

### Praise

“Daniel Mellem hasn’t just written a sweeping novel - he has ignited a rocket! He has resurrected rocket scientist Hermann Oberth, a great, pugnacious dreamer, in a fantastic story that will fascinate those of us who dreamily gaze at the stars.”

*Saša Stanišić*

### Sample Translation

by Sarah Pybus

### **TEN**

The summer of 1899 was as hot as always in Sighișoara. Houses grew hotter and hotter, grass burned on the banks of the Târnava. If you stood on School Hill and gazed down at the city through the shimmering air, then the medieval fort, its clock tower, the monastery church and the school seemed like visions from a long-forgotten time.

Up on the hill, surrounded by oak trees, Hermann stretched out his arm. A stag beetle crawled along his hand and slowly climbed his index finger. Hermann regarded its fat, red-brown body, its long, black legs and its antlers, which were almost as long as its body. He held up his finger. It seemed impossible that this ungainly creature would be able to fly, and yet the beetle slowly spread its wings. Hermann watched as it floated down into the valley.

“Let’s go for a swim”, said his little brother Adolf, dragging him out of his thoughts. Hermann wiped the sweat from his brow and looked down at the Târnava, which glittered in the midday sun. Why not? “Race you to the bottom”, he said, crouching down. A little clumsily, Adolf copied him.

“One...” said Hermann. They looked at each other, challenge in their eyes, Adolf’s mouth hanging open in excitement.

“Two...” Hermann squatted even deeper to maximise his sprinting power.

“Three!” He launched himself into a run. He immediately took the lead, leaving his little brother in his wake, running across the damp forest floor, through the trees and on to the mud track that led down the hill. The track had been heated by the sun and burned under his feet. Hermann ran faster and faster towards the riverbank, stumbled, almost lost his footing, then steadied himself and felt relief as the ground finally began to flatten out. At the bottom, he buried his toes in the cool river mud and looked back at his brother. Adolf was still running on shaky legs, then fell and slid on his belly down the embankment to the river. Sobbing, he held his bleeding knee. Hermann went straight over and helped him up. “It’ll be fine.” He pulled his brother into the river and washed his grazes. Adolf whimpered, then pointed at something behind them.

A few metres away, a large buffalo dozed in the sun, half-submerged in the water. Its black hide glistened and its wet tail swatted at a few gnats. Hermann watched it, thinking. Then he bent down,

scooped up some mud and threw it at the animal. He just missed it, making the water splash. The buffalo raised its head. Beneath its hide its muscles twitched, then its body slowly rose on four skinny legs. Hermann clapped his hands a few times until the buffalo finally looked in his direction. He approached slowly, one step at a time, until he could feel the animal’s breath on his face. He leaned forward a little more to look into the buffalo’s dark eyes, two marbles glistening mysteriously in the sunlight. “Come on, Hermann!” Adolf called after him. Hermann shook his head. Carefully he reached for one of the marbles with his thumb and index finger. The buffalo roared, lurching backwards. Then it suddenly lowered its horns.

Light trickled in through the arch windows, white tiles shimmered on the walls. The bright hospital room blinded Hermann, and he squinted. His chest hurt so much that he could barely breathe. Slowly he recalled what had happened. He saw the buffalo’s crescent horns before him, then the huge head stabbing at him. He felt ashamed. He had placed himself in danger and, even worse, he had endangered his little brother. Hopefully nothing had happened to Adolf. He forced himself to open his eyes again. He turned over with effort and let out a breath. His brother was sitting on the bed by the door, dangling his legs. “You won’t believe how angry Father was.”

It was punishment enough that their father happened to be the hospital director. In the days that followed, Hermann barely dared to breathe in his sickbed, and not only because of the excruciating pain from his broken rib. The most important thing was to be as quiet as possible and not attract any attention. The door to his room was left open all day, and he could see his father, with his full beard and cropped hair, hurrying up and down the stairs and along the corridors. Hermann was relieved every time his father didn’t pause in the doorway to glare at him through narrowed eyes before rushing off again. Hermann was certain that the only thing preventing his father from spending the entire day in his room, giving him the evil eye, was his eternal sense of duty. His father spoke of nothing as often as he spoke of his duty. He worked eighteen hours a day, and would even get up at night, leave the house they shared with another doctor’s family, and walk next door to the hospital to check on his patients. Everyone in Sighișoara admired his father. It was said that he made no distinction between rich and poor, and if someone was unable to pay for their treatment, then he would bear the costs himself. Patients came to Sighișoara from the whole of Transylvania, and even from Budapest and Vienna, to be examined with the ingenious X-ray machine his father had acquired. Once, he alleviated a Hungarian farmer’s deafness and the man declared him a god. His father waved the man away. He had merely cleaned out his ears.

