed on microplastics. And we don't leave them without food,” said Curious.

“We even designed a mobile game called 'Garbage Worm',” said Playful.

The girl asked, “A mobile game?”

Playful said, “It's played on devices like cell phones and tablets.”

“If you don't mind...” said the girl. “Both your island and you... You're strange.”

“Are we strange?” asked Curious in surprise.

“Your island, your worms, your games...” the girl listed.

“You should meet our teacher!” said Creative.

“I wish I could,” said the girl.

'Barrel already knows you,' he was about to say, but then he thought maybe she didn't and stopped.

When Creative said, "You'll meet with our teacher anyway at the evening fashion show," the girl took out a book from her bag and handed it to the Mischievous Ones, saying, "It makes science fun."

Curious opened the book, and the others gathered around. On the first page, they found a story with a note that said, "To save our island from plastic..." They read the story breathlessly. At the end, they encountered the slogan, "Don't throw away plastic, transform it..."

A small noise distracted the Mischievous Ones. Barrel, who had appeared beside them, said, "You've already succeeded, teacher!" they exclaimed as they quickly exited the story they had just entered.

As the islanders applauded the walking "Barrels, a strong wind blew in from the sea and suddenly entered the open laboratory window. The worn-out book was snatched from Puzzle's hand and carried away to another island.



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Written in an accessible and engaging style, these tales invite readers of all ages to look at the sea, the stars, and nature with wonder and care. Published as part of the Mediterranean Researchers' Night, the book celebrates science as a bridge between cultures and generations, showing that research is not confined to laboratories: it lives in our questions, our stories, and our shared future.

