III. The First Experiment

At 9 a.m. the following day, in accordance with the arrangement, we find our three friends reunited in Al-Harik's drawing-room.

The master of the house did not make them wait long. He came in, shook hands cordially with each of them, and took them up to the second floor. As they went past he kitchen, he ordered the maid to warn her mistress that the experiment was about to begin.

Al-Harik thought that he ought to give a few necessary instructions first. The first experiment would only last an hour at the most. It was necessary not to get too tired, and simply to familiarize themselves with the change of state. They would also be content with a reduction in size by a factor of a thousand, which was more than sufficient for a start.

The old man was finishing his instructions when Thilda came into the laboratory in her turn. The young woman was even prettier than the day before; her dark eyes were shining with a strange gleam and it was difficult to support the mysterious fluid that seemed to be emanating from her. Paradou and his companions were powerfully impressed by that singular gaze.

"My wife will accompany you during this experiment," said Al-Harik. "It's necessary that she supervises the progress of the operation and warns me if anything untoward occurs. Her presence won't inconvenience you; she'll keep a sufficient distance to leave you alone."

The preparations were quite simple. Everyone retained his ordinary costume. On the doctor's advice, they did not take any instruments. Soleihas, it must be confessed, was only half-convinced of the reality of Al-Harik's experiments. He expected to see the old scientist recant at the last moment and to hear him confess his impotence. The doctor and the dentist were, by contrast, full of enthusiasm. It had been necessary to moderate Camaret's ardor; he had wanted to take all the scientific apparatus at once. Although he had been firmly told that the experiment was a simple trial he had loaded himself up nevertheless with his photographic black box,¹ his tripod and his bag containing plates of silver bromide gel.

Al-Harik went to the windlass and, turning the wheel, slowly lifted the heavy bell-jar. When it had reached the required height—that of a man of medium height—he invited Thilda and the three members of the Hyperpsychical Society of Perpignan to take their places on the platform—which they all did, in silence.

At that solemn moment, it must be confessed, the three friends felt very anxious. Was it not reckless to deliver themselves into the hands of an unknown man in this way, and to attempt something almost unnatural? Al-Harik seemed worthy of their confidence, to be sure, but what unforeseen incidents might occur, and lead them to catastrophe?

To the fear of danger, however, was added the ardent curiosity to see what no man had seen before. To penetrate into the interior of a body, to become as tiny as the tiniest creatures—what a crazy dream, whose realization was easily capable of tempting scientists. The 19th century had given birth to many marvels, but none could compare with this one.

The bell-jar had now descended again. After making sure that everything was in good order, Al-Harik had retired to the next room, which contained the apparatus designed to carry out the transformation. A sharp stroke of a bell suddenly sounded; that was the agreed signal to indicate the commencement of the experiment.

In order to know the intimate impressions felt by the actors in the following scene, we need to borrow the notes that Soleihas transcribed in his notebook on the evening of that memorable day, while the slightest incidents of his adventure were still fresh in his memory.

I looked at Thilda; her gaze was still fixed and vitreous. She had the immobility of a statue. Redirecting my attention then to the objects I could see through the bell-jar and my companions, I got

¹ The phrase I have translated here as "black box" is *chambre noire*. In the earlier *Le Spirite malgré lui*, Bleunard uses that term to refer to a specially-equipped room in which photographs are developed, so I have translated it as "dark-room" in "The Reluctant Spiritualist," but here he is using it to refer to the photographic apparatus itself, which we would call a camera. Although "black box" has acquired new connotations in the interim, it seemed more apt to use that phrase than substitute the anachronistic "camera."

ready to observe all the phases of diminution. Before the experiment, I had already tried to anticipate the phenomena. My companions, according to these anticipations, ought to appear smaller and smaller, since they would always be diminishing; the external objects, on the contrary, would retain the same dimensions, not being subject to any change.

How I had misinterpreted the situation!

A few seconds after the bell rang, my eyes misted over and I experienced something akin to a strong desire to go to sleep. These symptoms were of short duration. My sight soon recovered its clarity; all my senses were heightened; I could see, hear and feel more intensely than usual. The need to sleep had completely disappeared.

Suddenly, the ground shifted under my feet, as if by virtue of the effect of an earthquake. The shock nearly made me fall over on the glass plate. I made every effort to recover my equilibrium but it was as if I were drunk; I tottered, leaned over toward the ground, straightened up again, moved to the right and the left without being able to recover my aplomb.