His father may have treated his patients well, but he was incredibly hard on himself. A few months earlier, he had spent a day suffering from terrible stomach pains. Several times he had left the hospital, come back to the house and disappeared into the toilet for lengthy spells. During the night, Hermann had heard a strange groaning coming from his parents’ bedroom and crept out into the hallway. Through the crack in the door, he watched his father examine his naked belly and ask his mother to bring his doctor’s bag. She looked at him with concern. Wouldn’t it be better to go over to the hospital for treatment, otherwise what was the point of him sinking all their savings into the place? But his father shook his head and she gave in, just as she always did in the face of his insistence. She fetched the bag and his father pulled out a needle and injected himself in his side. Then he ordered her to sit by the bed with the oil lamp and place a mirror in the crease between her thigh and groin. She did as he asked, but averted her pale face and stared at the ground. Suddenly, his father stuck a scalpel into the middle of his belly. Hermann had to suppress a cry when he saw the

gushing blood. His father instructed his mother to wipe away the blood and open the wound wide enough that he could see inside. Suddenly, Hermann became aware of his little brother standing beside him. Adolf wanted to look inside their parents’ bedroom too, but Hermann pushed him back and held a hand over his eyes. Groaning, their father pushed a pair of scissors into the open wound, opened them and closed them again. Then he pulled something out of the wound with his hand that looked like a blood-soaked sausage. He threw it down by the bed and asked Hermann’s mother to pass him a needle and thread. Hermann felt sick but couldn’t tear his eyes away. Only once his father had closed up his stomach did Hermann take his brother by the hand. Together, they crept back to bed.

Now Hermann lay in his hospital bed, certain that, were it not for the bandage around his chest, his father would have long since given him a hiding. On his first evening in the hospital, his father had yelled at him. “What were you thinking, provoking a buffalo? How dare you steal my time with such idiocies!”

Even his mother had shaken her head. She usually always took Hermann’s side. Like last winter, when he had secretly run off to the train station. While the train driver was standing on the platform, smoking his pipe, Hermann had climbed up into the cab. The little narrow-gauge railway had been connecting Sighișoara with Agnita for two years, and Hermann loved to watch it whistle past the marketplace. Up in the cab, he had looked at all the manometer dials and the many pipes, valves and levers. He had asked himself what they might mean and what they could be used to do. He had been playing around with them, when suddenly things started to hiss and spit. The driver had stormed in, dragged him out and given him a clip round the ear. Later his father had also scolded him fiercely. His mother had been the only one who wasn’t angry. She had looked at him silently, from her soft, melancholy face, and stroked his head as he told her about the excitement of the driver’s cab.

But when the incident with the buffalo happened, even she had looked at him in bewilderment. “What’s got into you?” Hermann hadn’t said anything. He didn’t know the answer.

One month after his recuperation, his mother woke him shortly after sunrise. They left the house with Adolf in tow. It was a gloomy morning. In the garden, the Hungarian hospital caretaker hammered mutely on a piece of wood; out on the street, ox carts and horse-drawn carriages slowly shuffled through the fog on their way out of Sighișoara. Hermann, his brother and their mother walked through the little city, climbed the narrow steps up onto the hill, passing the monastery church and marketplace until they reached the clock tower. Hermann was still scared of the large box next to the clock-face; every weekday, a different male figurine would spring out on the hour, pulling a grotesque face. He walked faster as the angry soldier presented its spear.

Most of the other boys were already lined up in front of Master Both, puffing out their chests. Many of them were taller than him and almost all of them were loud. Some pushed and shoved to get to the front; one pulled another’s hair so hard that he began to cry. Hermann’s mother let go of his hand and patted him. Then she went over to the other mothers and took Adolf by the arm. She hadn’t done that for a long time. The summer was over.