At first, I didn't understand what was happening to me. Eventually, after a few minutes, I succeeded in maintaining my equilibrium, or very nearly. In order to do that, it was sufficient to lift my feet up alternately, as if I were marching on the spot. Thus freed from the preoccupation with staying on my feet, I was able to look around to see what was happening.

My companions had not diminished either in height or volume. I was amazed to find them exactly as before—but, by virtue of a strange and inexplicable inconstancy, they were getting further and further away from me, shaken and vacillating in all directions as they did so. As for Thilda, she was drawing away too, but her movements were so slow that she seemed motionless.

It is understandable that, in such a situation, everyone had kept silent until then. The astonishment, surprise, near-terror and the necessity of keeping his balance obliged each man to concentrate his attention on himself.

Paradou was the first to break the silence.

"Camaret," he shouted to the dentist, "try harder to maintain your equilibrium—you'll break your photographic apparatus if you fall. Put it down and do as I'm doing...one, two...lift your feet up as if marching on the spot."

Camaret, waning to follow the advice he had been given, leaned over to deposit his black box and tripod on the glass plate. At the same moment, a more violent shock threw him on the ground and caused him to roll over. The poor fellow got up immediately, with an expression so distressed by a mixture of terror and anger that his two companions could not help bursting into loud laughter.

"The Devil take your scientist and his infernal invention!" he shouted.

Al-Harik would obviously have been able to warn them and explain the means by which they could retain their balance. What use was Thilda, then? The young woman was continuing to draw away, rigid and impassive, like a statue, seemingly not seeing or paying any heed to anything. There was only one plausible explanation. The old scientist had wanted to leave them all the surprise of events. After all, the oscillatory movement was slow enough, and falls could not be dangerous. Once they were accustomed to it, they would become easy to avoid.

So there was Camaret, standing up, and his luggage deposited on the ground nearby. Surprise! The black box, the tripod and his hat—which had fallen off when he fell—were now undulating on the glass plate like objects floating on the waves of a choppy sea. Extraordinarily, they were slowly drawing apart from one another, exactly like the three friends.

The doctor, very intrigued, wanted to investigate these singular phenomena. He ran to the place where the objects were—but, just as he reached them, he was violently thrown to the ground in his turn.

Stunned by the shock, he remained unconscious. It was only a matter of a few seconds. When he opened his eyes again, he found himself supported in the arms of his companions.

"Are you hurt?" asked the optician.

"No," the doctor replied. And he immediately launched himself toward the dentist's hat. Another phenomenon was already soliciting his attention, however; the bumps on the glass plate, which were still moving away and increasing in size, were now taking on extraordinary dimensions. The surface of the plate resembled an immense ploughed field.

At the same moment, Soleihas also made a discovery that was no less important. When the doctor, while running, had been violently thrown to the ground, it was because he had tripped over a

large slab of stone. Now, that slab had not been in the bell-jar when they had come in. Who, then, had put it there? The optician went to rejoin Paradou to make him party to his discovery.

"Look closely at the hat," the doctor said to his companions. "See how strange it all is."

The dentist's headgear was, indeed, the seat of phenomena well worthy of attracting the attention of scientists. A sheet of glass, seemingly liquid, emerged from underneath the hat, spreading in all directions and drawing the three men with it. To maintain himself at the same distance from the hat, it was therefore necessary to advance continually toward it.

"One could easily imagine," said Camaret, "that molten glass was flowing from underneath my hat."

"Look at your feet, my friend," the doctor replied. "It's exactly the same."

Indeed, a sheet of glass seemed to be emerging from beneath every object.

"How do you explain that?" asked the dentist.

"It's quite simple," Soleihas replied. "We're subject to an illusion similar to the one that makes us think that the Earth is motionless and that the sun moves around it, while it's really the Earth that is rotating. Here, it's the surface of the plate of glass that seems to be expanding, when in reality, it remains immobile while we're shrinking."

"I can't quite understand why the glass seems to be emerging from beneath the hat," Camaret observed.

"Yes," said the doctor, "since it's the hat that is diminishing incessantly in volume. Inversely, we see previously-hidden areas of glass appearing incessantly around the hat."

"Yes, yes!" said the dentist, who was rather slow on the uptake, and who required a quarter of an hour to grasp a relatively uncomplicated chain of reasoning.

"That also explains," Soleihas added, "why we're getting further away from one another. It's because the surface of glass that separates us is increasing relative to the dimensions of our bodies, which seem to us to remain constant."

"Yes, yes!" said the dentist, who would have required 24 hours to understand an abstract mathematical proof.

All movement suddenly stopped.

"It's finished," said Paradou. "We're now reduced to a thousandth of our size." Taking out his watch, he added: "It's exactly half an hour since we came into the bell-jar."

"All this is a farce!" exclaimed Camaret. "We've become a thousand times smaller, you say, my dear doctor. Well, look at me, look at Soleihas, look at my hat. They're all the same size as..."

"Illusion, my dear chap," Paradou told him, "still illusion on your part. That which has diminished seems to you to have stayed the same; that which has stayed the same seems to you to have been enlarged."

"So one grows because one hasn't grown?" cried the terrible dentist, laughing. "It's all as clear as mud—it must be philosophy. Oh, I prefer our fine spiritualist theories. All that, by contrast, is crystal clear. Physics be damned—I don't understand any of it."

The landscape had taken on an extraordinary appearance. The ground, comprised by the plate of glass, normally so polished, now appeared with bumps, ridges and ravines as far as the eye could see. Walking was difficult on such an uneven surface. As for the walls of the bell-jar, they were at least a kilometer away. Beyond the glass, the furniture of the laboratory was visible at an infinite distance, but the items of furniture had dimensions so enormous that it was impossible to recognize them. Everything, moreover, seemed to be plunged in a yellow-tinted fog.

Soleihas told the doctor about the discovery of the block of stone that had caused his fall.

"Let's go take a look," said Paradou. "That intrigues me. Where can the stone have come from?"

The slab that the optician had noticed had grown considerably since the doctor had tripped over it. It was visible from 300 meters way, no longer the same size as a paving-stone but seemingly an enormous rock.

They drew nearer and they each examined it. It was transparent, and presented the angles and smooth surfaces appropriate to crystalline substances.

"It's a quartz crystal!" exclaimed the doctor.

"Quartz!" said the optician. "Who could have brought it here."

"What's quartz?" asked the dentist, timidly. He was no stronger in mineralogy than physics or chemistry.

"Rock crystal," Soleihas replied.

As for Paradou, he was reflecting profoundly. Where had this fragment of rock crystal come from? Suddenly, he slapped his forehead; his broad face expanded. He had just found the answer for which he had been searching so intently.

"My friends!" he cried. "My friends! It's a grain of sand that one of us has brought in on the sole of his shoe."

"So you've tripped over a grain of sand," Camaret replied, immediately. "Admit that it's very little to have thrown you to the ground."

The doctor, who understood the joke, contented himself with smiling. He advised the dentist to take advantage of the immobility in which everything was presently to be found to take a photographic impression of the rock crystal."

"All right," said Camaret. "With you on top—it will serve you as a pedestal."

The dentist had picked up his black box and tripod on the way. His two companions climbed on to the rock and the apparatus, pointed in their direction, was brought into focus.

"Don't move," said Camaret.

At the same moment, *bang!* A violent shock made the block of quartz oscillate on its base, and the two friends only just had time to cling on to it in order not to be thrown to the ground.

"Look out," said Soleihas. "We're resuming our original size. Observe what's happening closely."

"A thousand curses!" muttered the dentist. "My photograph is ruined. It would have been picturesque, though." And folding up his apparatus, he loaded it all on his back.

"Patience," the doctor said to him. "There'll be other opportunities."

Scarcely had Paradou finished speaking when he and his two companions were suddenly precipitated against the block of quartz, colliding with one another at the same time. There was a confusion of jostling bodies for a few seconds, trying to avoid ne another but always drawing closer, driven by an irresistible force. To make things worse, the ground was shifting underfoot, and in order to avoid falling it was necessary to recommence the fastidious gymnastics of a little while before.

When the first moment of amazement had passed they were finally able to take account of the new incident.

"My friends," said Paradou, "it's absolutely necessary that we move apart."

"Indeed," observed the optician. "if the first phase of the experiment distanced us from one another, the second will inevitably draw us closer together.

No sooner said than done: each of them turned his back on his companions and drew away with sufficient velocity to avoid any further collision. Singularly enough, however, they remained the same distance from one another, and were able to continue their conversation without difficulty.