Why did everything move so slowly in primary school? The second these otherwise noisy boys were called upon to add two numbers together, they had to strain their fingers under their desks to get the answer right. If the result was greater than ten, they seemed in danger of tying their fingers in knots. Hermann didn't understand why Master Both made allowances for these boys. First, Both asked Tall Erwin, who was sitting right at the back, to calculate two plus two. Erwin spread both index fingers and middle fingers and answered “Four”. Then the teacher asked the exact same question to the next boy. He continued through the rows until he reached the front and asked Hermann. “Four; surely you should know that by now”, he replied. Master Both's eyes widened. He picked up his pointer and whacked it down on Hermann's hand. His fingers turned blue and hurt so much for the rest of the day that he could barely move them. But at least he didn't need them to count.

Hermann was glad when school was over and he could spend his afternoons in the large garden at the doctors' house. No teacher ordering him to learn something he'd known for a long time. He struck flints to make sparks, built a sundial out of cardboard, caught swallowtails and admirals on the fragrant lilac in an old fishing net. His only company his little brother, who gazed in wonder at everything he did.

At supper, Adolf recounted their adventures, claiming Hermann's ideas as his own. Hermann protested and tried to set things straight, to say what had really happened. But everything sounded strangely flat coming from his mouth, less exciting than from Adolf, and then he turned red, threw his hands in the air and screamed, trying to achieve with volume what he could not achieve with words. His mother held him tight. “Shush, Hermann. We know what really happened.”

After the meal she took him up to the attic, where she kept Grandfather Friedrich's poems in an oak chest. They sat together by the open chest and she told him about his grandfather. Friedrich Krasser was a doctor and famous poet who had rejected the clergy and believed in Darwin's teachings. His friends had called him The Reformer. During his studies in Vienna, he had treated working-class families who were suffering from typhus and living in cellars. After that, he spent his whole life advocating for the rights of the exploited.

She read him *Tabula Rasa*, his grandfather's poem that had caused great uproar in the German Empire back in 1869. Hermann found the poem pretty tedious; the whole thing seemed to be about sleep. According to the poem, the sun rose in the east every day, but its rays would not extend beyond the Carpathians, and so the Western world remained in darkness, and its people in their slumber. The poem had caused great outrage; Hermann was convinced this was because it was so boring. His grandfather was taken to court, which prompted him to write an essay entitled *The Modern Inquisition*. The powers-that-be were even further incensed, and shortly after he was convicted in Graz to a two-year prison sentence. But the people of Sighișoara were thankful for all he had done to establish the first workers' health insurance fund in Sibiu. And so friends in high places wrote petitions to Emperor Franz Joseph, and it was not long before the Emperor declared an amnesty. Hermann's grandfather, who really didn't care for social classes and the nobility, named his mother Valerie, just like the Emperor's daughter.

“You're a Krasser too”, his mother said with a smile. Hermann could see the pride in her face.

From then on, he found it a little easier to let Adolf hijack his adventures at the dinner table.

But in the autumn, something strange happened. All of a sudden Adolf stopped stealing his adventures and moved on to Walli, the hospital caretaker's son. All the neighbourhood children admired him. Walli could throw a ball all the way from the apple tree to the horse tracks; he had beaten Tall Erwin at arm wrestling, and had recently even managed to catch a rat. Hermann didn't understand the excitement. Walli hadn't built the trap himself – and what's more, the animal was dead, stuck under the metal bar and nothing more than food for the cats.

Soon the apples on the tree were gleaming red and the neighbourhood fathers announced that they would be harvested at the weekend. The wait was almost unbearable and the children gathered beneath the tree, gazing up in longing. Adolf called to his mother, who was taking the washing off the line. She shook her head and said that they would have to wait a few more days.

Walli didn't want to wait. He took a running jump and tried to grab onto a branch. He missed, tried again, and missed the branch again. He tilted his head, walked up to the tree, hugged the trunk and put both feet on the bark. Maintaining his position, he slowly shuffled up the trunk. Despite the cool wind blowing in from the Târnava, Walli was sweating. Hermann could see how much effort it was taking. Finally, Walli grabbed hold of the branch he had previously failed to reach and pulled himself into the treetop. He picked a few apples and let them fall to the ground. The other children cheered and even Hermann's mother applauded. Adolf picked up an apple and took a hearty bite.