A few minutes after these incidents, another occurred, no less extraordinary. The hat that Camaret had forgotten to pick up began undulating toward the group of three men. It was the doctor who noticed it first.

"Hey, Camaret!" he exclaimed. "Look at your hat, coming to find its owner of its own accord."

"That's nice," the dentist relied. "We have no need to go to the mountain—the mountain is coming to us."

They moved away from the block of rock crystal in order to go to meet the hat. The glass sheet, instead of flowing, as before, from inside the hat to the outside, now seemed, by contrast, to be moving from the outside to engulf itself in the gaping mouth of a whirlpool hidden beneath the dentist's headgear. It was evident that they were growing rapidly. The air in the bell-jar was recovering its transparency and gradually losing its yellow tint. At the same time, the distant objects were drawing rapidly nearer. Suddenly, they perceived Thilda, who had disappeared until then without them knowing where she had gone. That disappearance, in view of the intensity of the fog, had nothing very extraordinary about it. The young woman still maintained the same statue-like appearance.

"Let's get back to our rock," said the doctor.

"Where is it, then?" asked Soleihas, looking round in all directions.

"It must be further away," observed the dentist, "but we hardly advanced 100 meters in coming to as far as my hat."

"Look, there it is!" cried the optician, pointing at a pebble the size of a egg about ten meters away.

"It's shrunk a great deal," said the doctor. "That proves that we're quite close to recovering our usual size."

"Yes, Monsieur," replied a soft and harmonious voice. "In five minutes, we'll be out of the belljar."

Paradou turned round to see who had spoken to him. It was Thilda, who had now recovered her normal physiognomy. Her eyes had lost their fixity and recovered their charming gleam. Her cheeks had lost the strange pallor that caused such a painful impression and were rosy again.

"How did you find this first experiment?" the pretty creature added.

"Veritably strange, Madame," the doctor replied. "it seems to me that I've been the victim of a dream."

"You think so?" she said. "The other experiments will prove to you that all this has been perfectly real."

Camaret had leaned over and picked something up from the floor. "Look," Monsieur Paradou," he said to the doctor, presenting something to him that he was holding between his thumb and index-finger. And, the doctor having held out his hand, the dentist let a little grain of sand fall into it. "There's the stone that caused your fall," he added.

"Thank you, my friend, thank you," said Paradou. "I'll keep it as a precious souvenir of our fine experiment. What a fine document to deposit in the archives of our Hyperpsychical Society of Perpignan!"

If there are no others than that, Soleihas thought, it will be necessary to admit that our documents don't prove very much. They won't cut too poor a figure, though, in the midst of others that aren't worth much more.

Suddenly, the movement of the ground ceased, and a bell chimed. The bell-jar rose up slowly and everyone got down from the glass plate.

"The experiment is over, gentlemen," said Al-Harik. "How do you feel?"

That question was, in fact, not unnecessary, and did not have its usual banality. The three friends were reminiscent of people who had just woken up suddenly from a profound sleep. It was impossible for them, at first, to reply to the aged scientist's question.

"Come on," Al-Harik went on. "I see how things are. Rest for a moment. Answer me when you've recovered somewhat from your fatigue. When you get used to it, you'll cease to experience the rather disagreeable sensations of the first venture. The human body can't shrink to a thousandth of its height and the resume its original state with impunity. In a few minutes, your indisposition will have ceased."

Indeed, five minutes later, all of them had recovered their complete mental lucidity.

"How admirable all that is!" exclaimed the doctor, enthused by the memory of the events that had just taken place under the bell-jar.

"What an extraordinary invention!" added Soleihas, no less overwhelmed by enthusiasm.

The dentist was less expansive in his admiration, however. "You ought to have warned us," Camaret said, addressing the old man reproachfully. "It's your fault that the doctor and I nearly broke bones falling over."

"No," Al-Harik replied, immediately. "No, I knew there was no danger. I wanted, above all, to let events take you by surprise. On a voyage, the unexpected is agreeable—you know that as well as I do. You've just undertaken a voyage to an unknown country." Then, turning to the doctor and the optician, he added: "You know what you promised, gentlemen: you mustn't hide anything from me, and must tell me in the most minute detail everything that you have seen and felt. Would you like to go into the drawing-room, then, where refreshments are awaiting us, and you'll be able to make a complete recovery."