Hermann went up to the tree and tried to copy Walli. His soles slipped on the bark and he wondered how Walli had done it. He ended up hanging onto the tree, his arms and legs flung around the trunk. He heard the others sniggering behind him. His legs trembled. He tried to pull himself up the trunk but lost his grip and fell on his behind. He got up, angry and ashamed, his face red. The others laughed at him, Walli's little brother Gyula holding his belly. Hermann lost control. He ran to Gyula and kicked him hard in the shin with the solid tip of his leather shoe. Gyula started crying and Hermann ran away as fast as he could. He didn't want anyone to see that he was crying too.

That night he lay awake for a long time. Darkness had long since fallen by the time his father came home. The floorboards squeaked as his father walked along the corridor and into the nearby bedroom. Hermann listened at the wall to see if his parents were talking. All he could hear were his mother's indecipherable murmurs. Suddenly, the door to the boys' bedroom was yanked open so hard that it hit the wall. His father stormed in, followed by his mother, holding an oil lamp that caused his father's shadow to engulf the room. Adolf woke with a fright and began to cry. Their father pulled Hermann out of bed and threatened to beat him with a belt, but their mother begged him, and so he only used his hand. After the fourth slap, Hermann's father let him go. “How can you hurt people so for no reason”, he said quietly.

“It's for their own good.”

Hermann had been lying awake for an eternity, his backside throbbing with pain, when the door flew open again. He sat up immediately. His father looked in. “Come with me.” Hermann's heart was pounding, but he put on his slippers and crept past a sleeping Adolf and out of the room.

The corridor was cool and bathed in silvery light. The full moon shone through the open window. There was a telescope set up in front of it on a tripod. Hermann's father guided him over. “My

telescope”, he said. “Sometimes, when I’m having trouble at the hospital, I spend the evening looking up at the sky.” He adjusted the telescope and told Hermann to take a look. Hermann pressed his eye against the eyepiece, and was briefly startled. The moon was suddenly so huge that it filled his field of vision. Light and dark landscapes stretched across its surface, seas and mountains, dazzlingly bright plateaus and vast shadows, and craters everywhere. A foreign world. Hermann tried to move the telescope, but he pulled too hard on the barrel and the moon disappeared. All that remained was deep blackness. His father helped him to reposition the telescope. Hermann looked at the mysterious landscapes. If a telescope could show you so many new things, imagine what you would find if you were actually there yourself? He stared, not trusting himself to move the telescope. He didn’t want to lose the image again. Eventually his father pulled him back. “That’s enough for today.”

Hermann looked out of the window at the night sky, where the moon had returned to a luminous disc.

“Can you go there?” he asked.

“You can do anything you want”, his father said.

“But there’s nothing up there for a doctor to do.”

There had been an old rowing boat in the reeds at the bottom of the garden for ages. It was moored to a rotten wooden peg and even the old blacksmith, who usually knew everything, had no idea who owned the boat. Some of the planks were sticking out and the framework was visible. Hermann loved to hide himself away in the boat; it was wonderfully quiet and he could barely hear the other children in the garden. A few times, lost in thought, he had been startled by Adolf’s sudden appearance, but he always sent his brother away again and now he had the place entirely to himself.

On this particular afternoon, he swung his upper body from side to side, trying to make the boat rock, and chewed on the blunt end of his pencil. Someone approached the bank and he looked up. His mother smiled. “Ah, so this is where you are.” She bent down, took off her shoes and waded through the shallow water to the boat.

“Are you drawing something nice?” She pointed to the pieces of paper in his lap. He handed them to her and she leafed through them carefully. “What is it? The monastery church?” Hermann shook his head vigorously. He tried to explain the lightning factory. The idea had come to him the previous evening, during a violent storm that had prevented him from using the telescope. The lightning had flickered through the darkness, intense and dazzling. Something was needed to absorb its energy.

His mother nodded, but he could tell that she didn’t really understand. Disappointed, he took back the drawings. She stroked his hair, then stood up and slowly climbed back up the embankment. Hermann watched her go. The boat continued to rock for a while after she left. Then he took out a new sheet of paper and started another drawing.

## NINE

“Look at Hermann wading through the muck!” The eighth school year had just begun. Hermann and his classmates were walking home. Walli shouted and the others laughed. They could laugh all they wanted. They had no idea how practical it was to walk in the drainage ditches. In the summer, when it didn’t rain, the slurry in the ditches dried out, and it was just as easy to walk in there as on the gravel paths. When the other boys weren’t disturbing him, Hermann could use this time to think in peace. He didn’t have to constantly watch out for other people walking into him. Once, on the gravel path, Hermann had collided with the carpenter and his bicycle and the man had broken his leg. Things like that never happened in the ditches. For the last few months, Hermann had liked to spend his walking time thinking about Jules Verne. His mother had given him Verne’s novel *From the Earth to the Moon*. At first it had seemed like a fairy tale, but after just a few pages Hermann was hooked and couldn’t put it down. Verne had such great ideas! The story was about how humans could travel to the moon. A huge, cast-iron cannon, 274 metres long, was constructed to shoot people to the moon in a hollow aluminium projectile. Verne even knew how fast you needed to travel to escape the Earth – more than 11,000 metres per second!

Looking through the telescope one evening, Hermann imagined what it would be like to fly to the moon in the projectile. First the darkness inside the cannon and the anxious wait. Then a tremendous explosion that he wouldn’t actually be able to hear because the projectile would move faster than the sound. When he was shot out of the cannon, he would be pressed into the padding so hard that he wouldn’t be able to breathe – although, unlike Verne’s traveller, he would probably manage not to faint. After the launch, he would open the hatch and look down at the Earth. Sighișoara and the Târnava would be far below him, as would the hospital – where his father would be so distracted by his many duties that he would miss the launch altogether – and their house, where his mother and Adolf would wait for his return. Soon the whole planet would be nothing more than a green and brown soup. He would see how it curved and be immersed in a never-ending blackness until he began to approach the moon.

Hermann often took Verne with him to the rowing boat. He had added new planks and made it seaworthy again. It felt wonderful to float down the tranquil river and read about the journey to the moon. He could learn so much more from Verne than from his teachers. School was gruesome. Every morning he had to climb the hill on the Scholars’ Stairs, 175 steps through a dark tunnel with only tiny shafts of light falling through the narrow cracks between the boards. The headmaster was an old man, older than seventy, who started each school year by singing the praises of humanist education. The auditorium ceiling was adorned with the wisdom of the philosopher Immanuel Kant, Sighișoara’s Georg Daniel Teutsch and the poet Homer, all in red and black letters. According to Stephan Ludwig Roth, the morning star shines through the doors of a school. Hermann couldn’t remember the star ever shining into his school. The teachers knew nothing apart from Ancient Greek vocabulary and dates from antiquity. All they wanted to know was what had happened in the past. Nobody here seemed to be interested in what the future held.

After lessons, Hermann’s classmates often hid in the graveyard bushes. Hermann went with them to find out what they were doing. They sat in a circle between the shrubs and Walli produced a pipe from his schoolbag. He said he had borrowed it from his father. He expertly tamped a little tobacco

into the pipe bowl, held up a burning match and dragged on the pipe until smoke came out. Then he passed it around. Tall Erwin took a puff, coughed and spluttered, praised the tobacco’s “splendid note” and passed the pipe to the next boy. Soon it was Hermann’s turn. The harsh, bitter taste brought tears to his eyes and burnt his lungs. He coughed violently and the others laughed. “Some boys become men faster than others”, said Walli.

The following week, the class visited the Burenwirtshaus tavern, where they listened to the girls’ school choir. Two dozen girls with plaited hair stood on the stage and sang Siven Krueden. The boys whispered to each other excitedly, and Professor Fabini had to remind them repeatedly to be quiet. Hermann sat next to them in silence. At the edge of the choir was a blonde girl who appeared to be staring at him the whole time. Again and again he felt the need to stare at his shoes, unable to bear the gaze of her light-coloured eyes. He was relieved when the concert ended and the choir left the stage.

On his way home, he saw the blonde girl walking in front of him. He moved out of the ditch and onto the path. He walked faster to catch up with her, and soon the girl was just a few metres ahead, her blonde plaits swinging behind her slender neck. He wanted to say something, but didn’t know what. Suddenly the girl looked around. He opened his mouth but nothing came out, and the blood went to his head. He quickly bent down and retied his shoelace. When he looked up again, she had carried on walking and turned onto a different path.

In bed that evening, he couldn’t get the girl out of his head. He tried to visualise her face, but couldn’t do it. Time after time, all he saw were her swinging plaits. He cursed himself. Why couldn’t he have forced himself to speak to her? He stared at the ceiling and considered telling Adolf about it. Adolf had recently been caught in the shed, kissing the hospital caretaker’s daughter; that had caused a heap of trouble. But Adolf was already asleep and Hermann didn’t want to wake him. He lay there for quite some time, thinking about the girl. Finally he shook his head, angry at himself. There were more important things! He threw off the covers, went to the window and adjusted the telescope. What was a girl compared to the moon?

Hermann’s father was incensed by his bad grades. Poor performance in history and Hungarian! He said nothing about Hermann’s good grades for mathematics and physics. “You’re not learning correctly. Your head is full of fantasies and you spend every evening at the window! That wasn’t the intention.” And so his father took away the telescope. He even cursed Hermann’s mother when he saw Verne’s book on his nightstand. “And you encourage these flights of fancy!”

His mother didn’t object. “Well, he’s a Krasser”, she simply said, no longer sounding proud. Lately she had become taciturn and often bad-tempered. She spent whole days in bed, plagued by headaches, her fingernails gnawed away. When Hermann tried to tell her about Verne’s cannon, she sent him away without so much as a kind word. “You’re just as obsessive as your father!”

Hermann’s father ordered him to take the book to the city library. Hermann nodded and left, but couldn’t bring himself to do it and turned back halfway. He secretly hid the book in his wardrobe. From then on, he would wait until his father had gone to bed after work, get up, light a candle, fetch Verne from the wardrobe and read. Sometimes Adolf would wake up. But he didn’t tell their father.

One afternoon, Hermann was floating slowly down the Târnava in the boat. Clouds had covered the sun and a south-westerly wind swept over the river. He wanted to think in peace. He had noticed something in the novel that couldn't be right. Had Verne made a mistake? Despite being 274 metres long, the cannon was too short! Nervously, Hermann once again calculated the force applied to the moon travellers when they were launched out of the cannon and accelerated to an escape velocity of 11,000 metres per second. He fervently hoped that he had miscalculated, but whenever he applied the formulas, the result stayed the same – the moon travellers were subjected to the Earth's gravitational pull a thousand times over. There was no way that they would survive the cannon launch. By the time they reached space, they would be a fleshy mush floating around inside the projectile. Hermann rocked back and forth, unsettled. Could it be that moon travel wasn't actually possible?

The sky grew darker, the boat rocked, the book slipped off the bench and into the belly of the boat. Hermann looked around. Blackberry bushes passed by on his right, School Hill's vibrant autumn forests on the left. The wind picked up and it started to rain. In the distance Hermann could see the outline of the fort, the tip of the clock tower protruding. He considered what it would be like to stay in the boat and follow the course of the Târnava. To leave the fort behind, the school, his family home, to be carried by the river as far as Blaj, where the Târnava Mare and Târnava Mică met, then on to the Mureş, the Tisza and the Danube all the way to the Black Sea, and then – somewhere else.

Thunder boomed, the rain whipped Hermann's face and he had to hold on to stay in the boat. His sheets of calculations fell off his lap and into the boat, which was already filled with water. Suddenly lightning struck in the forest. Frightened, Hermann leaped over the stern and into the river. He went under the water, enveloped in the cold. The water churned and the shadow of a fish rushed past. He floundered wildly, came back up, gasped for air. He fought his way to the riverbank, his clothes clinging heavily to his body. He looked at the river. As he jumped, he had pushed the boat even further out. Shivering, he stood in the sodden sand and watched it slowly drift away. A sudden thought struck his brain. His jump – a thrust! He ran back into the water, swam a few strokes, grabbed the stern of the boat and pulled it into the shallows with all his might. Hurriedly, he stood on the stern and jumped onto the riverbank. He turned around. The boat slowly moved away. He quickly pulled it back again, added a few heavy rocks from the shore and climbed in after them. He hurled the first rock out over the stern. The boat broke loose from the shore. He threw the second rock. The boat moved faster. He threw the third rock, then the fourth – and every time the boat got faster! He clapped his hands, leaped up and down, and cheered in the pelting rain. Now he knew how to solve Verne's mistake.

[...]